1.0 INTRODUCTION

1.1 My name is Andrew William Craig and I am a Landscape Architect employed by Peter Rough Landscape Architects Ltd. I hold a Bachelor of Arts degree and a post graduate diploma in Landscape Architecture. I am also an associate member of the New Zealand Institute of Landscape Architects, and have been practising since 1987. For 13 years I was employed by the Christchurch City Council working in the area of environmental policy and planning. Prior to that I worked for the Department of Conservation on the West Coast. Most of my work since graduation and to date has involved landscape assessment and the development of landscape policy.

2.0 SCOPE

- 2.1 In this report I briefly summarise a study I prepared in 2006 assessing the location of the Rural Port Hills and Rural Inner Plains zone boundary. The fundamental purpose of that study was to determine a logical, justifiable and defensible boundary between the two zones. The study gives a detailed account of how the appropriate boundary location is determined with regard to landscape considerations only. It also looked at landscape management for the lower slopes of the Port Hills, and suggested assessment matters that may clarify and assist in the consideration of subdivision, use and development proposals within the lower slopes. The findings in the 2006 PRLA report inform those parts of the proposed plan change affecting landscape management of the rural Port Hills. It is recommended that the 2006 PRLA report is read in conjunction with this report and that of Ms Rykers.
- 2.2 In the planning section of the S42A report, Ms Rykers discusses and summarises the background and history concerning, among other things, the location of the Rural Inner Plains and Rural Port Hills boundary. In her report reference is made to other landscape assessments made by fellow landscape architects with respect to the boundary and the Port Hills in general. These are also discussed in my (PRLA) 2006 study. I will not consider those in this report, suffice to say that there is a consensus view with the landscape architects involved in the earlier assessments that the 60m contour is not logical or justifiable on landscape grounds.
- 2.3 Ms Rykers also gives a detailed account of landscape matters that are based on the PRLA study, previous landscape studies and advice that I have given. I have read her S42A report and agree with the observations and conclusions she makes with regard to landscape matters. Therefore, I will not revisit these matters in my report, except by way of summary.
- 2.4 Currently the boundary is located at the 60m contour, above which the land is deemed an outstanding natural landscape in accordance with RMA S6(b). The proposed boundary is 20m except where the natural character of the rural land is compromised by existing built development. The map accompanying the S42A report indicates where the location of these two boundaries is.
- 2.2 In this report I also consider submissions, among which some adjustment of the boundary is sought. Maps will be tabled indicating where these are located.
- 2.3 Other issues raised in submissions are discussed where information further to that provided by Ms Rykers is provided.

2.4 In sections 3.0 and 4.0 to follow, the key findings in the 2006 PRLA report are summarised.

3.0 SUMMARY OF OBSERVATIONS FROM 2006 LANDSCAPE STUDY

- 3.1 In the 2006 PRLA landscape report the following observations are summarised.¹
 - There are no landscape features which demarcate the 60m contour.
 - The landscape character above and below the 60m contour is generally indistinguishable, although most dwellings are below the contour.
 - For the most part the land below the 60m contour is visible from nearby public spaces, these being mainly roads.
 - The visibility from public areas varies depending on how close the public space is to the toe of the hill.
 - The area below the 60m contour can be divided into two distinct areas that more or less occurs north and south of Rocklands.
 - The southern area is less modified than the northern area.
 - The southern area is the most visible due to its proximity to State Highway 75 and the predominance of pastoral farming.
 - Three rural lifestyle subdivisions exist where the intensity of land use means that their location can no longer be considered natural enough to include within the S6(b) landscape.
 - The topographic edge which occurs where the Port Hills meet the Plains plays and important role in defining the character of each land form by virtue of the contrast between them.

The above summary points give an indication of those landscape factors that have influenced the content of proposed Plan Change 6.

4.0 BOUNDARY LOCATION

- 4.1 In landscape terms, boundaries occur where discernibly different features meet. These features can be either natural or physical. Examples of the former would typically include watercourses, shorelines, forest edges and significant changes in landform gradients. The latter include roads, transmission lines, and urban environments.
- 4.2 It is evident that any discernable meeting point in the landscape does not determine the current 60m contour boundary. There is no apparent difference in landform or land use either above or below the boundary. Thus the boundary has no visible rationale in landscape terms. Consequently it cannot be considered logical, justifiable or defensible.

¹ Cited from the 2006 Study, p.15

- 4.3 From a landscape point of view, the logical boundary occurs where the Port Hills landform meets the Canterbury Plains. There are no other natural or physical boundary delineations in the vicinity of the 60m contour. Purely by coincidence, the meeting point of these two landforms lies more or less at the 20m contour. This contour is generally uniform throughout the subject area.
- 4.4 As mentioned, the only exceptions occur where the natural character of the landscape is compromised by existing development, such as at Rocklands, Otahuna, Holmeswood Rise and at Early Valley road. Here the boundary rises above these areas, thereby circumventing them.
- 4.5 In summary, it is determined from a landscape point of view that the natural, logical and justifiable boundary lies more or less at the 20m contour that runs along the change of gradient that occurs at the meeting point of the Plains and Port Hills.

5.0 LANDSCAPE MANAGEMENT

- 5.1 With reference to RMA S6(b) management of the rural Port Hills as an outstanding natural landscape does not rule out appropriate subdivision, use and development. The principle outcome should always be that the natural character of the landscape is protected in the event of subdivision, use and development. To that end context plays a critical role in where such activity should take place and what measures are necessary to ensure that adverse effects are avoided, remedied or mitigated.
- 5.2 To this end, it is recognised that the landscape character of the lower rural Port Hills varies considerably. Broadly speaking there are two major variables affecting landscape character which are;
 - That there are two distinct sectors which are located north and south of Tai
 Tapu. The northern sector displays a much more complex and developed
 character that contrasts with that area of the hills to the south which are
 simpler, cleaner and more legible in appearance. Because of the complexity
 of the northern hills, there is a greater ability to absorb activity and its effects.
 - That to the south the main Akaroa / Christchurch highway quite closely follows the toe of the hills, thereby exposing them to view from this key vantage point. Here the hills are less complex than their northern counterpart, and are therefore highly legible. Thus they are less able to absorb adverse effects.
- 5.3 Overall, it is anticipated that the management of effects will take into account contextual matters such as those described above. The controlled activity status for existing consents (regarding the proposed 'grandfather' clause) along with the recommended restricted discretionary will ensure that development does not compromise the natural character of rural Port Hills. The assessment matters listed in the proposed rules (3.2.2 ff and 3.2.4.1ff) are in my view sufficient to control potential adverse effects arising from development. In particular these matters will enable context to be taken into consideration, which is pivotal to proper landscape management of the rural Port Hills ONL.

6.0 SUBMISSIONS

- A total of 38 submissions were received in response to the plan change notification. Ms Rykers identifies these in her planning report, and summarises their general intent, particularly with regard to support, partial support or opposition to proposed Plan Change 6. Ms Rykers considers the relief sought, which in part has been based on my advice to her, in combination with the findings in the 2006 PRLA study. Rather than repeat her discussion, I consider only those submissions requiring elaboration that is referred to in her report.
- 6.2 Specifically the submissions relate to the following matters.
 - Relocation of the ONL boundary from 60m to 20m
 - Boundary line amendments
 - General boundary position
 - The 'grandfather' clause
 - Earthworks
 - Assessment matters
 - Horticultural Activities

6.3 Relocation of the ONL boundary from 60m to 20m

For the reasons discussed in my 2006 report, this report, (see section 3.0 above) and that of Ms Rykers, I cannot support maintenance of the 60m contour on landscape grounds. Other than for the areas to be excluded, I therefore recommend that all relied sought to maintain the 60m contour be rejected.

6.4 **Boundary line amendments**

Six submitters seek amendments to the boundary line where it affects their properties. Generally boundary line adjustments are only justifiable where the landscape is clearly and irredeemably modified to a point where it no longer displays predominantly natural character. Additionally, the relief sought with regard to boundary adjustments is generally confined to small areas relative to the entire extent of the Port Hills ONL. Nonetheless, in the collective these areas contribute to the natural character of the rural Port Hills. Thus consideration of the wider setting has to be taken into account when entertaining possible boundary adjustments. Finally, for an adjustment to be considered favourably there needs to be an exceptional circumstance when compared to all other likes areas subject to the proposed Plan Change.

The recommendation is to reject five of the requests, while accepting that of I Duff, discussed as follows.

6.5 **I Duff (\$1285)** seeks an amendment to the boundary line in respect of his property at 60 Early Valley Road. The submitter asks that the boundary line avoid an existing dwelling, which is part of a cluster of other buildings. Amending the line is justified on the grounds that this cluster of buildings sufficiently derogates from the level of natural character that is considered necessary to maintain within an ONL. Further,

there is a pattern of dwellings and accessory buildings that run more or less alongside Early Valley Road, most of which are below the 60m contour. Thus to amend the line as indicated on Map 14 would be appropriate in these circumstances. The extent of the amended line is determined by the extent of effects arising from the presence of the buildings. A natural barrier in the form of a minor rock outcrop further presents an opportunity to terminate the amended boundary line and return to the roadside, which it then runs alongside in an easterly direction. Accordingly, for the reasons outlined above, it is recommended that the boundary line is amended as shown on Map 14.

6.6 **General boundary position**

S1285.2 I Duff seeks to define the contour along internal boundaries (presumably cadastral). If this were to occur, potential development below the boundary would likely assume an erratic, somewhat crenulated and geometric appearance. A natural boundary is preferred since it would better reflect the assertive natural character of the Port Hills. Cadastral boundaries often run counter to the natural contour and gradient of the hill landform. In or alongside an ONL it is important to maintain and enhance natural character rather derogate from it. An internal or cadastral boundary would therefore not be justifiable in landscape terms, and it is recommended that the relief sought be rejected.

6.7 The 'Grandfather' Clause

Ms Rykers explains in detail the meaning of this clause, specifically relating to consented but yet to be developed lots that will become substandard as a result of the boundary change should it be implemented. I understand that the Council, by way of a submission to PC6, seeks controlled activity status for future dwellings subject to this clause. I have read the controlled activity assessment matters proposed by the Council and am satisfied that these will ensure desirable design outcomes within the context of an ONL setting. The overall aim is to ensure that future development sit harmoniously within the landscape and does not unduly compromise its natural character.

6.8 Earthworks

A number or submissions seek changes to the earthworks rule as it applies to the Rural Port Hills. Essentially the current rules set out to control volumes of earthworks. While there is a general correlation between volume and effects, it is not always the case. Given an equal volume there are variables where some effects will be less, while others will be more. These are now described.

- 6.9 Earthworks on the Selwyn's rural Port Hills have the potential to generate significant adverse effects on landscape character and amenity. Because the hills are elevated the visual effects of earthworks will be especially apparent, as they could be seen from many vantage points. Views of earthworks will also depend on the elevation of the viewer whether they are above the site or below it. People above earthworks sites have the ability to look down into them, whereas for those below this is generally not possible. So a large pit or hole may not be visible from elevations below, but is likely to be highly visible from above.
- 6.10 Amplifying visual effects is the predominantly pastoral land use, which means that earthworks are not readily screened by woody vegetation. The nature of pastoral farming is such that the underlying land form is exposed and is therefore highly legible. That is, the land form is easily appreciated by people.

- 6.11 With the hills being recognised in the District Plan as an outstanding natural landscape, the chief adverse effects are going to be those that detract from their naturalness. Earthworks can cause cuts in the land surface that disrupts natural contour and gradients. They can disrupt land use patterns, and in particular vegetation regimes such as that arising from pastoral farming. Other effects can involve the disposal of cut material, which may be used for fill or simply discarded in situ, or ideally off site.
- 6.12 Earthworks also have the potential to exacerbate erosion. Allied to this is the possibility that waterways are contaminated by eroded material, particularly by rainfall events.
- 6.13 There are a number of reasons why earthworks are carried out in rural settings, and these will typically include the following:
 - Vehicle tracks
 - Silage pits
 - Offal pits
 - Stock water dams
 - Building site excavations and platform formations
 - Fence lines and post holes
- 6.14 Being a hill environment, any earthworks will involve some degree of cut. The depth of this will depend on slope gradient generally the steeper the slope, the deeper the cut. Conversely, shallow gradients will result in cuts that are less visible from points at or below the earthworks site.
- 6.15 Notwithstanding this, some of the above listed earthworks activity will have less potential to generate adverse effects than others. Those earthworks involving holes will not generally create major visual effects, unless they are sited on a steep slope. The latter is unlikely as most holes are created on relatively flat land so as to enable vehicle access. However, if holes are sited below key vantage points, such as the Summit Road, views into them are likely, and the effects of these can be potentially adverse.
- 6.16 As suggested, other forms of earthworks have greater potential to be seen. These will principally involve vehicle tracks and building platforms, the effects of which is largely dependent on gradient. Because of their elongated nature, vehicle tracks have the greater potential to create adverse effects, where extended cuts are likely, especially on steeper slopes. This will especially be the case where the track runs along the face of the slope following the contour, as opposed to those that run perpendicular to it.
- 6.17 Building excavations and platforms can involve significant earthworks. However, they do have an advantage over vehicle tracks. Firstly the effects are generally concentrated in one fairly compact area. Secondly, the cut site will be 'filled' with the building, thereby screening the earthworks effects. Thirdly, the effects of 'digging' a building into a slope are significantly better than having one that protrudes or sits above. And finally, most earthworks in association with buildings are retained in some manner, often involving the use of vegetation for beautifying purposes. Thus the adverse effects arising from building excavations and platforms are generally mitigated by de fault.

- 6.18 Fence lines do not appear to create much in the way of too much earth disturbance. It is uneconomic for land owners to carry out extensive earthworks to install a fence. The earthworks associated with fences are mostly associated with vegetation clearance, which may involve surface scraping and superficial top soil removal. Observation indicates that vegetation re-establishes itself around fence lines fairly quickly, thus mitigation clearance effects.
- 6.19 So the greatest adverse effects are going to be those that arise from vehicle track formation. Stock water dams can also generate significant long term effects, because they can be quite large and are permanent. Offal and silage pits tend to be temporary features, and are not particularly big. Their effects are therefore going to be limited to a relatively small area.
- 6.20 Given that the greatest earthworks adverse effect is likely to arise from deep and long cuts into hillsides, it would be necessary to control these. It is recommended that rules for the Selwyn Rural Port Hills control the depth and length of cuts and extent of fill material. The suggested maximum permitted depth of cut is 1 metre in combination with a maximum length of 20 metres, and that all permitted earthworks are to be naturalistically contoured and re-grassed or vegetated within 6 months of completion in accordance with the diagram below.

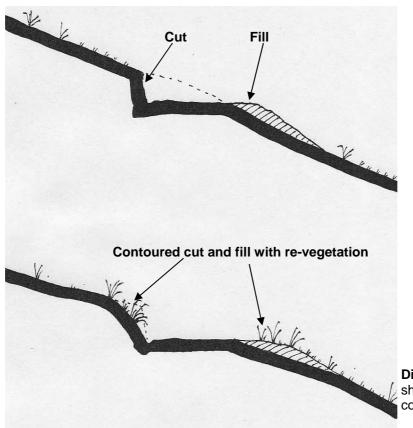


Diagram: Cross section showing pre and post contoured cut and fill

6.21 Despite the above discussion, it is acknowledged that to entertain a rule based on length and depth of cut and fill may be beyond scope. Nonetheless, I believe there is benefit in more fully understanding the effects arising from earthworks. On this basis, Ms Rykers discusses the submissions in more detail and makes a recommendation accordingly.

6.22 Assessment Matters

\$1266.4 Horgan seeks to define public viewing point with regard to a proposed assessment matter that reads as follows:

"the visibility of the building from public viewing points, having regard to the accessibility of the viewing point."

- 6.23 Ms Rykers discusses this in some detail and I agree with her observations and conclusions. Essentially, when landscape architects undertake assessment we consider whether vantage points are significant to the public with respect to the view, ease of access and numbers of people who are likely to gain access. A state highway would be an example of this, as would a public park or sports field. Both feature in proximity to the Selwyn Port Hills. Less frequented publicly accessible spaces are likely to be considered less important, but this may not always be the case. Further, it is important to appreciate that the natural landscape benefit of the Port Hills will involve appreciation remotely; that is, from publicly accessible vantage points that are not actually on the hills. So the proposed assessment matter is mindful of potential development that may detract from the scenic quality of the hills, and seeks to ensure that this does not happen.
- 6.24 Ms Rykers suggests an alternative wording that I agree would better clarify what is to be considered. She also considers a further submission (**S1266.5 G Horgan**) seeking as assessment matter that considers the positive effects of a proposed development. Ms Rykers supports the submission and to that end recommends a new assessment matter that reads:

"Any positive effects to be created by the proposed building and its associated accessway"

I agree with this wording. One reason for this is that it encourages the provision of positive outcomes that have the potential to overcome potential adverse effects on natural landscape character and amenity. Revegetation using native plants is one example of this.

6.25 Provision for Horticultural Activities

One submission (**S1295 Horticulture New Zealand**) seeks to provide for the establishment of vineyards and orchards as a permitted activity below the 60m contour. Ms Rykers reiterates my advice in her report with respect to this submission. Her recommendation to accept the relief sought by the submission is appropriate.

7.0 CONCLUSION

- 7.1 With regard to landscape matters the central issue relates to the appropriate location of the rural Port Hills ONL boundary. For the reasons discussed above and in the 2006 PRLA report, it is clearly evident that the current 60m boundary cannot be justified. Consequently it is indefensible.
- 7.2 The 20m contour is the logical boundary as it coincides with a major change in topographic form. It is a boundary that is readily discernable by all, whereas the 60m boundary is not.
- 7.3 Notwithstanding this, lowering the boundary does not preclude future subdivision, use and development, provided it is appropriate meaning that the outstanding

natural character of the rural Port Hills is protected. The controlled and discretionary activity status for development is designed to enable this while maintaining the natural character of the rural hills.

7.4 In considering development though, context is always going to be a key factor. The existing and proposed assessment matters allow this to be taken into account. Consequently there is an expectation that development will be site sensitive, where contextual circumstances will inform appropriate outcomes. In this regard it is recognised that the rural Port Hills are not uniform in their natural character, where in general they have less capacity to absorb development in direct correlation to elevation. However, it is important to appreciate that while this is generally so, there are exceptions, particularly for that part of the lower hills south of Tai Tapu. In any event, it is expected that landscape integrity of the Port Hills will be maintained, while enabling appropriate change.

Andrew Craig Landscape Architect Peter Rough Landscape Architects Ltd July 2009