

SELWYN DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Private Plan Changes 8 & 9 – Rural Residential
development west of Rolleston

SECTION 42A REPORT PREPARED BY

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1.0 Introduction

- 1.1 My name is Jonathan Guy Clease. I am employed by a planning and resource management consulting firm Planit RW Batty & Associates as a senior planner. I have fifteen years experience working as a planner, with this work including policy development, providing s.42a evidence on plan changes, the development of plan changes and the preparation of s.32 assessments, and the preparation and processing of resource consent applications. I have worked in both the private and public sectors, in both the United Kingdom and New Zealand.
- 1.2 I have a B.Sc. in geography, a Master of Regional and Resource Planning (MRRP), and am a graduate member of the New Zealand Planning Institute.
- 1.3 This report has been prepared under section 42A of the Resource Management Act 1991. It considers proposed Private Plan Changes 8 & 9 (PC8 & 9) to the Selwyn District Plan ('the Plan'). The proposed plan changes are the result of a request under Part 2 of the First Schedule of the Resource Management Act by the Selwyn Plantation Board Limited ('the applicant').
- 1.4 This report analyses the plan change requests and the submissions and further submissions which have been made on them, and makes recommendations for the assistance of the Commissioner. It is important to emphasise that the opinions, conclusions and recommendations in this report are my own and are in no way binding on the Commissioner who will be reaching their own findings based on the evidence put before them through written submissions and presentations at the hearing.

2.0 Background

- 2.1 The applicant lodged two separate plan change requests with Council on 24th April 2009. Plan Change 8 relates to a 92 hectare block of land bounded by State Highway 1 to the north, Rolleston township to the east of Dunns Crossing Road, rural farmland to the south, and a large area of land recently designated for the disposal of treated wastewater from the Council-held Pines Wastewater treatment Plant to the west.
- 2.2 This area is referred to in the application as 'the Holmes Block'. Plan Change 9 relates to a 72 hectare area bounded by rural land to the north, west, and south, and an area of Living 2A zoned land to the east of Dunns Crossing Road. The PC9 area is referred to in the application as 'the Skellerup Block'. Both blocks are currently zoned Rural Outer Plains, which provides for rural activities and requires a minimum lot size of 20 hectares per dwelling.

- 2.3 The applicant seeks to develop both Blocks for rural residential development with individual lots ranging in size from 0.4 – 4 Hectares. When originally notified, the Holmes Block was to yield 125 residential units, and the Skellerup Block was to yield 100 units. The applicant has since confirmed that in response to concerns raised by submitters they are now seeking a reduced yield of 97 rural residential lots and five x 4ha lots for the Holmes Block and 68 rural residential lots plus five x 4 ha lots for the Skellerup Block. This equates to a total yield of 165 rural residential lots and ten 4 hectare lots across the two Plan Changes.
- 2.4 The applicant proposes to introduce a new 'Living 3' zone and associated rule package to the District Plan, along with associated amendments to a number of policies. The Plan Changes also include an Outline Development Plan (ODP) for each block that sets out the general layout and key features of each block. The applicant has provided modified ODPs for both blocks in response to submissions, with a copy of these amended ODPs and Plan Change provisions attached as **Appendix 1**.
- 2.5 A relatively unusual feature of the ODPs is the inclusion of 'Countryside Areas' in the middle of each block which comprise a communally owned strip of rural land that is to be retained in pasture for grazing livestock, with the key function of these areas being to provide a rural amenity and outlook to residences near the middle of the blocks and to retain a rural character around the Plan Change perimeters.
- 2.6 The two blocks covered by the Plan Changes are described in detail in both the s.32 reports prepared by the applicant, and in the assessments undertaken by Andrew Craig (**Appendix 2**) and Tim Church (**Appendix 3**). In summary, both blocks have been primarily utilised as forestry plantations over the last thirty or so years, with the trees having been harvested several years ago. After harvesting, both blocks have been developed as pasture and are currently used for pastoral grazing. Both blocks are flat and relatively featureless, do not contain any dwellings or large farm buildings, and visually consist of rural paddocks bounded by wire fencing and occasional shelter planting that is typical of the wider Canterbury Plains rural environment.
- 2.7 The two Plan Changes take place within the planning framework of an operative Regional Policy Statement (RPS), and Change 1 to that Policy statement (PC1) which seeks to provide a high degree of direction as to how urban growth is to be managed within Greater Christchurch, with growth consolidated within and adjacent to existing townships and greenfield growth located within a Metropolitan Urban Limit (MUL). The Selwyn District Plan is also directly relevant, including the need to have regard to Plan Change 7 (PC7) which seeks to align the District Plan with PC1 and provide for ten year's worth of urban growth in Rolleston and Lincoln, and Plan Change 17 (PC17) which seeks to amend the District Plan to provide for rural residential development in a comprehensive manner.
- 2.8 Two documents prepared under the Local Government Act rather than the Resource Management Act are also of relevance, namely the Rolleston Structure Plan (RSP) which seeks to guide the long-term development of Rolleston, and the Rural Residential Background Report (RRBR) which Council prepared to help inform the development of PC17.

3.0 Statutory Considerations

3.1 Resource Consent Act 1991

- 3.1.1 The general approach for the consideration of changes to district plans was summarised in the Environment Court's decision in Long Bay¹, the relevant components of which I have set out in the following paragraphs.
- 3.1.2 A plan change should be designed in accordance with (section 74(1)):
- (a) the district council's functions under section 31;
 - (b) the provisions of Part 2;
 - (c) its duty under section 32; and
 - (d) any regulations (section 74(1)).
- 3.1.3 The purpose of the Act, as set out in Part 2, is to promote the sustainable management of natural and physical resources. In achieving that purpose, identified matters of national importance are to be recognised and provided for (s.6); particular regard is to be had to various other matters (s.7); and account taken of the principles of the Treaty of Waitangi (s.8).
- 3.1.4 When preparing a plan (change) a district council:
- (a) must give effect to any operative regional policy statement (section 75(3)(c)); and
 - (b) shall have regard to a proposed regional policy statement (section 74(2)(a)(i)) and any management plans and strategies prepared under other Acts (section 74(2)(b)(i)); and
 - (c) shall have regard to the extent to which the plan needs to be consistent with the plans of adjacent territorial authorities.
- 3.1.5 In this case the Regional Policy Statement is operative, with amendments being proposed to Chapter 12 of the RPS through Change 1. Several plans prepared under the Local Government Act are of direct relevance to this proposal, including the Rolleston Structure Plan (adopted by Council in September 2009) and the Rural Residential Background Report that was recently adopted by Council in February 2011. There are no directly relevant provisions in the Plans of the neighbouring territorial authorities, with matters of interest to the neighbouring authorities limited to the coordinated urban growth of Greater Christchurch which is the subject of Change 1.

¹ Long Bay – Okura Great Park Society Inc v North Shore City Council A 078/08

- 3.1.6 A district plan must state the objectives sought to be achieved, policies to implement the objectives and rules (if any) to implement the policies (s75(1)). It may also state the significant resource management issues, methods, other than rules for implementing the policies, reasons for adopting the policies and methods, and the environmental results expected (s75(2)). There are a large number of objectives and policies relating to urban growth and associated related topics in the Selwyn District Plan. PC8 and PC9 seek to make only relatively minor changes to existing objectives and policies in the Plan, and do propose the addition of several new policies.
- 3.1.7 The rules are to implement the policies (sections 75(1)(c) and 76(1)) and the proposed policy or method is to be examined, having regard to its efficiency and effectiveness as to whether it is the most appropriate method of achieving the objectives of the plan (section 32(3)(b)) taking into account (section 32(4)):
- the benefits and costs of the proposed policies and methods; and
 - the risks of acting or not acting if there is uncertain or insufficient information.
- 3.1.8 In making a rule the territorial authority shall have regard to the actual or potential effect of activities on the environment (s76(3)).
- 3.1.9 Where the objectives of the Plan are not being altered, as is the case here, then section 32 in essence requires the Council to consider whether the proposed amendments to the Plan's policies and rules better achieve the Plan's objectives, and thereby Part 2 of the Act, than the existing Plan provisions. To this end, section 32 requires an overall consideration of whether approving the proposed rural residential zones (with or without any amendments) would better achieve the objectives of the Plan and thereby the purpose of the Act than declining the plan changes and retaining the existing Outer Plains zoning.
- 3.1.10 The process for making privately-requested changes to district plans is set out in the First Schedule to the Resource Management Act. These plan change requests have reached the stage where a hearing is required under Clause 8B and a decision is to be made on the provisions of the plan changes and the submissions under Clauses 10 and 29 of the First Schedule.

4.0 Submissions

- 4.1 The summary of submissions was publicly notified on 14th August 2010, with submissions closing on 24th September after the submission process was extended following the Darfield earthquake. Thirty two submissions were received on PC8, and thirty one submissions received on PC9. All of the submissions received were opposed to the Plan Changes in whole or in part. A summary of these submissions was in turn publicly notified on 10th November 2010 and closed on 25th November 2010. All of the further submissions on both Plan Changes were in support of submitters seeking the plan changes be rejected.

- 4.2 Late submissions were received from J & G Burdis (S32), N Sole (S32) and Dryden Trust (S33) which were accepted, with the late submissions by J Baxter (S34), G & P Poole (S35), G & J Meadows (S36) and P Tilling (S37) being rejected. The acceptance of these submissions has been made under delegated authority by Council Officers and is not a matter that is open for the Commissioner to consider. For information I have attached the report considering the acceptance of these late submissions as **Appendix 4**.
- 4.3 The two Plan Changes are seeking broadly similar outcomes, have a similar rule package, and are located in the same general geographic area to the west of Rolleston. The statutory framework, infrastructure needs, and potential environmental effects therefore have a high degree of similarity between the two Plan Changes. Both Plan Changes were notified on the same day, and the majority of submitters lodged a single written submission covering both of the Plan Changes with the consequence that the majority of submitters are seeking identical outcomes to both Plan Changes.
- 4.4 I have therefore prepared a single s.42a report covering both Plan Changes, as much of the discussion and assessment of the issues raised by submitters is of equal relevance to both blocks. Where there are issues that are specific to only one of the blocks then I have made that clear. I have also provided a separate recommendation on each of the Plan Changes, along with a separate appendix that summarises my recommendations as to whether to accept, accept in part, or reject the relief sought by submitters.
- 4.5 The submissions were relatively unusual in that the majority of submitters sought a single outcome, namely that both Plan Changes be declined in their entirety. There were therefore very few submissions that sought specific text changes to the proposed Living 3 policy and rule package, or that sought what might be termed compromise positions whereby the Plan Changes might be considered to be acceptable subject to specific amendments.
- 4.6 Given the lack of specific amendments sought (beyond a general desire to see both Plan Changes declined), I have generally sought to discuss the broad issues or themes raised by submitters, with a table for each Plan Change attached as **Appendix 5** summarising my overall recommendations in relation to whether submissions should be accepted, accepted in part, or rejected. In the few instances where submitters have sought specific text amendments, I have included a specific reference in the body of the report, in addition to the above mentioned table.

5.0 Assessment

5.1 Household Numbers, Market Demand and the Pre-emption of PC17

- 5.1.1 PC1 seeks to make limited provision for rural residential households in Greater Christchurch. In the eastern portion of Selwyn District, this provision is limited to 200 households from now until 2016, 200 households between 2017-26, and 200 households from 2027-2041, making 600 rural residential households in total. The preferred procedural method for providing these households is set out in

Method 14.2 of PC1, namely *"The Canterbury Regional Council together with the three territorial local authorities within Greater Christchurch shall undertake monitoring of Rural Residential development in accordance with Policy 16, and shall undertake a review of the provisions in 2010"*. The Commissioners also state in their decision that *"...the long term aim should be to ensure that areas are specifically zoned by the territorial authorities, rather than being randomly selected by developers and advanced as private plan change requests"*(para.341).

- 5.1.2 To implement PC1, and also to address pre-existing pressure for rural residential development in the District that was occurring regardless of the PC1 process, the Council has prepared a Rural Residential Background Report that has subsequently fed into the development of Plan Change 17. PC17 sets out a strategic objective and policy framework for accommodating rural residential development, and also contains a rule package and rezones sufficient land to provide for some 170 rural residential households i.e. most of the 200 households required by PC1 in the first staging period to 2016.
- 5.1.3 A number of submitters have raised concerns that the granting of PC8 and 9 in their current forms will pre-empt and/or undermine Council's PC17 process to the extent that significantly contrasting approaches to managing rural residential activities could be formalised into the District Plan. This, in turn, could result in variable environmental, social and economic outcomes, whilst making the administration of the District Plan onerous and the related provisions contradictory.
- 5.1.4 The concerns raised by submitters tend to focus primarily on PC8 and 9 taking up a large proportion of the 200 household allocation, thereby limiting the ability of arguably more appropriate blocks to be rezoned through the PC17 process. In essence, if regard is had to the 200 household limit, the question is whether in s.32 terms PC8 and 9 represent a more effective and efficient method of achieving consistency with the Regional Policy Statement than the alternative locations set out in PC17. In an ideal world, the merits of all competing blocks would be able to be considered in a holistic manner, with the obvious vehicle for this consideration being through the hearing of submissions on PC17 which are likely to take place later this year. Unfortunately we do not live in an ideal world, with private plan changes having every legal right to be considered in a timely manner, even if this does not produce the most efficient of Plan drafting contexts.
- 5.1.5 The applicant has nonetheless sought to address such concerns in two ways. The first is by reducing the overall yield of each plan change and deferring PC9 until 2016 which I discuss in more detail below. The second way is through their s.32 assessment which briefly considered the merits of potential alternative areas in the UDS portion of the District and concluded that the PC8 & 9 blocks were better suited to rural residential development than any of the alternatives. This assessment was relatively succinct and high level, and as far as I am aware did not involve any consultation with the landowners of potentially competing blocks as to their suitability or otherwise.
- 5.1.6 The shortcomings of this assessment of alternatives is especially evident when compared to the much more robust assessment of possible sites undertaken by

the Council through the RRBR and PC17 s.32 process. The Background Report in particular was widely circulated for consultation, and numerous expressions of interest were received from landowners who believed that their land was suitable for rural residential development. The blocks proposed through this feedback were then investigated in more detail, and the sites assessed for their ability to be serviced with network infrastructure and their locations compared with the policy criteria developed through PC1 and the RRBR.

- 5.1.7 This process resulted in a number of sites being identified as suitable for rezoning through PC17, with the sites located adjacent to Rolleston, Lincoln, Prebbleton, and West Melton. It is important to note that a portion of PC8 was identified through this process as being suitable for some 50 households. Submissions have yet to close on PC17, and I have no doubt that submissions will be received from landowners who have 'missed out' on inclusion through PC17 i.e. the areas identified in PC17 have yet to be tested through a hearing process. What PC17 does however demonstrate is that when assessing the efficiency and effectiveness of achieving the first phase of allocating 200 households in PC1, there are alternative sites that are likely to be as good, if not better than PC8 and 9.
- 5.1.8 I am aware that private plan changes need to be assessed on their own merits, and that the proposed Living 3 zoning for PC8 and 9 needs to be considered primarily against the current status quo zoning of Rural Outer Plains in terms of which zone and rule package better delivers the outcomes necessary for achieving the District Plan's objectives and policies and that in turn give effect to the Regional Policy Statement. The key point I am making above is simply that in providing for the first tranche of 200 households, there appear to be alternative sites that are at least as good as PC8, and better than PC9. I do not therefore believe that there are grounds to grant these two Plan Changes purely on the basis that there are no alternative sites available that are as good for giving effect to PC1.
- 5.1.9 In terms of the two Plan Changes absorbing a disproportionate share of the rural residential households available under PC1, there was indeed the potential for that to occur with the Plan Changes as notified which would have seen 225 lots provided across both blocks, with 125 of these to be available in the first staging period. In response to concerns raised by both submitters and Council Officers, the applicant has proposed some significant amendments to reduce the yield of both blocks, and to defer the development of PC9 until 2016, thereby enabling the 67 rural residential households now proposed in PC9 to come out of the 'next' 200 household allocation in the 2016-26 period.
- 5.1.10 It is my view that with these amendments, both Plan Changes are broadly compatible with the PC1 policy issues around household numbers. To my mind it is consistent with the PC1 approach of managing growth through consolidation and with a focus on reinforcing Key Activity Centres (in Selwyn's case the townships of Rolleston and Lincoln), that the majority of rural residential development should be adjacent to Rolleston and Lincoln. In the case of PC8, provided the overall rural residential yield is reduced to approximately 80 lots (as per below recommendations on landscape and urban design matters), then PC8, plus the other rural residential area identified in PC17 to the east of

Rolleston, will result in some 110 lots being provided in Rolleston in the coming six years, and approximately 200 lots being provided in total across the District.

- 5.1.11 I note that the overall number of lots in PC8 is to be controlled through proposed amendment 45, amendment 47, and amendment 50. Amendment 45 sets a limit in the subdivision rule section of the Plan controlling the overall number of lots to be created within the ODP and amendment 50 determines that any proposal to exceed this number will be a non-complying activity. I have concerned that the wording of Amendment 45 is “in respect of the land identified at Appendix 37, no more than 102 rural residential allotments may be created by subdivision prior to 31 December 2016.” The implication of this wording is that the total household limit only applies until 2016, after which further subdivision would be permitted. Given the need for long-term certainty as to the spacious outcomes and rural character anticipated in the Plan Change, I recommend that Amendment 45 be amended as follows:

“in respect of the land identified at Appendix 37, no more than **102 80 Living 3 zone rural residential** allotments and **5 Rural Inner Plains allotments**² may be created **by subdivision prior to 31 December 2016.**”

- 5.1.12 Should PC9 be granted, then I strongly support the need for it to be deferred until 2016 (as opposed to being made operative immediately), to ensure that an equitable distribution of rural residential households is achieved across the District within each staging period to ensure that geographic choice of rural residential housing is maximised, that the market is not overly dominated by a single player, and to improve the prospects of PC9 being able to be efficiently serviced and connected with future urban growth within Rolleston itself.
- 5.1.13 Provided that the overall rural residential household yield of PC8 is reduced to around 85 lots, and PC9 is deferred until at least 2016, I do not believe either plan change fundamentally challenges PC17. I do recognise that PC8 will have taken up the 50 households allocated to it through PC17, plus the additional 30 or so ‘spare’ households that have yet to be allocated through the PC17 process. In so doing it does pre-empt PC17 to a certain extent, however the outcomes achieved through PC8 and PC17 will still remain broadly consistent.
- 5.1.14 Where PC8 and 9 do pre-empt PC17 is in the inclusion of a rural residential objective, policy, and rule package. Should PC8 or 9 (or both) be accepted, then the District Plan will contain three zones that provide for rural residential-type activities, namely the operative Living 2 zone, the Living 3 zone proposed through PC 8 and 9, and the Living 4 zone proposed through PC17. A profusion of similar zones achieving broadly similar outcomes does not make for clear, succinct District Plans.
- 5.1.15 Unfortunately the private plan change process enabled by the RMA seems to lend itself to ad hoc zone making, with the Selwyn District Plan already containing numerous living zones that have subtle variations on similar themes. I am aware that the Christchurch City Plan has also experienced a profusion of subtly different living and business zones that have arisen over time primarily via

² The other amendment to include reference to Rural Inner plains is discussed in more detail in the section on urban Form.

the private plan change process. Such zoning does have the benefit of being able to tailor specific rules to address specific on-site issues, however the downside is the potential for an overly complex District Plan. Again, in an ideal world the PC8 and 9 blocks would have been considered through the PC17 process, and the duplication of similar provisions avoided. As noted above, we do not live in a perfect world, and whilst it makes for inefficient District Plan drafting, the precedent for multiple similar zones has long been established.

5.1.16 In considering the consistency of the PC8 & 9 and PC17 provisions, I note that the objectives and policies proposed through amendments 16-19 are seeking to achieve broadly similar outcomes to the PC17 provisions, albeit that PC17 has necessarily taken a more strategic approach as to how rural residential activities should be provided for. In essence the objectives and policies of the two plan changes overlap rather than conflict.

5.1.17 At a policy level there is therefore the ability for both sets of provisions to coexist, and there also remains the potential for the policy package to become further aligned and rationalised through the upcoming PC17 hearings. In terms of the rule packages, I consider that they are broadly consistent, with PC 8, 9, and 17 all including the provision of ODPs, controls on site coverage, building setbacks, landscaping, and boundary fencing. This means that the end 'on the ground' built outcomes should be broadly similar between developments established under PC8 & 9 and PC17 rule packages.

5.1.18 A separate, but related, issue relating to household numbers is the definition of what constitutes a Rural Residential activity in terms of PC1. When notified, PC 1 defined rural residential activities as:

"Residential units outside the urban limits at a density of an average of between a half and one hectare"

5.1.19 This definition was subsequently amended following the hearing of submissions so that rural residential activities are now defined as:

"Residential units outside the Urban Limits at an average density of no less than one per hectare"

5.1.20 This definition has subsequently been appealed by the Christchurch City Council and the Waimakariri District Council, and that the Canterbury Regional Council has since issued a memorandum to the Environment Court clarifying that it will not be defending the Commissioner's definition but instead is in agreement with the alternative definition put forward by the appellant Councils. I note that Selwyn Council has incorporated this latest definition into PC17. The agreed position of the various Councils therefore now appears to be that rural residential activities are to be defined as:

"Residential units outside the Urban Limits prescribed in the Regional Policy Statement at an average density of between one and two households per hectare"

5.1.21 The density of the two Plan Change blocks is further complicated by whether the 4 hectare rural lots now proposed are included within the area used for calculating densities, and whether the Countryside Areas are likewise included.

To my mind the 4ha lots do not constitute rural residential activities (and indeed PC1 is explicit that lots of 4ha or larger are rural, not rural residential). The Countryside Areas are an innovative concept that don't fit easily into any of the above definitions.

- 5.1.22 I am cautious about getting bogged down in somewhat esoteric discussions on the weighting and wording of the various definitions and the inclusion or not of what constitutes the net density of the two Plan Changes. In my view the common theme or outcome being sought is that rural residential developments contain lots that are on average between 0.5 and 1 hectare in size and that the minimum and maximum individual lots sizes should also not stray too far beyond 0.5 (minimum) and 1 hectare (maximum). If the 4ha lots (20 hectares total) are excluded from calculating the average densities in both Plan Changes, and the Countryside Areas are included, then PC8 as now proposed results in 97 rural residential lots on 72 hectares at an average of 7,400m², whilst PC9 results in 68 lots over 52 hectares at 7,600m² per lot.
- 5.1.23 The Countryside areas mean that many individual lots will be smaller than this average, however the majority of lots will still exceed 5,000m² in size. These average densities will increase further if the amendments recommended below in the sections on landscape and urban design issues are accepted. The resulting development means that purely in terms of the relationship of dwellings to rural open space, both Plan Changes to my mind are generally consistent with the densities anticipated in PC17 and PC1, recognising that neither PC17 or PC1 is beyond challenge on these matters.
- 5.1.24 The above discussion has focussed primarily on consistency with the Change 1 definitions and the cap of 200 rural residential households. Whilst I believe it is important to have regard to emerging Regional Policy Statement provisions, I am also mindful that the PC1 provisions as they relate to rural residential households have yet to be settled. I have therefore also considered the merits of the two Plan Changes in the event that the Commissioner places relatively little weight on the 200 household limit. The s.32 report for PC8 and 9 includes a report from Simes Limited that examines the demand for rural residential activities. As part of the development of the Rural Residential Background Report and subsequent s.32 assessment that lead into PC17, the Council also engaged Ford Baker Valuation to undertake a specific assessment of both the demand for, and trends towards, rural residential activities³.
- 5.1.25 There is broad agreement between Ford Baker Valuation and Simes Limited that the demand for rural residential activities is significantly greater than the 600 households allocated to the District over the remaining 30 year development period currently prescribed under PC1. I accept the view that there is considerable demand for this form of housing. Indeed, as set out in the PC17 s.32, the Ford Baker report assessed demand as being for some 120 lots per year, which over the 30 year timeframe of PC1 would result in total take-up of some 3,600 rural residential properties in just the UDS portion of the District (a rough crescent running from West Melton, around Rolleston and Lincoln, to Tai Tapu).

³ PC8 & 9; Appendix A – Valuer Report, Statement of evidence of P W Wilkinson

- 5.1.26 At an average density of between 0.5 and 1ha per lot, meeting market demand would result in some 2,500 hectares of farmland being taken up in this area. Clearly simply 'meeting the market' would have significant resource management implications in terms of the efficient provision of servicing and community infrastructure, rural character and amenity, township identity and form, transportation, and rural productivity. Put simply, just because a market exists for a certain product, it does not necessarily follow that the provision of that product will have acceptable effects when considered in the wider context of sustainable management as set out in Part 2 of the RMA.
- 5.1.27 The provision of this product is also not necessary for accommodating household growth per se i.e. PC7 seeks to rezone sufficient land to enable some 4,100 additional households to be accommodated in Rolleston and Lincoln over the coming decade, in addition to existing vacant sections within these townships and a large block of land recently rezoned in West Melton. The District therefore has more than enough land to accommodate growth (including a large number of any households relocated out of Christchurch because of the earthquakes), without the need for further rural residential housing. In essence, the provision of rural residential households has far more to do with meeting a lifestyle aspiration than it does with accommodating household growth per se.
- 5.1.28 An inevitable consequence of limiting supply is that price is likely to be somewhat higher than if the market was able to fully meet demand without constraint. This has always been a feature of property markets generally, whereby desirable areas with limited land supply command higher prices. Local Christchurch examples (pre-earthquake) include areas such as Sumner, the hill suburbs, and areas within Christchurch Girls and Boys High School zones. This is not of course to say that large areas of the Port Hills ought to be rezoned for residential purposes in a bid to lower land prices in such areas, but rather that any such proposals need to be considered primarily within the context of whether or not the adverse environmental effects that might result from such rezoning are able to be appropriately managed.
- 5.1.29 So it is with rural residential typologies where the market demand for such forms is likely to outstrip the ability of the eastern Selwyn environment to provide for that demand without significant adverse cumulative effects on the inner plains environment. I accept that the debate around market demand, and the appropriate number of rural residential households to be provided within eastern Selwyn are wider issues that will be more fully considered through both appeals on PC1 and the hearing of submissions on PC17.
- 5.1.30 For the purposes of assessing PC8 and 9 I am simply acknowledging that there is market demand for a rural residential product, that such demand is likely to exceed supply unless extremely large swathes of the inner plains is made available for this form of housing, and that the benefits of providing for that demand on any given block needs to be assessed on its merits and against the potential immediate and cumulative adverse environmental effects of enabling such development. The potential effects of developing both blocks are therefore considered in detail below.

5.2 Rural Character and Amenity

- 5.2.1 A number of submitters are concerned about the loss of green open space and the rural appearance of the area if this development goes ahead. This effect would be most strongly felt along the frontages of Dunns Crossing Road opposite the two developments. Mr Andrew Craig, a Landscape Architect, has assessed the landscape aspects of the two Plan Changes, with his report attached as **Appendix 2**.
- 5.2.2 Mr Craig has briefly described the character of the site and the wider context, and has considered the visual impacts of the two Plan Changes. In general, Mr Craig agrees with the assessment of the applicant's landscape Architect Mr Espie, subject to several matters where their opinions differ. Mr Craig has noted the different landscape contexts of the two blocks, where the pC8 land is bounded on three sides (and these boundaries will become more distinctive over time as the land to the east becomes urbanised and the Pines WWTP infrastructure and shelter planting becomes established. PC9 is much more representative of the Rural Outer Plains environment and visually is largely indistinguishable from the open farmland surrounding it on three sides.
- 5.2.3 Mr Craig then sets out a number of criteria against which he considers a successful rural residential development can be measured, with the key element being whether future occupants perceive themselves to be living in a rural, rather than a low density suburban, environment. In achieving this outcome aspects such as open road boundary fencing, generous building setbacks from the road, low site coverage, landscaping, and an avoidance of 'urban motifs' such as kerb and channel, street lighting (except at intersections), and street furniture are all important. The proposed plan changes achieves these matters through the proposed rule package, although Mr Craig has recommended some relatively minor amendments to site coverage (reducing it from 500m² to 400m²) and road boundary landscaping to reduce the proposed rule complexity and monitoring implications. In this regard I note that the proposed rule package covering general design and building bulk and location standards is broadly consistent with that being promulgated by the Council through PC17.
- 5.2.4 The building setback controls are however more liberal in PC8 and 9 compared with PC17, where PC17 requires a 20m setback from roads and 15m setback from internal boundaries, compared with a 15m setback from roads and a 5m setback from internal boundaries proposed by PC8 and 9. I concur with the relatively minor amendments to the site coverage and landscaping rules recommended and set out in Mr Craig's report, and in addition would recommend that the building setback controls be increased to be consistent with those being put forward in PC17.
- 5.2.5 In terms of the elements that Mr Craig considers contribute to an acceptable rural residential development, the key matter is that lots should in general be at least 5,000m² in size (although small numbers of slightly smaller lots might be appropriate where they are directly adjacent to larger rural views/ outlook). In this regard Mr Craig is concerned that the ODP for PC8 contains a number of 4,000m² lots located towards the centre of the plan change area that in

combination have the potential to detract from an open rural character for both immediate occupants and residents of the wider Plan Change area. He has recommended that a number of these more central lots be increased to a minimum of 5,000m², with their location shown in an appendix attached to his report. In total, an increase in these lots to a minimum of 5,000m² will result in an overall loss of approximately 2 lots across the ODP as a whole. I rely on Mr Craig's recommendation on this matter that the potential gains in amenity and rural residential character outweigh the loss of up to two lots.

- 5.2.6 Mr Craig also considers that in general the overall size of rural residential areas should be relatively small so that lots remain closely connected to larger rural areas and views, rather than developing a very low density suburban character that can occur with large developments where internal sites are some distance from a rural outlook. The proposed Plan Changes have an overall yield that is higher than that which Mr Craig believes to be generally appropriate for maintaining a rural character. In overcoming what would otherwise be a significant constraint on the appropriateness of these two Plan Changes, Mr Craig considers that the Countryside Area concept is an integral element in maintaining rural character and views both for future residents and for the wider community viewing the Plan Changes 'from the outside'.
- 5.2.7 In my view the Countryside Areas are an innovative concept that has the potential to provide a significant amenity and functional benefit to future residents. Clearly the management and maintenance of these areas over the long term will be a key determinant on the quality of the Plan Changes and their ability to integrate appropriately with the surrounding environment. Like any new concept the downside is that there are few examples available that demonstrate where the concept has been successfully implemented elsewhere. I am aware of a number of developments around the country where investors have been able to purchase small lots within a larger farm, vineyard, or olive grove, with a manager employed to oversee the farming operation.
- 5.2.8 This arrangement enables homeowners to enjoy the amenity of living on a productive farm, without the day-to-day management issues. The Countryside Area concept differs from these other examples whereby the proposed areas are strips and are not particularly anticipated to be farmed as a single commercial entity. Instead it is my understanding that these areas will be held in a body corporate-type structure and leased to farmers or more likely to residents who desire more grazing land for horses and the like. I am unsure whether a strict body corporate mechanism can be in place for fee simple lots (assuming the lots will be freeholded). I have discussed the prospect of these areas being vested in Council as reserves with the Council's open space Asset Manager (Anne Greenup) and the verbal feedback from Ms Greenup is that Council would not wish to accept these areas.
- 5.2.9 Given the importance of the success of these areas to the Plan Changes being acceptable from a landscape perspective, the applicant may wish to provide more detail at the hearing regarding the mechanisms and management arrangements that are anticipated for these areas. The applicant may also wish to clarify the distinction in the proposed wording of rule 10.15.1 and 10.15.2

(amendment 41) which appear to make rural activities both permitted and discretionary. If the intention is that rural activities in accordance with a management plan are permitted, whilst rural activities not in accordance with that plan are discretionary, then it would be helpful if the rules were made more explicit.

- 5.2.10 The Countryside Areas around the perimeter of the two Plan Changes along Dunns Crossing Road are considered to be critical in maintaining both a degree of rural outlook for existing residents to the east (a matter of concern raised by a number of submitters), and in maintaining a sense that the Plan Changes are distinct rural residential nodes, whilst concurrently remaining in close proximity to, and well connected with, the suburban edge of Rolleston.
- 5.2.11 Mr Craig considers that this edge treatment should be extended along Burnham School Road on the southern side of PC8, to both ensure that the Holmes Block is visually contained and buffered on all sides, and also to ensure that the rural outlook of the rural residential lots along the southern boundary is maintained in perpetuity and is not reliant on the Outer Plains zoning to the south for providing this amenity, outlook, and character. The addition of a further Countryside Area along the southern boundary of PC8 means that the recommended changes will result in the loss of some 12-15 smaller lots (including the two lost in the above recommendation and potentially another couple lost through the extension of an Odour Constrained area adjacent to the Resource Recovery Park (discussed below in the section on reverse sensitivity)), with PC8 yielding approximately 80 rural residential lots.
- 5.2.12 This reduction in yield co-incidentally assists in maintaining general consistency with PC17 (which rezoned approximately 170 rural residential lots, including 50 lots in the Holmes block) and PC1 which requires Council to provide for 200 rural residential households in the period to 2016. In the event that PC17 is accepted, then PC8 at around 80 lots effectively takes up the shortfall of 30 lots in PC17. In noting this consistency, I have not placed a great deal of weight on it in terms of a justification for accepting Mr Craig's recommendation. This is because the PC1 '200 lot' number is subject to appeal and PC17 is at a very early stage in the plan development process and doubtless will attract submissions from a number of landowners outside the PC17 zoned areas who will be keen to promote the merits of their land as alternative candidates for making up any shortfall in household numbers.
- 5.2.13 In summary, responding to landscape issues I recommend the following amendments:
- PC8 ODP be amended to include an additional Countryside Area along the southern boundary with Burnham School Road;
 - PC8 ODP be amended to identify a number of internal lots that should be a minimum of 5,000m²;
 - Permitted site coverage for both PC8 and PC9 be reduced to 10% or 400m² (whichever is the lesser) – see amendment 11 and 24
 - Simplify the proposed road frontage landscaping rule – see amendment 21

5.3 Urban Form and Urban Design

- 5.3.1 In assessing urban form and urban design issues, the Council has commissioned a report from Mr Tim Church, a Senior Urban Designer with consulting firm Boffa Miskell Limited. Mr Church was involved in the preparation of the Rolleston Structure Plan which was adopted by Council in September 2009. Mr Church's evidence is attached as **Appendix 3**.
- 5.3.2 Mr Church's report provides a detailed summary of urban design matters raised by submitters. These submitters have raised concerns about the effect of the Plan Changes on the urban form of Rolleston, with these concerns worded around the effects of urban sprawl, the loss of a clear edge to the township, or the lack of consistency with the direction of growth expressed through the Rolleston Structure Plan.
- 5.3.3 Mr Church considers that from an urban design perspective there is an inherent tension between rural residential development as a typology and what are generally accepted good urban design principles i.e. rural residential development by definition has a very low density form, is typically single use (residential and ancillary rural only), is invariably isolated/ peripheral to town centres, tends to be car dependant, socio-economically uniform, and has the potential to displace activities/ households that might otherwise have chosen to locate closer to town centres. Mr Church therefore suggests that as a general approach to accommodating urban growth, the use and extent of this typology as an urban form should be minimised.
- 5.3.4 The desire for limiting this typology is to my mind also reflected in the approach (and s.32 analysis) taken in PC1 i.e. a somewhat 'grudging' recognition that a limited amount of rural residential development is necessary to provide a degree of choice in housing typologies on offer, and to a lesser extent to reduce pressure on 4 hectare blocks (when owners might ideally wish for somewhat smaller lots), but that this choice should be limited as it is inherently unsustainable and contrary to an overall approach of accommodating urban growth through urban consolidation.
- 5.3.5 Within the context of limited provision of a rural residential typology, the general policy approach proposed in both PC1 and PC17 (and discussed in more detail in the section on the Statutory Planning Context) regarding the preferred locations are that rural residential housing should be established in small nodes (so as to maintain a rural outlook and character), distributed across the District to maximise geographic choice, are not in areas that are hazard prone, adjacent to strategic regional infrastructure, or have high landscape, heritage, or ecological values. Such sites should be able to be efficiently serviced with network infrastructure, be located outside MUL and in location where future urban growth is unlikely, yet are also to be adjacent to and well connected with the MUL, and with an outer edge to prevent ongoing expansion.
- 5.3.6 Mr Church considers that PC8 (with modifications) fits reasonably comfortably with the urban design elements of the above criteria, with this broad consistency also recognised by the inclusion of approximately half of the PC8

household allocations within the northern third of the Holmes block in PC17. Mr Church has identified that the PC8 block is bounded to the east by existing urban zoned land in Rolleston Township. I note that the area to the east of Dunns Crossing Road is included within the MUL as set out in PC1 and that no appeals have been lodged on PC1 opposing its inclusion.

- 5.3.7 The existing very low density urban zoning of this land is proposed to be amended to a more intensive Living Z zone through PC7 so as to better achieve the objectives of both PC1 and the Rolleston Structure Plan. No submissions have been lodged opposing the Living Z zoning on this neighbouring block, with the Living Z zoning to be made operative i.e. not deferred, through PC7. Given the lack of opposing submissions, I believe that a high degree of certainty can be placed on the likelihood that the land to the east of Dunns Crossing Road opposite PC8 will be developed for suburban purposes well within the next ten years.
- 5.3.8 PC8 is also bounded to the north by State Highway 1 and the rail corridor (with the IZone industrial estate and Rolleston Prison further to the north) , and to the west by the designations and developing infrastructure needed to service the Pines Waste water Treatment Plant ('WWTP') and the Resource Recovery Park ('RRP'). The only relatively 'open' boundary is to the south where the PC8 block adjoins Burnham School Road, and thereafter open Outer Plains zoned farmland. Mr Church has agreed, from an urban design perspective, with Mr Craig's recommendation of the desirability of establishing an additional Countryside Area along the Burnham School Road frontage to ensure that a clear southern edge and rural character is established for the PC8 land to the south. I agree with the conclusions of both Mr Church and Mr Craig that, with the addition of a southern Countryside Area, the PC8 land will have good 'edges' or containment. These contained edges help to prevent further outward expansion, whilst also enabling the block to have a distinctive rural residential character and outlook both from within the site looking out, and for the wider community experiencing the development from the outside.
- 5.3.9 As an aside, I note that a key element of the western edge (and the northern edge of PC9) is the use of five x 4 hectare lots along these boundaries. These large lots assist in maintaining rural outlook for internal rural residential lots, minimising potential odour issues, and reducing the overall yield of the development so that it is more consistent with both PC17 and does not take up a disproportionate amount of the 200 households required under PC1. Whilst supporting the applicant's amended ODP to introduce these 4ha lots, I believe zoning them Living 3 creates a very uneasy fit between the proposed policies and zone description for Living 3 areas and large 4 hectare sized lots. In essence the amended ODP results in a number of 4 ha lots with an underlying zoning and associated rule package that is designed for lots around 0.5 – 1.0 ha in size.
- 5.3.10 In my view, should either of the Plan Changes be accepted, it would be a far more consistent 'fit' with the District Plan's objective, policy, and rule package for the proposed 4 ha lots to be zoned 'Rural Inner Plains' which is the long-established Plan zone for lots of this size. A Rural Inner Plains zoning for the 4 ha lots would be especially appropriate for PC8, whereby the Plan Change

effectively fills in a 'gap' between the urban-zoned edge of Rolleston Township, the State Highway, and the extensive area covered by the Pines WWTP designation.

- 5.3.11 Whilst Mr Church generally supports PC8 from an urban design perspective, he has nonetheless made a number of recommendations as to how PC8 might be further improved and its potential effects mitigated. He supports the Countryside Area concept as a positive tool for providing rural character, outlook, and edges. In particular he is supportive of the Countryside Area along Dunns Crossing which contributes towards a greenbelt boundary treatment that was set out in the Rolleston Structure Plan around the urban edge of the Township.
- 5.3.12 To this end Mr Church has emphasised the benefits of the Dunns Crossing Countryside Area and the relatively short length of Countryside area adjacent to the existing pocket of rural residential dwellings as including provision for public access for walking, cycling, and potentially horse riding. To this end I note that the PC8 ODP includes a red dotted line along this countryside Area denoting public access, with an associated assessment matter included in the subdivision section of the Plan Change. Given that the Countryside Areas are to be retained as privately owned land, I presume that a public easement or similar instrument will need to be in place over this area, with a public access strip potentially physically separated from any leased paddocks within the area. Given that access has been shown on the ODP, and given the importance attached to it by Mr Church, it would be helpful if the applicant was able to clarify at the hearing the mechanism by which such access will be provided.
- 5.3.13 Mr Church has also recommended that a 'key gateway' feature be made at the Dunns Crossing/ Burnham School Road intersection, in line with the treatment of gateways into Rolleston proposed in the Rolleston Structure Plan. He has also suggested that increased variety in lot sizes would assist in maintaining visual interest and diversity within the area, which may well be achieved in any event through Mr Craig's recommendation that a number of internal lots be increased to at least 5,000m² in size. Mr Church has also recommended that the ODP be amended to include a note preventing a gated subdivision i.e. the principle road access points are to remain unobstructed and free for access by the wider community. I support these recommendations.
- 5.3.14 Mr Church, in contrast to his general support of PC8, has significant concerns about the urban form created by the PC9 Plan Change. In particular, he considers that the PC9 Block is disconnected from the urban edge of Rolleston township, and is unbounded to the north, west, and south. In essence the PC9 block represents an isolated pocket of RuralOuter Plains zoned land that is surrounded by Outer Plains zoning on three sides and has no physical or policy boundaries that would contain the Plan Change or prevent its further outward expansion.

- 5.3.15 Whilst a portion of the site's eastern boundary is opposite a Living 2A zoned area on the eastern side of Dunns Crossing Road, it is important to note that this area has a minimum lot size of 1 hectare i.e. it is a rural residential enclave with larger lots than those proposed in the PC9 area. The Living 2A zone in itself currently constitutes something of a very low density outlying peninsula of development that is disconnected from the higher density suburban areas of Rolleston. PC9 could therefore be said to constitute a peninsula appended to a peninsula in terms of urban form.
- 5.3.16 The area to the east of PC9 is included within the MUL identified in PC1, and has also been identified as being suitable for higher density suburban growth in the long term through the Rolleston Structure Plan process. This area has not however been included in PC7 which rezones sufficient land to accommodate Rolleston's urban growth for the coming decade to 2021. Whilst PC7 is not yet operative, I note that no submissions were received on PC7 seeking the urbanisation of the rural area to the east of PC9. Whilst future private plan changes might be received seeking such urbanisation, such plan changes would in my view face a difficult policy hurdle in the short-medium term in that they would be inconsistent with both PC1 Policy 6, and the staged and Council-led approach to growth encapsulated in the objective and policy package promoted through PC7.
- 5.3.17 Likewise any plan changes to intensify the Living 2A Zone would in my view need a high degree of acceptance from owners to have reasonable prospects of success. In my experience such acceptance is often difficult to achieve as whilst some owners might be keen to subdivide, others will have purchased their property because they value the low density character of the neighbourhood and would not wish to see that change. I therefore believe that considerable certainty can be placed on the fact that the PC9 block will remain largely detached and isolated from the physical urban edge of Rolleston for at least the next decade. Even in a decade's time when Rolleston township may be starting to expand to reach the PC9 boundary, PC9 would still remain a somewhat incongruous block of residential properties jutting out into the very extensive Rural Outer Plains environment for the very long term.
- 5.3.18 Unlike the Holmes block which has physical or infrastructural boundaries on three sides, the Skellerup block has no such physical or even policy boundaries beyond the Outer Plains zone provisions. Given that there is little to differentiate this block from any of the neighbouring Outer Plains landholdings, in my view it would be difficult for Council to resist future Plan Changes seeking similar rezoning proposals in the wider Outer Plains area. Indeed were both PC 8 and PC9 to be approved, it could lead to a logical desire for Rural Outer Plains landowners between the two Plan Change blocks to seek to 'fill in the gap' created between PC8 and 9. This would lead to an agglomeration of rural residential developments that in total would result in more of a very low density suburban character such as that experienced in Mandeville and Ohoka in Waimakariri District where multiple private plan changes over the years have cumulatively led to a very extensive rural residential area.

- 5.3.19 I acknowledge that Plan Changes need to be assessed as 'stand alone' proposals on their own merit rather than judged against what might speculatively occur at some pointing the future. That said, I also believe that it is relevant to take into account the implications for urban form and the pressure for consistent decision-making on similar future plan changes and a reasonable expectation that 'like applications would be treated alike'. The lack of physical boundaries, edges, or differentiation between the Skellerup block and surrounding farmland means that it will be difficult to resist similar plan changes on adjoining land in the future with the associated implications that such an outcome would have on the desire to both manage growth with a primary approach of achieving a consolidated urban form and to ensure that rural residential nodes are generally small discrete areas that retain a strong rural character.
- 5.3.20 It is therefore the view of both myself and Mr Church that PC9 should be declined in its entirety due to its poor urban form, disconnection with the existing (and medium term future) township, lack of any physical boundaries on three sides, and incongruousness within a wider Rural Outer Plains context of extensive farmland. In short, it is our view that the existing Rural Outer Plains zoning of this block, surrounded as it is on three sides by similar Outer Plains Zoning, is a more effective method for achieving the District Plan's objectives than the proposed Living 3 Zoning.
- 5.3.21 In terms of urban form and urban design, I consider that PC8 is broadly acceptable, subject to a number of modifications, of which the most significant are as follows:
- The amendment of the ODP to include an additional Countryside Area along the southern boundary with Burnham School Road;
 - Confirmation of public access to the Dunns crossing Countryside Area in particular;
 - A gateway landscaping feature at the corner of Dunns Crossing and Burnham School Roads;
 - The alignment of roading connections to Dunns Crossing with similar access points in the emerging urban areas to the east;
 - The prevention of a gated community i.e. that the main access points remain open to the wider community.
- 5.3.22 In terms of urban form and urban design, I consider that PC9 is not acceptable and that this plan change should be rejected. Should the Commissioner be of a mind to grant the Plan Change then I support Mr Church's recommendations that the PC9 ODP be amended to include:
- 4 hectare lots around the northern, western, and southern boundaries, with an associated reduction in overall yield and consequential amendments being made to the PC9 table included as 'Amendment 45' that specifies the maximum number of lots to be created;

- Alignment of the main access point onto Dunns Crossing Road with the future roading connection to the neighbourhood centre proposed in ODP6 as set out in PC7;
- Confirmation of public access to the Dunns crossing Countryside Area in particular;
- The prevention of a gated community i.e. that the main access points remain open to the wider community.

5.4 Water, Wastewater, and Stormwater Infrastructure Servicing

- 5.4.1 Mr Hugh Blake-Manson, Council Utilities Asset Manager, has provided a summary of the Council strategic approach to the planning of water, stormwater, and wastewater network infrastructure. He has also outlined the network as it currently exists and the programmed upgrades and expansion to this network that are anticipated to service the Rolleston area over the coming years (Appendix x).
- 5.4.2 Mr Blake-Manson has confirmed that in general servicing low density rural residential development is an inefficient means of servicing a given population relative to accommodating those people within higher density suburban areas as part of an existing township. He considers that PC 9 in particular will result in an “orphan” sewer and water services line, which will result in increased costs of operation, maintenance and renewal over the asset life compared with accommodating the same number of households within the MUL. Mr Blake-Manson has confirmed that there is sufficient capacity within the consented and proposed community treatment plants “Pines I” to accommodate the growth anticipated from both Plan Changes.
- 5.4.3 Both Plan Changes will need individual pump stations to assist in transporting sewerage to the network contained within the MUL, and both Plan Changes will need to wait until this network infrastructure becomes available through suburban development within the MUL. In this regard PC8 is well-placed, as the adjoining area to the east is proposed to be rezoned to a higher density Living Z Zone in the first phase of development proposed under PC7. Network services are therefore likely to be available for connection within the next couple of years.
- 5.4.4 The ability to efficiently connect to network infrastructure is more problematic for PC9, as the adjoining area to the east is very unlikely to be intensively urbanised of at least the next decade. Whilst I suspect it would be technically feasible for the applicant to install a long sewer line to connect with the existing network, such provision would not be efficient and would require the Council to maintain a substantial length of sewer network that is serving relatively few households. The long-term maintenance costs and inefficiency of servicing PC9 is therefore a further reason for recommending that this Plan Change be declined.
- 5.4.5 Mr Blake-Manson notes that should PC8 be approved, Council is required under conditions of the Notice of Requirement and associated Regional Council

consents to ensure that the effects, if any, of wastewater disposal within the Pines Waste Water Treatment Plant and associated disposal area are minimised at the adjoining boundary. He does nonetheless acknowledge the views expressed by Ms Harwood that a further dwelling setback from the shared boundary would assist in further minimising the potential for reverse sensitivity issues arising in the future.

- 5.4.6 In terms of water supply, Mr Blake-Manson has concluded that whilst there is sufficient consented water take capacity, there is not currently sufficient pressure to meet the demand of predicted growth in the PC7 area to the east of PC8. Improvements to the network to ensure sufficient pressure is available to PC7 (and thereafter to PC8) will be led by Council as part of the wider network enhancements necessary to accommodate urban growth in Rolleston in a coordinated and staged manner. In this regard PC8 is preferred over PC9 as water supply infrastructure is programmed to be upgraded in the short term immediately to the east of PC8 to service the ODP 1 area.
- 5.4.7 As with sewer infrastructure discussed above, it is still technically feasible to service PC9 with water supply infrastructure, however such servicing will require relatively long lengths of piping to be laid and subsequently maintained to service a small number of households for the medium term. As such the servicing of PC9 is not particularly efficient or effective and is contrary to the direction encapsulated in PC1 that growth should be staged and coordinated with the efficient provision of Council-held network infrastructure.
- 5.4.8 In terms of stormwater treatment and disposal, Mr Blake-Manson has confirmed that disposal is readily available to ground for both Plan Changes. He notes that this provision will be subject to obtaining any necessary Regional Council consents, but that in his experience such consents are relatively straight forward to obtain provided the proposed system is properly designed and constructed.

5.5 Transport safety, network capacity, and integration with the existing network

- 5.5.1 The potential effects of both Plan Changes on the safe and efficient functioning of the District's transportation network have been considered by Mr Andrew Mazey, Council's transportation Asset Manager, with Mr Mazey's report attached as **Appendix 7**.
- 5.5.2 Mr Mazey has set out the strategic planning framework relevant to the two Plan Changes from a transportation perspective, and in particular notes the need for future growth areas to be developed in a coordinated manner so that they dovetail with programmed upgrades to the road network and public transport services. Mr Mazey has concluded that the additional traffic generated by the two Plan Changes can be readily accommodated within the wider network. He does however recommend that the road access point onto Dunns Crossing Road from PC8 be aligned to match with the roading connections proposed from the emerging suburban areas to the east.
- 5.5.3 He also considers that localised intersection improvements will be needed where both Plan Changes access Dunns Crossing Road, and that in particular

the intersection of Dunns Crossing road and State Highway 1 will need upgrading, with this upgrade necessarily requiring the involvement of NZTA as the road controlling authority for the State Highway network.

5.6 Reverse sensitivity

- 5.6.1 A number of submitters (and in particular Selwyn Council Asset Manager (\$32), NZTA (\$11, and Tegel Foods Limited (\$8)) have raised concerns about the potential of the two plan changes to result in 'reverse sensitivity' effects on existing established businesses and infrastructure. The concept of reverse sensitivity in essence occurs when an existing business was legitimately established some time ago, and at the time of its establishment was surrounded by relatively insensitive activities. If these surrounding activities are subsequently replaced with more sensitive activities, then this change in neighbouring use can result in complaints regarding the long-established business and create pressure for that business to have to relocate, or as a minimum constrain any further expansion.
- 5.6.2 Recent examples of reverse sensitivity issues being raised include the ongoing debate around the location of airnoise contours for Christchurch International Airport limited (with these contours used as a planning tool to limit residential dwellings from locating under the flightpaths), and urban residential expansion in the vicinity of piggeries and freezing works in Belfast (Plan Change 45 recently considered by Christchurch City Council).
- 5.6.3 For PC8 & 9, the submitters' concerns centre on the potential for a change in landuse from extensive farming to more intensive rural residential activities in relatively close proximity to the Rolleston Resource Recovery Park ('RRP') which is a Council-owned refuse transfer and recycling centre, the Pines Waste Water Treatment Plant ('Pines WWTP'), State Highway 1, and an intensive Tegel chicken farming operation. In response to the concerns raised by submitters, the applicant has sought to modify both plan changes to minimise the potential for reverse sensitivity effects to occur.
- 5.6.4 The Council has commissioned a report from Ms Prue Harwood, a consultant with Beca Infrastructure Limited (**Appendix 8**), on the potential for the existing operations to result in odour nuisance effects beyond their site boundaries that could give rise to complaints were rural residential development to occur. Ms Harwood has reviewed the applicant's assessment prepared by Golder Associates, the concerns raised by submitters including the assessment for Tegel by Dr Terry Brady, and the amendments proposed by the applicant in response to these submissions.
- 5.6.5 **Pines WWTP:** In relation to the Pines WWTP, Ms Harwood has noted the recent changes to both Regional discharge consents and Notices of Requirements that were granted in late 2010 by independent commissioners to enable the expansion of the treatment plant and wastewater discharge area to meet the foreseeable population growth of the District to 2041 (i.e. a population equivalent of 48,000 people).

- 5.6.6 The designation and associated ECan consents are for a thirty five year period i.e. 2045, and are designed to provide certainty as to the ability of the Council to appropriately treat and dispose of sewerage over this time period. The discharge consents include an extensive list of conditions, with a number directly related to the management of wastewater disposal adjacent to the boundary with PC8, in the event that PC8 is accepted. A copy of the conditions relevant to this boundary interface are attached in **Appendix 8** behind Ms Harwood's report.
- 5.6.7 Ms Harwood agrees with the applicant's assessment that both PC8 and PC9 are sufficiently removed from the treatment plant that odour will not be significant enough to give rise to the potential for reverse sensitivity. She also agrees with the applicant that PC9 is not affected by the disposal area. Ms Harwood does however consider that a 200m setback for sensitive activities from the PC8 boundary with the spray irrigated discharge would be prudent to minimise the potential for complaints. Given the Pines WWTP conditions require a setback of 25m for spray irrigation within the Pines site, the setback within PC8 should be therefore be 175m so as to achieve a 200m separation distance overall. I note that whilst the conditions relating to the Pines WWTP are adequate for ensuring that odours are not offensive or objectionable beyond the boundary, there remains the potential for some odour to extend beyond the site and that the setback proposed by Ms Harwood will assist in further reducing the potential for reverse sensitivity effects.
- 5.6.8 The applicant has proposed that the PC8 ODP be amended so that it now provides for 5 x 4ha lots adjacent to the internal boundary with the Pines WWTP. The ODP also shows an 'odour constrained area' along this boundary, however this area is not dimensioned on the ODP and is limited to an arc centred on the existing treatment plant, rather than the length of the boundary of the area that is to be used for spray irrigation of treated wastewater. The NoR and associated ECan consents included a plan showing the spray irrigation areas, with these areas generally being shown as circles due to the proposed centre pivot spraying system proposed. The 175m setback recommended by Ms Harwood could therefore in theory also function as an arc following the alignment of the 'circle' shown on the NoR plans. Given the difficulty of accurately determining the extent of an arc 'on the ground' and on individual lots, it is recommended that a simple 175m boundary setback for buildings housing sensitive activities be used instead.
- 5.6.9 A new rule (4.9.28) has been proposed by the applicant that makes the provision of a building containing living or sleeping areas within the odour sensitive area a fully discretionary activity. Provided that the odour constrained area is dimensioned on the ODP to 175m and extended for the full length of the internal boundary between the Pines WWTP and PC8, it is my view that the proposed amendments will be effective in minimising the potential for reverse sensitivity complaints whilst concurrently still enabling a buildable area to be located within the proposed 4ha lots outside the odour area.
- 5.6.10 I note that the Rolleston Structure Plan allows for growth out to 2075 (44,000-50,000 population) and that in the very long term it is therefore likely that either the Pines WWTP will need to be expanded beyond its current consents and

designation, or alternative treatment sites will need to be provided elsewhere in the District. Whilst the approval of PC8 therefore has the potential to limit sewerage treatment options in the very long term, the timeframe is such that in my view it is unreasonable to reject a plan change on the grounds of something that may or may not happen 35 years hence.

- 5.6.11 **Resource Recovery Park:** In relation to the Rolleston Resource Recovery Park, which is the District's only refuse transfer station and solid waste facility, Ms Harwood has considered the potential effects of odour-generating activities that could as of right be located adjacent to the northern boundary of the site under the existing designation. The applicant has proposed the following package of provisions to address potential reverse sensitivity issues:

Amendment 29: Rule 4.9.28:

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall not be located within the 'Odour Constrained Area' as shown in Appendix 37 (Holmes Block).

Amendment 32: Amend existing Rule 4.9.34 for Buildings and Building Position (Page C4-013) as follows:

Any activity which does not comply with Rule 4.9.3 or Rule 4.9.28 shall be a discretionary activity

Amendment 36: Insert new final paragraph within 'Reasons for Rules – Building Position' (Page C4-024) as follows:

In the case of Rolleston Sewage Treatment Plant an "Odour Control Setback Area" has been imposed. Building within this area is a Discretionary activity as reverse sensitivity issues may arise if this setback area is not applied.

- 5.6.12 Ms Harwood has agreed with the 300m setback recommended by the applicant, with the difference being that Ms Harwood considers that this setback should be measured from the boundary of the RRP designation, rather than from the existing plant itself. The difference of views appears to have arisen from the applicant simply assessing effects from the existing processing plant as it currently stands, whereas Ms Harwood has considered the Council's 'as of right' ability to undertake waste recovery, recycling, and composting operations from anywhere within the designated area, subject to submitting an Outline Plan of Works to the Council.
- 5.6.13 I note that Ms Harwood's recommendation is based on potential odour effects, rather than a consideration of effects arising from noise or more general disturbance. The 300m setback is a considerable distance, and is something of a worse case scenario given that it is based on a potentially objectionable activity being undertaken in very close proximity to the boundary of what is a large designated area. The recommended setback is also consistent with the 300m setback the District Plan currently requires for proposed dwellings from

established intensive farming operations such as chicken sheds and piggeries (Rule 3.13.1.5, page C3-018) which might generate a package of effects similar to a large composting plant such as increased heavy vehicle movements and noise.

- 5.6.14 The location of the setbacks recommended from both the Pines WWTP and RRP are shown in figure 5.1 of Ms Harwood's report. A 300m setback would impact on the southwestern most 4 hectare blocks proposed in PC8, and is likely to require minor amendments to the boundaries of these lots to ensure that buildable areas are able to be achieved. I consider that such minor amendments are likely to remain within general accordance with the ODP and are therefore unlikely to trigger the need for a resource consent beyond the normal subdivision consenting process.
- 5.6.15 On balance I am satisfied that a 300m setback is sufficient to mitigate potential effects arising from within the Resource Recovery Park on future residents, thereby in turn minimising the potential for complaints to arise. In particular, I also note that the applicant is now proposing 4ha lots near the RRP boundary, thereby minimising the number of residents potentially affected i.e. Ms Harwood's recommendation still only affects the two 4ha lots that were already subject to an odour constrained area, albeit that the area of these two lots subject to controls is extended significantly.
- 5.6.16 Should PC8 be accepted, I would recommend that the ODP be amended to show the 300m setback from the RRP, and that proposed rule 4.9.28 also include this 300m setback i.e. a single 'odour constrained area' be shown on the ODP (and be subject to 4.9.28), with the boundary of this area designed to incorporate both setbacks. This amendment does not require any text changes to the proposed rule (apart from expanding the rule coverage to include the Rural Inner Plains zoned 4 hectare lots recommended above), however there is a need for a consequential amendment to the reasons for the rule to extend the rationale to include the Resource Recovery Park as follows:
- 5.6.17 **Amendment 36:** Insert new final paragraph within 'Reasons for Rules – Building Position' (Page C4-024) as follows:

*In the case of Rolleston Sewage Treatment Plant and **Resource Recovery Park** an "Odour Control Setback Area" has been imposed. Building within this area is a Discretionary activity as reverse sensitivity issues may arise if this setback area is not applied.*

- 5.6.18 **Tegel Breeding farm:** Tegel Foods Limited operate a poultry breeding farm on a large rural site located immediately to the north of PC9. The chickens are housed within a number of large sheds, with three of these sheds located in relatively close proximity to the shared internal boundary. Ms Harwood has raised concerns regarding the methodology adopted by Golder Associates in assessing an appropriate setback distance from these sheds. Ms Harwood has recommended that a 300m setback be in place between the sheds and any future dwellings. I note that the 300m setback recommended by Ms Harwood is consistent with the current approach in the District Plan which requires a 300m setback for dwellings from intensive farming units (rule 3.13.1.5).

- 5.6.19 The Poultry Industry Association of New Zealand and Tegel Foods Limited ('Tegel' S8, D3) have sought that in the first instance the Plan Change be declined (D1), that alternatively if the Plan Change is accepted that the overall number of lots be reduced (D2), and that proposed amendment 28 of PC9 be altered (D3) to provide for a 300m setback, provide for sensitive activities, and provide for an intensive farming activity on the site through proposed Rule 4.9.27 being amended to read as follows:
- 5.6.20 "Any ~~dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes~~ sensitive activity in the living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 38) shall be setback at least ~~150m~~ 300m from the northern boundary shared with lot 3 DP20007 containing ~~a poultry breeder farm, an intensive farm~~, provided that this rule shall cease to have effect upon the cessation of the intensive farming operations on Lot 3 DP20007."
- 5.6.21 In response to the concerns raised by Tegel, the applicant has proposed three amendments. The first is an amendment to the PC9 ODP to include 5 x 4 hectare lots along the northern boundary, with the effect of reducing the overall number of lots to 73 in total and enabling a greater dwelling separation distance from the shared boundary. The second is a series of proposed amendments to rule 4.9.27. These amendments are consistent with the relief sought by Tegel, with the exception that the proposed building setback for sensitive activities is to be 200m from the boundary with Lot 3 DP20007 i.e. the Tegel property, rather than the 300m sought by the submitter.
- 5.6.22 The applicant has also retained the reference to "a poultry breeder farm" rather than the more generic "intensive farm" terminology sought by Tegel. Buildings within the setback are to be fully discretionary. Ms Harwood has recommended that the setback distance proposed in rule 4.9.27 be extended to 250m to ensure a 300m separation is maintained between the existing sheds and any future dwellings. I support the amended wording put forward by Tegel, as it aligns more closely with the existing District Plan rules and definitions controlling dwellings near 'intensive farms'.
- 5.6.23 I rely on Ms Harwood's recommendation on the extent of the setback, and note that a building platform beyond the recommended setback will be able to be achieved on 4ha lots. I also note that the existing District Plan limits new intensive farming operations in close proximity to residential dwellings (Rule 9.10, page C9.007-009) which will mean that should the proposed PC9 development proceed, Tegel will be unable as of right to establish a new intensive farming operation in close proximity to the shared boundary. Given the large size of the Tegel site, to my mind the ability of Tegel to establish new intensive farming operations will not be unduly constrained as they will retain a very significant landholding that is well separated from any dwellings.
- 5.6.24 The third rule 12.1.3.38(iii) (Amendment 42) requires that as part of any subdivision consent a shelterbelt is to be established along the shared boundary

comprising three rows of Leyland Cypress. Ms Harwood has estimated (from aerial photographs) that the closest chicken shed is some 40m from the shared internal boundary, which would result in a minimum setback of 240m between the sheds and potential future dwellings.

5.6.25 The proposed rule package, subject to Ms Harwood's recommended amendments, is in my view appropriate for mitigating potential reverse sensitivity affects and is consistent with the approach already incorporated into the District Plan for intensive farming. I would however recommend that in order to maintain consistency between the ODPs for PC8 and PC9, that should the above PC9 rule package be accepted, that an 'odour constrained area' with a 250m dimension be shown on the PC9 ODP to alert readers to the existence of a setback rule.

5.6.26 I therefore recommend the PC9 rule package be amended to read as follows:

Amendment 28 (Rule 4.9.27):

Any ~~dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes~~ sensitive activity in the living 3 Zone or Rural Inner Plains Zone at Rolleston (as shown on the Outline Development in Appendix 38) shall be setback at least ~~150m~~ 250m from the northern boundary shared with lot 3 DP20007 containing ~~a poultry breeder farm, an Intensive Farming Activity~~, provided that this rule shall cease to have effect upon the cessation of the intensive farming operations on Lot 3 DP20007.

Amendment 34 (Reasons for rules – Building Position):

In regard to the ~~Poultry~~ Intensive Farming Activity located identified on Lot 3 DP 20007 at Rolleston a ~~200~~ 250m setback has been imposed in relation to the northern boundary of the Skellerup Block (as shown on the Outline Development Plan in Appendix 38). Building within this area is a discretionary activity as reverse sensitivity issues may arise if this setback area is not applied.

5.6.27 **State Highway 1:** PC8 as notified included a new rule 4.9.27 requiring dwellings to be setback a minimum of 80m from the boundary with the State Highway in order to minimise the potential effects of traffic noise, with any dwellings proposed within this setback to be assessed as a restricted discretionary activity. In addition to the building setback rule, the Plan Change also includes a robust buffer and landscape treatment requirement along the State Highway boundary, through rule 4.2.4 and the associated planting guide in Appendix 37. This approach was supported by the New Zealand Transport Agency (NZTA, S12), with the caveat that the rule should be broadened to include controls on 'noise sensitive activities' that might seek to establish in the area, along with amendments to the associated assessment matters to again broaden the scope of consideration beyond effects on habitable rooms.

5.6.28 In response to the concerns raised by the NZTA, the applicant is seeking to amend PC8 by altering proposed rule 4.9.27 (Amendment 28) so that it includes 'noise sensitive activities'. The proposed 80m setback is also proposed to be

shown on the PC8 ODP to alert readers to the associated rule. Proposed rule 4.9.27 is now to read as follows:

Any dwelling, family flat, any rooms within accessory buildings used for sleeping or living purposes, and any internal areas associated with noise sensitive activities in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall be setback at least 80m from State Highway 1.

For the purposes of this rule, noise sensitive activities means any residential activity, travellers accommodation, educational facility, medical facility or hospital or other land use activity, where the occupants or persons using such facilities may be likely to be susceptible to adverse environmental effects or annoyances as a result of traffic noise from State Highway 1 over its location.

The associated assessment matter 4.9.34.4 (Amendment 31) is also proposed to be amended to set internal acoustic performance standards for any noise sensitive activities proposed within the 80m setback.

Given that the applicant appears to have accepted the relief sought by the submitter, I am reluctant to recommend a different outcome. I am however mindful that there are a range of rules currently being put forward through various plan changes that seek to address the same issue regarding building setbacks from the State Highway. PC7 proposes the following rule in relation to ODP 3 on the eastern edge of Rolleston:

5.6.29 Rule 4.9.20:

In ODP Area 3 in Rolleston, no dwelling shall be located closer than 40m (measured from the nearest painted edge of the carriageway) from State Highway 1.

In ODP Area 3 in Rolleston, for any dwelling constructed between 40m and 100m (measured from the nearest painted edge of the carriageway) from State Highway 1:

Appropriate noise control must be designed, constructed and maintained to ensure noise levels within the dwelling meet the internal design levels in AS/NZS2107:2000 (or its successor) – 'Recommended design and sound levels and reverberation times for building interiors';

Rule 4.9.21:

Prior to the construction of any dwelling an acoustic design certificate from a suitable qualified and experienced consultant is to be provided to Council to ensure that the above internal sound levels can be achieved."

- 5.6.30 The Council has also recently notified PC12 which looks at transportation issues and rules. PC12 proposes two new rules be inserted into the Township Volume of the Plan to consistently control building setbacks from the State Highway network in the District:

Rule 4.9.3:

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes shall be located no closer than 40m from the edge of the sealed carriageway of State Highways with a posted speed limit of 70 Km/hr or greater.

Rule 4.9.4:

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes within 100m from the edge of the sealed carriageway of State Highways with a posted speed limit of 70 Km/hr or greater shall have internal noise levels from road traffic that do not exceed the limits set out below with all windows and doors closed.

	24 hours
Within Bedrooms	35 dBA (Leq 24 hour)
Within Living Area Rooms	40 dBA (Leq 24 hour)

- 5.6.31 *Living Area rooms means any room in a dwelling other than a room used principally as a bedroom, laundry, bathroom, or toilet.*
- 5.6.32 I note that the submission period for both PC7 and PC12 has closed, with no submissions having been received opposing the above rules. Considerable weight can therefore be placed on the likelihood that the PC12 rules in particular will become the standard control across the District. The rule package proposed in PC12 is broadly similar with that proposed by the applicant for PC8, with the primary differences being that the setback increases to 100m, the control does not extend to 'noise sensitive activities', and that the internal acoustic performance standards become rules rather than assessment matters.
- 5.6.33 In my opinion the wording proposed in PC12 falls broadly within the scope of the relief sought by NZTA, and its adoption will enable consistent controls for identical effects throughout the District Plan. I therefore recommend that the PC12 wording be adopted, with specific reference to the PC8 block (as the PC12 rule package has yet to be finalised).

4.9.27: Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall be located no closer than 40m from the edge of the sealed carriageway of State Highways with a posted speed limit of 70 Km/hr or greater.

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) within 100m from the edge of the sealed carriageway of State Highways with a posted speed limit of 70 Km/hr

or greater shall have internal noise levels from road traffic that do not exceed the limits set out below with all windows and doors closed.

24 hours

Within Bedrooms 35 dBA (Leq 24 hour)

Within Living Area Rooms 40 dBA (Leq 24 hour)

Living Area rooms means any room in a dwelling other than a room used principally as a bedroom, laundry, bathroom, or toilet.

Rural activities in general

- 5.6.34 A number of submitters are concerned that having relatively dense urban activities adjacent to productive rural farms will lead to complaints about normal farming activities and will curtail the ability of existing rural landowners to continue with their rural operations in what is currently an Outer Plains rural environment. I acknowledge that agricultural activities are not always visually attractive, and there can be other nuisance elements such as noise, odours, spray drift, weeds, and general disturbance. Rural neighbours often have a high degree of tolerance of each other's activities in this regard but the submitters are concerned that new urban residents would not.
- 5.6.35 As discussed above, PC8 is buffered from Outer Plains activities on all sides, including the southern boundary through Burnham School Road and the proposed additional Countryside Area. Similar buffering is available to PC9 to the north (through the proposed 4ha lots and rule package discussed above) and to the east by Dunns Crossing Road and the long-term prospect of urbanisation. In my opinion there is some justification for these concerns to the west and south of PC9, and complaints about rural activities are probable, although probably at a low level. Should PC9 be approved, the inclusion of 4ha lots along the western and southern boundaries, as recommended by Mr Church for urban design reasons, would also assist in providing a buffer for rural residential dwellings from the sorts of noise and disturbance that normal productive farming activities can generate.

5.7 Archaeology/Heritage

- 5.7.1 The New Zealand Historic Places Trust (submission 19) neither supports nor opposes the two Plan Changes. I note that there are no heritage items located in either Plan Change area (both in terms of being listed in the District Plan or registered with NZHPT). The submitter has requested that the following advice note be included in the *decision notice*, alerting the applicant to their responsibilities under the Historic Places Act 1993:

Work affecting archaeological sites is subject to a consent process under the Historic Places Act 1993. If any work associated with the development of these areas under Plan Change 8 & 9 around Rolleston, such as earthworks, fencing or landscaping, may modify, damage or destroy any archaeological site(s), an authority (consent) from the New Zealand

Historic Places Trust must be obtained for the work prior to commencement. It is an offence to damage or destroy a site for any purpose without an authority. The Historic Places Act 1993 contains penalties for unauthorised site damage.

- 5.7.2 I note that the submitter is not seeking any amendments to the District Plan itself, rather they are simply seeking to have it recorded in the decision that there is other legislation in play that may influence the development of the two Plan Changes areas should any archaeological items be uncovered. I can see no harm in making the applicant aware of their responsibilities in this regard, and therefore recommend that the Commissioner notes the relief sought in their decision.

5.8 Earthquake risk/ geotechnical matters

- 5.8.1 Following the major earthquakes of 4th September 2010 and 22nd February 2011, the Council has commissioned a brief report by Mr Ian McMahon of Geotech Consulting limited. Mr McMahon's report is attached as **Appendix 9**. Mr McMahon has concluded that the soil conditions underlying both Plan Change areas are suitable for residential dwellings, subject to compliance with standard Building Codes. The significant depth of groundwater, combined with the overlying soil conditions, meant that there was no evidence of liquefaction in the Plan change areas following both earthquakes. Mr McMahon has concluded that the risk of liquefaction in future earthquakes is low and that there are no geotechnical reasons that would prevent the Plan Changes from being granted.

5.9 Council conflict of interest

- 5.9.1 A number of submitters have raised concerns over a perceived conflict of interest between the Council being a majority shareholder (approximately 66%) in SPBL on the one hand, and being the decision-making authority on the other. In essence the concern is that as Council would be a major beneficiary of any increases in land values that might result from rezoning, it should not have a role in deciding whether or not the plan changes should proceed. In contrast to these concerns, I note that the Asset Manager of Council has lodged a submission seeking that the whole of PC8 be declined due to its perceived potential to create reverse sensitivity effects on the operation of the Rolleston Resource Recovery Park. To further complicate matters, Council has recently notified PC17 which includes the rezoning of a portion of the Holmes Block for rural residential activities. Thus the Council finds itself as having the multiple roles of shareholder of the applicant, statutory processing body, submitter, and initiator of a separate partially-overlapping Plan Change.
- 5.9.2 It is my understanding that the SPBL is legally required to act in the best interests of its shareholders, which in this instance include the Council. The Council also has legal responsibilities regarding the development and administration of the District Plan, as set out in section 3 above. In managing the potential conflict between these various responsibilities, the Council has engaged the services of

an independent planner (myself) and independent landscape, urban design, and odour experts, to assess the Plan Change applications and to make recommendations to the Commissioner. The Council has also appointed an independent Commissioner (rather than a Councillor panel) to hear submissions and to make a final recommendation to Council.

- 5.9.3 Council cannot avoid the fact that it has multiple roles and responsibilities. In fulfilling these multiple roles, Council has sought to manage the potential of a conflict of interest arising by appointing independent parties to assess and determine the applications. The potential for a conflict in interest is not in itself therefore a basis upon which to decline the Plan Changes.

6.0 Statutory Planning Framework

6.1 The Regional Policy Statement (the RPS)

- 6.1.1 There is an operative Canterbury Regional Policy Statement, which the District Plan (and therefore PC 8 & 9) are required to 'give effect to'. As these Plan Change requests are for a major piece of urban (or at least peri-urban) growth, I consider the RPS chapters of most relevance include Chapter 12 (Settlement and the Built Environment), Chapter 15 (Transport), and Chapter 16 (Natural Hazards).
- 6.1.2 Many of the provisions of the remaining chapters are overly general in nature, or deal with issues that are not particularly relevant to these Plan Change requests such as water quality, coastal environments, the margins of lakes and rivers, outstanding landscapes, heritage, significant natural areas, hazardous substances, or the storage and disposal of solid waste.
- 6.1.3 **Chapter 12, Objective 1** and **Policy 2** seeks to enable urban development and the physical expansion of settlements, provided adverse effects on a range of matters are able to be appropriately managed. These matters include water and air quality, and regionally significant landscapes, features, ecological areas, and heritage. The subject sites do not contain any significant heritage, landscape, or ecological values, and are not adjacent to any waterbodies. The Plan Changes are therefore consistent with these aspects of the RPS which seeks to avoid urban development and the loss of environmental values in such areas.
- 6.1.4 **Policy 1** seeks to promote settlement and transport patterns and built environments that result in the efficient use of energy and that reduce the need for motor vehicle travel. The explanation to the policy notes that the policy will in most cases be met by the consolidation of urban areas and that planning should encourage the consolidation and infill of urban areas, to the extent that is practical, whilst providing adequate land for the accommodation of anticipated development and choice. Consistency with this policy was discussed in more detail above as part of the broader discussion on urban form

and the management of urban growth, with the conclusion being that PC8 fits reasonably well with this policy direction whereas PC9 does not.

- 6.1.5 **Objective 2** and **Policy 4** aim to avoid urban development where that would adversely affect the operation of regional infrastructure, including network utilities. The Plan Changes are located outside of the Christchurch International Airport noise contours⁴ and are not located in close proximity to any of the key regional facilities listed in Objective 2 and Policy 4. The Holmes Block is located near to the Pines waste water treatment plant and associated spray areas, and the Resource Recovery Park. Potential 'reverse sensitivity' effects on both facilities are discussed in more detail below, with the conclusion being that provided appropriate building setbacks are in place (primarily through larger lots and associated setback rules adjacent to the Block edge), the plan changes will not adversely affect the operation of these existing utilities.
- 6.1.6 **Policy 3** aims to encourage settlement patterns that make efficient use of the regional transport network, with this policy closely linked to **Chapter 15, Objective 1** which seeks to enable a safe, efficient and cost-effective transport system. **Chapter 15, Policy 1** seeks to protect the existing transport infrastructure and transport corridors by, among other things, avoiding the adverse effects of land use and development. **Chapter 15, Policy 3**, promotes changes in the location of activities, which achieve a safe, efficient and cost effective use of the transport infrastructure and reduce the demand for transport. In terms of the safe and efficient use of the regional road network, the Plan Changes have been assessed by both Traffic Design Group (as part of the application), and by Mr Andrew Mazey, Council's Transportation Asset Manager Senior.
- 6.1.7 The conclusions of both traffic experts is that the Plan Changes will not adversely affect the safe and efficient functioning of the nearby road network or the capacity or function of State Highway 1, although Mr Mazey is of the view that the location of the PC8 road connections to Dunns Crossing Road need to be amended and the Dunns Crossing intersections upgraded (including the intersection with S.H.1). The Holmes Block Outline Development Plan and associated rule package provides for a dwelling setback from the edge of the State Highway to ensure that the potential for reverse sensitivity issues created by people living in close proximity to noise generated by traffic on the State Highway are able to be minimised.
- 6.1.8 **Objective 3** and **Policy 5** seek to maintain the rural character of land in close proximity to Christchurch and to maintain a clear urban-rural contrast around the edge of Christchurch. It is important to note that these provisions are specific to the area immediately adjacent to Christchurch and do not have wider application to maintaining a rural-urban contrast around Canterbury townships in general. The explanation to the objective clarifies that land in 'proximity to Christchurch' is on the City-side of a line drawn roughly from Tai Tapu to West Melton and is east of the Plan Change sites.
- 6.1.9 **Objective 4** and **Policy 6** and **Chapter 16, Objective 1** and **Policy 4** discourage the expansion of settlements where there are natural hazard risks. Both of the Blocks are free from the risk of flooding or stormwater ponding. A brief

⁴ These contours have now been revised via Plan Change23 to the Selwyn Plan to match the contours shown in RPS Change 1. Plan Change 23 has recently been made operative.

assessment of liquefaction risk in the light of the recent earthquake has been provided by Mr Ian McCahon of Geotech Consulting Limited who confirmed that the Blocks have a very low risk of liquefaction and that there are no geotechnical reasons why they could not be safely developed for residential purposes.

- 6.1.10 **Chapter 12, Objective 5 and Policy 7** provide for the expansion of rural towns to enable people and communities to provide for their wellbeing, with the explanation to Policy 7 noting that such expansion should make efficient use of reticulated sewerage, water, and stormwater networks.
- 6.1.11 In conclusion, at worst the Plan Changes, and in particular PC9, sit somewhat uneasily with aspects of the objectives and associated policies relating to energy efficiency and the creation of an urban form that minimises the need for motor vehicle travel. These provisions are however very high level and general in nature, and the Plan Changes on balance are considered to give effect to the broader package of the operative RPS provisions relating to the location of urban growth and development, albeit that PC8 achieves this balance more convincingly than PC9.

6.2 The Urban Development Strategy and Proposed Change 1 to the Regional Policy Statement.

- 6.2.1 From 2004 to 2006 Selwyn District, Waimakariri District, and Christchurch City Councils, the Canterbury Regional Council and what was then Transit New Zealand (now the New Zealand Transport Agency) worked together to produce the Greater Christchurch Urban Development Strategy (UDS), to guide the future growth of Greater Christchurch. The strategy was developed through Local Government Act processes, including public consultation. This strategy is to be implemented in various ways, notably by using the powers of each of the organisations under the Local Government Act, Resource Management Act and land transport legislation.
- 6.2.2 In July 2007 the Canterbury Regional Council notified Proposed Change 1 (Change 1) to Chapter 12 of the Regional Policy Statement to implement the UDS to the extent possible under the RMA. Hearing of submissions was undertaken in 2008-09, with the Commissioner's recommendation adopted by the Canterbury Regional Council in December 2009. Change 1 is subject to numerous appeals, with the final Environment Court decisions unlikely to be confirmed before late 2012.
- 6.2.3 Despite the number of appeals, Change 1 has now advanced a considerable way through the statutory plan process, and therefore I consider that considerable weight can be placed on its provisions and the direction it sets for how growth is to be managed throughout greater Christchurch. Change 1 is not yet operative, and therefore it must be 'had regard to' rather than 'given effect to' when considering the two Plan Changes.
- 6.2.4 Change 1 adds a new Chapter 12A to the Regional Policy Statement, entitled "Development of Greater Christchurch". It is complementary to the existing chapters but is focussed specifically on the Greater Christchurch area and is

significantly more specific and directive. As discussed above, the operative RPS provides for any specific growth proposal to be assessed against a number of broad objectives and policies.

- 6.2.5 Given the general nature of these provisions it is not difficult for growth proposals to be broadly consistent with the operative RPS. Change 1 proposes a different philosophical approach which could be broadly described as one of 'predict and provide' whereby the amount of household and business growth until 2041 is predicted, and its location is identified through a Metropolitan Urban Limit ('MUL'). This growth is split between the three Districts, and is also split into stages over the 35 year life of Change 1.
- 6.2.6 **Objective 1** and the associated **Policy 1** seek to accommodate urban growth with a primary emphasis on urban consolidation. This essentially means that growth is to be focussed on infill development within existing towns, with any Greenfield growth to be in locations immediately adjacent to the current urban edge. Growth areas should also be located in areas that are hazard prone, adjacent to strategic regional infrastructure, or have high landscape, heritage, or ecological values (**Objectives 2, 3, and 8; policy 10**). Such sites should be able to be efficiently serviced with network infrastructure and transport networks (**Objectives 4 and 7, policy 9**), and should primarily be located within or adjacent to Key Activity Centres, which in Selwyn District are the towns of Rolleston and Lincoln (**Objective 5, Policies 4 and 5**).
- 6.2.7 **Policy 6** sets out the number of households each District is to accommodate, and stages this growth both between decades, and between different areas within the Districts. In terms of Rural Residential households, Policy 6 (Table 1) requires Selwyn to accommodate up to 200 rural residential households between now and 2016, a further 200 from 2017-26, and another 200 households from 2027-41, resulting in 600 households overall. **Policies 7 and 8** set out the urban design attributes that growth areas should achieve, and require that development be guided by an ODP.
- 6.2.8 **Policy 14** is the key Change 1 provision relating to rural residential development and therefore I have set it out in full:

Policy 14: Rural Residential Development

Rural Residential development further to areas already zoned in district plans as at 28 July 2007 may be provided for by territorial authorities, if it does not exceed the maximum quantities for the periods set out in Table 1, Policy 6, and if it accords with the methods under this policy.

Methods

14.1 Areas within which Rural Residential development may occur shall be defined by changes to the district plan by the territorial authorities subject to the following:

- (i) The location must be outside the Urban Limits*
- (ii) All subdivision and development must be located so as to be able to be economically provided with a reticulated sewer and water supply integrated*

with a publicly owned system, and appropriate stormwater treatment and disposal

(iii) Legal and physical access is provided to a sealed road, but not directly to a road defined in the relevant district plan as a Strategic or Arterial Road, or as a State highway under the Transit New Zealand Act 1989;

(iv) The location of any proposed Rural Residential development shall:

- limit noise sensitive activities occurring within the 50 dBA Ldn air noise contour surrounding Christchurch International Airport so as not to compromise the future efficient operation of Christchurch International Airport or the health, well-being and amenity of people;*
- avoid adversely affecting the groundwater recharge zone for Christchurch City's drinking water;*
- avoid land between the primary and secondary stop banks south of the Waimakariri River;*
- avoid land required to protect the landscape character of the Port Hills;*
- not compromise the operational capacity of the Burnham Military Camp, West Melton Military Training Area or Rangiora Airfield;*
- support existing or upgraded community infrastructure and has provide for good access to emergency services;*
- not give rise to significant reverse sensitivity effects with adjacent rural activities, including quarrying and agricultural research farms, or strategic infrastructure;*
- avoid significant natural hazard areas including steep or unstable land;*
- avoid significant adverse ecological effects;*
- not adversely affect ancestral land, water sites, wahi tapu and wahi taonga of Ngai Tahu;*
- where adjacent to or in close proximity to an existing urban or rural residential area, be able to be integrated into or consolidated with the existing settlement.;*
- avoid adverse effects on existing surface water quality.*

(v) An Outline Development Plan is prepared which sets out an integrated design for subdivision and land use, and provides for the long-term maintenance of rural residential character.

(vi) A Rural Residential development area shall not be regarded as in transition to full urban development.

14.2 The Canterbury Regional Council together with the three territorial local authorities within Greater Christchurch shall undertake monitoring of Rural Residential development in accordance with Policy 16, and shall undertake a review of the provisions in 2010.

6.2.9 The Commissioners were unconvinced about the robustness of the 200 rural residential cap, and did not have sufficient information at the time of their hearing to specify the locations of rural residential development, beyond setting the above broad criteria. They sought that this lack of information be overcome through further research and consultation undertaken by the various Territorial Authorities in 2010 (Method 14.2), which Selwyn Council has subsequently progressed through the Rural Residential Background Report and PC17 processes.

- 6.2.10 As set out in the above sections, it is my view that PC8, subject to various amendments, sits reasonably comfortably with the PC1 criteria and outcomes for rural residential development. In particular it is able to connect to reticulated infrastructure in a short time frame, is adjacent to the MUL, yet not in an area where future urban growth is anticipated, is well bounded to the north, west, and east, and the southern boundary is able to be enhanced through a Countryside Area in combination with Burnham School Road. Provided adequate building setbacks are in place, PC8 should also be able to develop without creating reverse sensitivity effects on existing infrastructure.
- 6.2.11 PC9 on the other hand is not able to efficiently connect with Council infrastructure and will remain largely disconnected from the urban edge of Rolleston for at least the next decade. It does not have particularly effective 'edges' with the boundaries of PC9 dictated by cadastral boundaries and land ownership, rather than any physical 'on the ground' features. As such I do not consider that PC9 will contribute to a consolidated urban form or achieve the policy outcomes anticipated in PC1 for rural residential activities.

6.3 The Selwyn District Plan

- 6.3.1 The District Plan is divided into two volumes – Rural and Townships. Rural residential typologies have always fallen into something of a gap between the two volumes in that they are neither wholly rural or wholly urban. PC17 has sought to clarify the position of rural residential activities by reinforcing the policy direction in the Township Volume, on the basis that the primary activity occurring on rural residential lots is residential, albeit that there may be some ancillary rural activities also occurring.
- 6.3.2 The objectives and policies of the Rural Volume of the Plan aim to maintain very a very low density of dwellings, set amongst a productive rural landscape (**Objective B4.1.1-B4.1.3**). In essence the objectives and policies support the outcomes anticipated in the status quo zoning of Rural Outer Plains. Given that the PC8 and 9 applications are for a plan change, rather than a resource consent, the rural objectives and policies are only of limited assistance in determining whether the Rural Outer Plains or proposed Living 3 zoning better meets the Plan's objectives and policies.
- 6.3.3 PC8 and 9 (and indeed PC17) promote a Living, rather than Rural, zone to facilitate rural residential development. Given that this typology is at its heart an urban growth issue, I consider that the Plan provisions dealing with urban growth are of most relevance. These provisions are contained primarily within the 'growth of townships' section of the Township Volume of the District Plan.
- 6.3.4 **Objective B4.1.1** seeks that "*a range of living environments is provided for in townships, while maintaining the overall 'spacious' character of Living zones*". **Objective B3.4.1** seeks that "*the District's townships are pleasant places to live and work in*", and **Objective B3.4.2** seeks that "*a variety of activities are provided for in townships, while maintaining the character and amenity values of each zone*". These objectives are all rather high level, and are supported by similar high level **Policies B3.4.1-B3.4.3**. The proposed Plan Changes sit

reasonably comfortably against these provisions in that they provide a diversity and choice of living environments that in themselves will provide a reasonable degree of spaciousness and amenity.

6.3.5 The provision of new urban growth areas is guided by **Policy B4.1.3** which aims:

"To allow, where appropriate, the development of low density living environments in locations in and around the edge of townships where they will achieve the following:

- *A compact township shape;*
- *Consistent with preferred growth options for townships;*
- *Maintains the distinction between rural areas and townships;*
- *Maintains a separation between townships and Christchurch City boundary;*
- *Avoid the coalescence of townships with each other;*
- *Reduce the exposure to reverse sensitivity effects;*
- *Maintain the sustainability of the land, soil and water resource;*
- *Efficient and cost-effective operation and provision of infrastructure"*

6.3.6 Similar outcomes are sought through **Objective B4.3.2** which requires that:

"new residential or business development adjoins existing townships at compatible urban densities or at a low density around townships to achieve a compact township shape which is consistent with the preferred growth direction for townships and other provisions in the Plan".

Policy B4.3.2 *"requires any land rezoned for new residential or business development to adjoin, along at least one boundary, an existing Living or business zone in a township, except that low density living environments need not adjoin a boundary provided they are located in a manner that achieves a compact township shape".*

Policy B4.3.3 seeks to *"avoid zoning patterns that leave land zoned Rural surrounded on three or more boundaries with land zoned Living or Business".*

Policy B4.3.5 seeks to *"encourage townships to expand in a compact shape where practical".*

As set out in the discussion above, I consider that PC8 achieves a compact township shape through the strong 'edges' available to this Plan Change and its location adjacent to the ODP1 growth area immediately to the east. Neither Plan Change 'reduces' the exposure to reverse sensitivity effects as they both result in new residential dwellings being located in relatively close proximity to existing odour generating activities. I note that the avoidance of reverse sensitivity effects are also sought through **Policy B2.2.5** which is specific to avoiding such effects as they relate to utilities (Pines WWTP and RRP) and **Objective B3.4.3**. Provided appropriate building setbacks are in place, the potential for reverse sensitivity effects should however be able to be minimised.

- 6.3.7 PC9 to my mind will not result in a compact township shape and nor will it maintain a distinction between rural areas and townships, as it will appear as an incongruous intrusion into the wider Outer Plains environment even once suburban growth within Rolleston has grown out to meet the edge of PC9 in decades to come. PC8 and 9 in combination will result in an, admittedly large, block of Rural Outer Plains zoned land that will be bounded by Living Zones on three sides (namely Rolleston to the east and Living 3 to the north and south. Whilst servicing of PC9 is technically feasible, this servicing will not be in an efficient and cost-effective manner.
- 6.3.8 **Policy B4.1.10** seeks to ensure that an appropriate balance between buildings and open space is achieved to maintain the spacious character of the District, and **Policy B4.1.12** seeks to discourage high fences in Living zones that have frontage but no access to strategic or arterial roads. The proposed rule package, subject to recommended amendments, will achieve both these policies.
- 6.3.9 Overall, I consider that PC8 with modifications sits reasonably comfortably with the relevant urban growth provisions, whereas PC9 is contrary to key elements of these provisions, and in particular those relating to the creation of a compact urban form and a clear distinction between townships and rural areas.

6.4 Plan Change 17

- 6.4.1 Council resolved on the 22nd April 2009 to advance Plan Change 17 (PC17) to the Selwyn District Plan. PC17 is being prepared to incorporate a strategic framework into the District Plan that identifies preferred locations to accommodate a limited amount of rural residential activities within the UDS area of the District. PC17 proposes to rezone rural land to meet an identified demand for rural residential activities, without undermining the urban consolidation and intensification principles of Proposed Change 1 (Chapter 12A) to the Canterbury Regional Policy Statement (PC1).
- 6.4.2 The Rural Residential Background Report (RRBR)⁵ has been prepared by the Council under the local Government Act to ensure the necessary in-depth analysis of rural residential activities is available to guide the preparation of PC17 and to enable a robust s32 cost benefit analysis to be undertaken. The process to date has involved public consultation to ensure PC17, and the primary research on which it is based, have been informed by the input of a broad range of interest groups, land owners, the local community, Crown entities, statutory authorities and Government agencies.
- 6.4.3 The RRBR has been informed by the comments received from 94 respondents to consultation held in December 2009 through to February 2010, in addition to expert reports, substantial research and a comprehensive review of what factors influence rural residential activities.
- 6.4.4 The RRBR informed PC17 which is currently out for submissions. PC17 is at a relatively early stage in the Plan development process, however it is based on

⁵ Selwyn District Council: Rural Residential Background Report, August 2010

the Background Report which was subject to extensive public feedback, in much the same way (albeit at a much smaller scale) that the Urban Development Strategy informed the development of PC1.

- 6.4.5 Section 5 of the RRBR includes detailed Township Study Area assessments, where a nominal 2.5km study area around the seven townships in the UDS area was investigated to provide a geographical area on which to gather qualitative information⁶. The Township Study Area assessments captured the following: (a) Historic and demographic context; (b) UDS Inquiry by Design workshops; (c) Relevant District Plan provisions (preferred growth of townships provisions and schedules sites registered in the appendices of the District Plan); (d) Identification of constraints and opportunities; (e) Relevant township structure plans and strategic planning documents; and (f) Other relevant reports and information held on Council records. This information, along with the fundamental elements and criteria for achieving the outcomes being sought by PC17, were illustrated in a single map to guide the selection of the 'preferred locations' (see Appendix 6 of the RRBR⁷).
- 6.4.6 Section 6 of the RRBR lists the criteria prepared to ensure that the allocated number of rural residential households are⁸: (a) Located and distributed in the most appropriate areas throughout the eastern portion of the District; (b) Able to achieve the anticipated levels of rural residential character; and (c) Consistent with the allocations, the staging of development and the principles guiding rural residential activities detailed in PC1. These criteria have been based upon the guiding principles set out in Section 4 of the RRBR and the aforementioned Township Study Area Assessments.
- 6.4.7 Public consultation encouraged interested parties to highlight where they believed rural residential activities should be located and why these sites were preferred. These comments are summarised in Appendix 13 of the RRBR and have informed Council's ongoing assessments⁹;
- 6.4.8 A large number of site visits have been undertaken to inform Council's process, which have included a broad range of sites in Rolleston, Lincoln, Prebbleton, Springston and West Melton.
- 6.4.9 PC17 therefore provides a District-wide, strategic framework for guiding the location of rural residential households. The identification of appropriate blocks that met the criteria set out in the RRBR (and incorporated into the PC17 policies), resulted in a portion of the PC8 land being identified as being suitable for growth, whereas PC9 did not meet these criteria and emerging policies, due primarily to its detached location, lack of outer edges or physical boundaries, and its distance from existing services for the medium term.

⁶ SDC Rural Residential Background Report: Section 5 - Township Study Area assessment; Pages 59-90, August 2010

⁷ SDC Rural Residential Background Report: Appendix 6 - Constraints, opportunities and contextual analyses; August 2010

⁸ SDC Rural Residential Background Report: Section 6 - Criteria for selecting 'preferred locations' for rural residential activities; Pages 91-100, August 2010

⁹ SDC Rural Residential Background Report: Appendix 13 - Summary of comments on Draft Rural Residential Background Report; August 2010

7.0 Recommendations

Plan Change 8:

- 7.1 As discussed at length above, PC1 obliges Council to provide for a certain amount of rural residential housing over the coming 30 years. This provision is currently capped at 200 households in each staging period, to ensure that the overall direction of PC1 of accommodating growth through consolidation is not undermined.
- 7.2 Council has sought to provide for these households through PC17, which identifies a number of suitable sites, including a portion of PC8. PC8 has good 'edges', is able to avoid reverse sensitivity effects with appropriate setbacks, is able to be efficiently serviced in the near future, and will achieve the amenity and character outcomes anticipated for rural residential areas.
- 7.3 PC9 alternatively will remain disconnected from the urban edge of Rolleston for at least the next decade, and will remain an incongruous and unbounded element in a wider Outer Plains landscape. PC9 can be technically serviced, however this servicing will not be particularly efficient given the lack of higher density urban growth anticipated near PC9 for the next decade.
- 7.4 My overall conclusion is that PC8, subject to amendments, does more efficiently and effectively achieve the outcomes sought through the various statutory Plans and Part 2 of the RMA than the site's current Outer Plains zoning. Conversely, I consider that the Rural Outer Plains zoning for PC9 better achieves the aims of the statutory Plans and Part 2 than the proposed Living 3 zone and accordingly should be rejected in its entirety.
- 7.5 In summary, **Plan Change 8** should be accepted, subject to the following amendments:
- A 175m dwelling setback from the western boundary;
 - A 300m setback from the boundary with the RRP designation;
 - An additional Countryside Area along the southern boundary adjacent to Burnham School Road;
 - Increase in the size of a number of internal lots to at least 5,000m² in size;
 - As a consequence of the above two amendments, a reduction in overall yield to no more than 80 rural residential lots;
 - Realignment of the road access points onto Dunns Crossing Road to align with the existing and proposed road access points to the east;
 - Amendments to the rule controlling dwelling setbacks from S.H.1;
 - Inclusion of a landscaped gateway feature on corner of Dunns Crossing and Burnham School Road via the ODP;
 - Requirement that road access points be freely available to the wider community i.e. PC8 is not a 'gated' community, via the ODP;
 - That public walking, cycling, and horse riding access is available within the Countryside Area adjacent to Dunns Crossing Road via the ODP
 - Simplification of the proposed road boundary landscaping rule;

- That the proposed 4 hectare lots be zoned Rural Inner Plains, but remain subject to the ODP set out in Appendix 37.

Plan Change 9:

7.6 That the Plan Change be declined in its entirety. If however the Commissioner is minded to grant the plan change, then I recommend that the following amendments be made:

- That the dwelling setback from the northern boundary be increased to 250m;
- That 4 hectare lots be formed along the western and southern boundaries and the overall maximum number of rural residential lots reduced by a corresponding amount;
- Requirement that road access points be freely available to the wider community i.e. PC8 is not a 'gated' community, via the ODP
- That public walking, cycling, and horse riding access is available within the Countryside Area adjacent to Dunns Crossing Road via the ODP

Recommended amendments to the proposed objectives, policies, rules, ODP, and maps

7.6.1 The applicant has provided a set of objectives policies, rules and other provisions which are the substance of the Plan Change applied for. The bulk of the proposed provisions relate to incorporating reference to the Living 3 Zone into existing Plan provisions, introducing several objectives and policies to guide and justify the rural residential development, and a rule package to control the effects of development.

7.6.2 The applicant has lodged two separate Plan Changes, and accordingly there are two completely different sets of proposed provisions. The rationale for this is so that each Plan Change can 'stand alone', thereby ensuring that a comprehensive set of provisions can be inserted into the District Plan in the event that one of the plan changes is accepted and the other rejected. The proposed provisions are therefore identical, apart from any obvious rule differences to address issues that are specific to only one of the Blocks.

7.6.3 The proposed amendments to the proposed provisions have been discussed above in the body of the report. For assistance, these recommendations have been collated into **Appendix 10**. Given the identical nature of the provisions, I have only included one set of amendments, rather than two completely different sets for the two Plan Changes. I have based these amendments on the text put forward by the applicant for PC8 and have used the same 'amendment numbers' as the applicant to assist with cross-referencing. I have shown the applicant's text as 'plain text' with my recommended deletions shown as ~~**bold—strikethrough**~~ and my recommended additions as **bold underlined**.

7.6.4 Should the Commissioner be minded to accept PC9 and decline PC8, then the recommended text changes I have made using the PC8 plan change as a base will need to be transposed through to PC9.



Jonathan Clease
Planning Consultant
April 2011

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For the purposes of this Plan Change Request, any existing text from the District Plan is shown in *italics*, any text proposed to be added by this Plan Change Request is shown as **bold underlined and in italics** and text to be deleted as ~~*striketrough in italics*~~. Please note that only the proposed new and amended provisions to the District Plan are shown in this section and therefore should be read in conjunction with the full text of the District Plan. The provisions proposed below may require some existing provisions to be renumbered / amended accordingly.

The following specific changes are sought to the District Plan to enable the rezoning to proceed:

Amendment 1 Amend Planning Maps 13, 102 and 105 (Sheets 1 and 2) to identify the zoning of the site as Living 3.

Amendment 2 Insert Living 3 Zone and description into Table A4.4 – Description of Township Zones (page A4-011) as follows:

<i>Zone</i>	<i>Description</i>
<u>Living 3</u>	<u>As for Living 2 Zone, but with specific controls and design elements incorporated to ensure development of the land is reflective of and retains elements of rural character expected of the Living 3 zone, which in essence is a rural residential zone, so as to visually set the development apart from the neighbouring urban area. Similar to the Living 2 zone, larger sections (with a lower building density than Living 2), more space between dwellings, panoramic views and rural outlook are characteristic of the Living 3 Zone.</u>

Amendment 3 Insert new paragraph 7 in Use of Zones (page A4-012) as follows:

As with higher density residential areas, rural residential development is provided for through Change 1 to the Regional Policy Statement. Accordingly the District Plan specifically provides for rural residential opportunities as has long been the case in Selwyn District.

Amendment 4 Amend Policy B1.2.3 for Water Supplies to include (Page B1-017) as follows:

*Require the water supply to any allotment or building in any township, **and the Living 3 Zone**, to comply with the current New Zealand Drinking Water Standards and to be reticulated in all townships, except for sites in the existing Living 1 Zone at Doyleston.*

Amendment 5 Insert new paragraph 3 in Explanation and Reasons for Objective B3.4.3 Reverse sensitivity (Page B3-036) as follows:

In the case of rural residential development there is the potential for reverse sensitivity effects to arise from the proximity to rural activities. This issue is addressed through Objective B3.4.3 and B4.1.2.

Amendment 6 Amend point 6 on discussion on Residential Density – Strategy (page B4-002) as follows:

*Density in Living 2 **and 3** Zones is kept low thus reflecting the rural character by maintaining a sense of open space, panoramic views and rural outlook.*

Amendment 7 Insert new paragraph 6 of Explanation and Reasons for Objective B4.1.2 for Residential Density (Page B4-003) as follows:

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Any Living 3 Zone being a rural residential zone shall be located beyond the 'urban limits' but where it can be economically provided with reticulated sewer and water supply, and appropriate stormwater treatment and disposal. The Living 3 Zone will have regard to providing a visual transition area between the 'urban area' and the rural area which exists beyond townships by incorporating certain design elements of rural character, which are common in rural settings so the land is visually set apart from the neighbouring urban area.

Amendment 8 Amend existing paragraph 7 of Explanation and Reasons for Objective B4.1.2 for Residential Density (Page B4-003) as follows:

*New residential areas should be attractively laid out, with allotments of an appropriate shape to build a house, and with access to sunlight. As well as functional utilities, new residential areas need some open space, plantings and landscaping to make them aesthetically pleasing. Objective B4.1.2 is to ensure future residential areas maintain the current attractive layout of Selwyn's townships. For low density Living 2 **and 3** Zones, the careful consideration and application of design treatment to such matters as road formation, kerbs, letterboxes, power supply, entry treatment, fencing, landscaping, lighting and the like will ensure the retention of open, spacious rural character. The market can be relied on to achieve this to a certain extent – many people won't buy sections in an unattractive area. However, not all people have the money to choose allotments in more attractive subdivisions. The District Plan provisions set some "bottom lines" to ensure all new residential areas achieve a standard of aesthetic appeal.*

Amendment 9 Amend Policy B4.1.2 for Residential Density (Page B4-004) as follows:

*Maintain Living 2 **and 3** Zones as areas with residential density which is considerably lower than that in Living 1 Zones.*

Amendment 10 Amend paragraph 2 of Explanation and Reasons for Policy B4.1.2 for Residential Density (Page B4-004) as follows:

*Policy B4.1.2 retains Living 2 **and 3** Zones areas with lower residential density than Living 1 Zones. The policy refers to 'considerably lower' which acknowledges that low density living zones be spacious and reflect something of the rural characteristics in which they are located. Currently they are from 6 to 12 times lower. The Council suggests average section sizes would need to remain between 3 and 6 times lower **in the Living 2 Zone and between 6 and 10 times lower in the Living 3 Zone** than that of Living 1 Zones, to have a visually discernible difference in residential density. If more intensive residential density than this is desired in Living 2 **or 3** Zones, the area should be rezoned to another Living zone.*

Amendment 11 Amend Policy B4.1.7 for Residential Density (Page B4-007) as follows:

*Maintain the area of sites covered with buildings in Living 2 Zones, at the lesser of 20% or 500m² **and in the Living 3 Zone at the lesser of 10% or 500m²**, unless any adverse effects on the spacious character of the area will be minor.*

Amendment 12 Amend paragraph 4 of Explanation and Reasons of Policy B4.1.7 for Residential Density (Page B4-008) as follows:

*Policy B4.1.7 maintains low site coverage in Living 2 **and 3** Zones. The very rationale for Living 2 **and 3** Zones is to provide a low density, residential area. The policy does include some flexibility to accommodate small increases in site coverage. Any effects on the 'spacious' look of the area should be minor. There are no limits on site coverage in Business zones.*

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Amendment 13 Amend Policy B4.1.9 for Residential Density (Page B4-008) as follows:

*Avoid erecting more than one dwelling per site in low density living (Living 2 **and 3**) Zones.*

Amendment 14 Amend paragraph 4 of Explanation and Reasons for Policy B4.1.9 for Residential Density (Page B4-008) as follows:

*Policy B4.1.9 is to avoid multiple dwellings in low density living (Living 2 **and 3**) Zones. The rationale for these zones is to provide a low density, residential area. There is no restriction on the number of dwellings per site in Business 1 Zones.*

Amendment 15 Insert new point 6 on Residential Density – Anticipated Environmental Results (Page B4-011) as follows:

Living 3 Zones are low density rural residential areas.

Amendment 16 Insert new Objective B4.3.7 of Residential and Business Development – Objectives (Page B4-030) as follows:

Objective B4.3.7

Ensure that any rural residential development occurs outside the urban limits identified in the Regional Policy Statement and such development occurs in general accordance with an operative Outline Development Plan, supports the timely, efficient and integrated provision of infrastructure, and provides for the long-term maintenance of rural residential character.

Amendment 17 Insert new paragraph 7 of Explanation and Reasons for Objective B4.3.7 for Residential and Business Development (Page B4-031) as follows:

Objective B4.3.7 seeks to ensure that rural residential development occurs outside the urban limits in a manner that accords with the Regional Policy Statement. Given the nature of rural-residential development, Objectives B4.1.1, B4.1.2 and B4.1.3 of the Rural Volume of the District Plan are also relevant when assessing the sustainability of rural land for rural residential purposes.

Amendment 18 Amend Policy B4.3.1 of Residential and Business Development – Town Form Policies (Page B4-033) as follows:

Policy B4.3.1

Ensure new residential, **rural residential or business development either:**

- **Complies with the Plan policies for the Rural Zone; or**
- **The land is rezoned to an appropriate Living Zone that provides for rural-residential development (as defined within the Regional Policy Statement) in accordance with an Outline Development Plan incorporated into the District Plan; or**
- *The land is rezoned to an appropriate Living or Business zone and, where within the Greater Christchurch area, is contained within the Urban Limit identified in the Regional Policy Statement and developed in accordance with an Outline Development Plan incorporated into the District Plan.*

Amendment 19 Amend paragraph 1 of Explanation and Reasons for Policy B4.3.1 (Page B4-033) as follows:

*Zoning is an integral part of the approach the District Plan uses to promote sustainable management of natural and physical resources. New residential, **rural residential** or business activities need to occur on land which is appropriately zoned, to ensure the most appropriate policies and rules in the Plan apply to the activity. Additional requirements apply*

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to those townships within the Greater Christchurch area, whereby new residential or business development within Greenfield areas is to be contained within the Urban Limits identified in the Regional Policy Statement and such development is to be carried out in accordance with an approved ODP that has been inserted into the District Plan. The purpose of these provisions is to consolidate and manage the rate of growth within these townships to ensure the integration of development with the appropriate provision of infrastructure, transport linkages, reserves and other community facilities.

Amendment 20 Amend Rule 4.2.1 for Buildings and Landscaping (Page C4-001) as follows:

Except for the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37, any principal building shall be a permitted activity if the area between the road boundary and the principal building is landscaped with shrubs and:

- Planted in lawn, and/or
- Paved or sealed, and/or
- Dressed with bark chips or similar material.

Note: Except that fences on boundaries adjoining reserve areas, cycleways or pedestrian accessways identified in the Outline Development Plan for Lincoln in Appendix 18 shall not exceed 1.2m in height.

Amendment 21 Insert new Rules 4.2.2, 4.2.3 & 4.2.4 for Buildings and Landscaping (Page C4-001 & 002) as follows:

For the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37 the following shall apply:

4.2.2 Any principal building shall be a permitted activity if:

- i) The area between all road boundaries (other than with State Highway 1) and a line parallel to and 15m back from the road boundary is landscaped with shrubs and specimen trees covering as a minimum the lesser of 30% of the area or 250m²; and**
- ii) The number of specimen trees in this area is not less than 1 per 10m of road frontage or part thereof; and**
- iii) The trees are selected from the list below planted at a grade of not less than Pb95; and**
- iv) Shrubs are planted at 'aa' grade of not less than Pb3 and a spacing of not less than 1 per square metre, typically located within a garden area dressed with bark chips or similar material; and**
- v) Any paved surface area within the area does not exceed 100m² in area.**
- vi) The list of suitable specimen trees for the purpose of this rule is:
Maple, Silk Tree, Alder, Birch, River She Oak, Leyland Cypress, Monterey Cypress, Lacebark, American sweet gum, Magnolia, Pohutukawa, weeping Kowhai, Common Olive, Pine, Lemonwood, Kohuhu, Ribbonwood, Plane, Totara, Poplar, Oak, Elm, Michelia**
- vii) The Council will require a planting plan to be submitted at building consent stage, prepared by a suitably qualified landscape professional, identifying compliance with the above control.**
- viii) The landscaping shall be maintained and if dead, diseased or damaged, shall be removed and replaced.**

Note: Rule 4.2.2 shall not apply to allotments of 4ha or greater in the Living 3 Zone identified on the Outline Development Plan in Appendix 37.

4.2.3 All fencing or walls on a road or Rural zoned boundary or in the area between the road boundary and the line of the front of the principal

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- building or in the area between the Rural Zone boundary and the line of the rear of the principal building;*
- i) *Shall be limited to a maximum height of 1.2m, be at least 50% open, and be post and rail or post and wire only; and*
- ii) *Shall be of a length equal to or greater than 80% of the length of the front boundary, of a minimum height of 0.6m and be at least 50% open.*

4.2.4 *Within the State Highway Buffer Area (refer Outline Development Plan in Appendix 37) planting and fencing of the area of land along the common boundary of the Living 3 zone and State Highway 1 shall be established and maintained in accordance with the detail shown in Appendix 37; and*

The landscaping shall be maintained and if dead, diseased or damaged, shall be removed and replaced.

Amendment 22 Amend existing Rule 4.2.2 for Buildings and Landscaping (Page C4-002) as follows:

4.2.25 *Any activity which does not comply with Rule 4.2.1, 4.2.2, 4.2.3 or 4.2.4 shall be a discretionary activity.*

Amendment 23 Amend Rule 4.6.6 for Buildings and Building Density (Page C4-005) as follows:

The erection on an allotment of any building (other than an accessory building) which does not comply with Rule 4.6.1 shall be a non-complying activity in the Living Z, 1A, 1A2, 1A3, 1A4 zones and the Living XA Deferred Zone at Prebbleton and all Living 2, and 2A zones and Living 3 Zones.

Amendment 24 Amend 'Table C4.1 Site Coverage Allowances' (Page C4-005 & 006) as follows:

Zone	Coverage
<u>Living 3</u>	<u>Lesser of 10% or 500m²</u>

Amendment 25 Amend Rule 4.9.2 for Buildings and Building Position (Page C4-008) as follows:

Except as provided in Rules 4.9.3 to 4.9.25~~28~~, any building which complies with the setback distances from internal boundaries and road boundaries, as set out in Table C4.2 below.

Amendment 26 Amend Rule 4.9.25 for Buildings and Building Position (Page C4-011) as follows:

Except for the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37, ~~Any dwelling, family flat, and any rooms within accessory buildings~~ used for sleeping or living purposes shall be located...

Amendment 27 Insert new Rule 4.9.26 for Buildings and Building Position (Page C4-011) as follows:

Any building in the Living 3 Zone at Rolleston (as shown on the Outline Development Plan in Appendix 37) shall be set back at least:

- i) *15 metres from any road boundary except that on corner lots a minimum setback of 10m applies to one road boundary*
- ii) *5 metres from any other boundary*

Amendment 28 Insert new Rule 4.9.27 for Buildings and Building Position (Page C4-011) as follows:

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Any dwelling, family flat, any rooms within accessory buildings used for sleeping or living purposes, and any internal areas associated with noise sensitive activities in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall be setback at least 80m from State Highway 1.

For the purposes of this rule, noise sensitive activities means any residential activity, travellers accommodation, educational facility, medical facility or hospital or other land use activity, where the occupants or persons using such facilities may be likely to be susceptible to adverse environmental effects or annoyances as a result of traffic noise from State Highway 1 over its location.

Amendment 29 Insert new Rule 4.9.28 for Buildings and Building Position (Page C4-011) as follows:

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall not be located within the 'Odour Constrained Area' as shown in Appendix 37 (Holmes Block).

Amendment 30 Amend existing Rule 4.9.30 for Buildings and Building Position (Page C4-012) as follows:

4.9.30 Any activity which does not comply with Rule 4.9.2 and Rules 4.9.4 to 4.9.14 and 4.9.25 **to 4.9.27** shall be a restricted discretionary activity

Amendment 31 Insert new matter of discretion as 4.9.34.4 for Buildings and Building Position (Page C4-012) as follows:

4.9.34.4 In the Living 3 Zone at Rolleston as shown in Appendix 37, whether the building development meets the internal sound levels listed in the table below:

<u>Type of Occupancy/Activity</u>	<u>Recommended Internal Design Sound Level (dBA Leq (24hr))</u>
<u>Residential Dwelling/Family Flat/Accessory buildings – bedrooms.</u>	<u>35</u>
<u>Residential Dwelling/Family Flat/Accessory buildings – other habitable rooms.</u>	<u>40</u>
<u>Noise Sensitive Activities</u>	<u>35</u>

Amendment 32 Amend existing Rule 4.9.34 for Buildings and Building Position (Page C4-013) as follows:

4.9.34 Any activity which does not comply with Rule 4.9.3 **or Rule 4.9.28** shall be a discretionary activity

Amendment 33 Insert new Rule 4.9.39 for Non-Complying Activities (Page C4-0013) as follows:

Erecting any new dwelling in the Countryside Area identified on the Outline Development Plan in Appendix 37.

Amendment 34 Insert new paragraph 6 within 'Reasons for Rules – Building Position' (Page C4-024) as follows:

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Controls on side and front yard spaces applies to sites in the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37 in order to retain views between residences and to assist in retaining elements of rural character and provide visual integration and visual attractiveness.

Amendment 35 Insert new paragraph 7 (immediately after new paragraph 6 as sought through Amendment 34) within 'Reasons for Rules – Building Position' (Page C4-024) as follows:

Building within the Countryside Area identified on the Outline Development Plan in Appendix 37 is a non-complying activity. The purpose of the Countryside Areas is to provide open space and a visual link to the surrounding rural landscape. These corridors bisect the residential activity and are to be managed in productive rural use.

Amendment 36 Insert new final paragraph within 'Reasons for Rules – Building Position' (Page C4-024) as follows:

In the case of Rolleston Sewage Treatment Plant an "Odour Control Setback Area" has been imposed. Building within this area is a Discretionary activity as reverse sensitivity issues may arise if this setback area is not applied.

Amendment 37 Insert new Rule 5.1.1.6 for Roading and Engineering Standards (Page C5-001) as follows:

For the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37, the road shall include the cross sectional treatment as shown in Appendix 37.

Amendment 38 Amend Rule 5.2.1.6 for Roading and Engineering Standards (Page C5-002) as follows:

The vehicular accessway is formed to the relevant standards in Appendix 13 **and in addition for the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37, private vehicular accessways serving less than three sites shall have a maximum formed width of 3.5m at the road boundary and within 10m of the road boundary**; and

Amendment 39 Insert new paragraph 3 within 'Reasons for Rules – Living Zone Rules – Roading' (Page C5-005) as follows:

A maximum width applies to accessways within the front 10m of sites in the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37 in order to avoid dominance of landscaped front yard areas by wide paved accessway surfaces, which could compromise the rural character the zone is expected to create.

Amendment 40 Amend Rule 10.3.2 for Activities and the Keeping of Animals (Page C10-003) as follows:

The keeping of animals other than domestic pets except as provided under Rules 10.3.3 to 10.3.5 shall be a discretionary activity (**except within the Living 3 Zone Countryside Areas identified on the Outline Development Plan at Appendix 37 provided that such activities are identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40).**

Amendment 41 Insert new Rule 10.15 Countryside Areas – Living 3 Zone, Rolleston (Page C10-011) as follows:

Permitted Activities – Countryside Areas – Living 3 Zone, Rolleston
10.15.1 Rural activities (excluding forestry, intensive livestock production and dwellings) within the Living 3 Zone Countryside Areas identified on the

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Outline Development Plan at Appendix 37 shall be a permitted activity provided that such rural activities are identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40.

Restricted Discretionary Activities – Countryside Areas – Living 3 Zone, Rolleston
10.15.2 Rural activities (excluding forestry, intensive livestock production and dwellings) within the Living 3 Zone Countryside Areas identified on the Outline Development Plan at Appendix 37 shall be a discretionary activity except where such rural activities are identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40.

10.15.3 Under Rule 10.15.2, the Council shall restrict the exercise of its discretion to:

10.15.3.1 the degree to which the proposed rural activities maintain open space and/or rural character and rural amenity of the Countryside Area(s);

10.15.3.2 the extent to which potential adverse nuisance effects on occupiers of adjacent rural residential allotments will be internalised within the Countryside Areas.

Amendment 42 Amend paragraph 2 of 'Reasons for Rules – Keeping of Animals' (Page C10-012) as follows:

*Resource consent for a discretionary activity is required for: commercial rearing of animals for sale of progeny, meat, skins, wool or other products; the keeping of animals other than domestic pets **(except within the Living 3 Zone Countryside Areas identified on the Outline Development Plan at Appendix 37;** and for the keeping of more than 15 domestic pets (excluding progeny up to weaner stage). Those activities may be granted resource consent, depending on whether adverse effects can be adequately mitigated, and if there is consistency with the relevant objectives and policies of the plan. **The exception provided for the Living 3 Zone Countryside Areas regarding keeping of animals recognises that rural activities (subject to some specific exceptions) are anticipated and intended to occur within the designated Countryside Areas. The potential adverse effects associated with the keeping of animals other than domestic pets (e.g. horse grazing) within the Living 3 Zone is managed through the requirement for a management plan to be in place prior to such activities occurring, and as such, are deemed appropriate for the Zone.***

Amendment 43 Insert new final paragraph within 'Reasons for Rules – Countryside Areas – Living 3 Zones' (Page C10-014) as follows:

Countryside Areas – Living 3 Zone
Rule 10.15 provides for rural activities (subject to some specific exceptions) to occur within the designated Countryside Areas within the Living 3 Zone identified on the Outline Development Plan at Appendix 37 as a means of achieving and maintaining rural character within the Living 3 Zone. While such activities have the potential to create adverse environmental effects, the requirement for those activities to be identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40 will ensure that any adverse effects are appropriately managed over time.

Amendment 44 Insert new Rule 12.1.3.38 for Subdivision General Standard (Page C12-007) as follows:

Rolleston
Any subdivision of land within the area shown in Appendix 37 (Living 3 Zone at Rolleston) complies with:

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- i) the Countryside Area layout of the Outline Development Plan at Appendix 37;
- ii) the location of the Lower Density Area as shown on the Outline Development Plan at Appendix 37;
- iii) the roading layout of the Outline Development Plan at Appendix 37; and
- iv) where any conflict occurs with Rule E13.3.1 the cross sections in Appendix 37 shall take precedence.

Amendment 45 Insert new Rule 12.1.3.39 for Subdivision General Standard (Page C12-007) as follows:

In respect of the land identified at Appendix 37, no more than 102 rural residential allotments may be created by subdivision prior to 31 December 2016.

Amendment 46 Insert new Rule 12.1.3.40 for Subdivision General Standard (Page C12-007) as follows:

Any subdivision application within the Living 3 Zone west of Dunns Crossing Road that includes any part of the Countryside Areas as identified on the Outline Development Plan included at Appendix 37 shall be accompanied by a Countryside Area Management Plan which addresses the following matters:

- (a) **The ownership and management structure for the Countryside Area(s);**
- (b) **Mechanisms to ensure that the management plan applies to and binds future owners;**
- (c) **The objectives of the proposed rural use of the Countryside Area(s);**
- (d) **Identification of the rural activity or activities proposed for the Countryside Area, which meet the above objectives;**
- (e) **Measures to maintain and manage open space and/or rural character;**
- (f) **Measures to manage plant pests and risk of fire hazard;**
- (g) **Measures to internalise adverse effects including measures to avoid nuisance effects on occupiers of adjacent rural residential allotments; and**
- (h) **Measures to provide for public access within the Countryside Area(s) along Dunns Crossing Road.**

Amendment 47 Amend 'Table C12.1 – Allotment Sizes' (Page C12-012) as follows:

Township	Zone	Average Allotment Size Not Less Than
Rolleston	<u>Living 3 (Appendix 37)</u>	<p><u>At least 20ha of the land within the area defined by the Outline Development Plan at Appendix 37 shall be developed as a Lower Density Area in the location shown on the Outline Development Plan with a minimum and an average allotment size of no less than 4ha.</u></p> <p><u>The balance of the land on the Outline Development Plan at Appendix 37 outside the above area shall be developed with an average allotment size of no less than 5000m² with a minimum allotment size of 4000m²</u></p> <p><u>The maximum number of allotments within the area defined by the Outline Development Plan at Appendix 37 shall be 102.</u></p>

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Amendment 48 Insert new matter over which Council has restricted the exercise of its discretion at Clause 12.1.4.77 (Page C12-023) as follows:

In relation to the Living 3 Zone (Holmes) at Rolleston as shown in Appendix 37:

- (a) Whether the pattern of development and subdivision is consistent with the Outline Development Plan in Appendix 37;
- (b) Whether local roading, and trees and planting on roads and lots, are proposed in general accordance with the Outline Development Plan, road cross section(s) and associated planting schedules and requirements shown in Appendix 37;
- (c) Whether the roading and lot pattern follow a rectilinear pattern with orientations generally established by the surrounding road network, consistent with the typical subdivision patterns of the Rolleston rural area;
- (d) Whether the roading pattern and proposed hard and soft landscape treatments in the road reserve will create a rural character to the development and distinguish it from conventional suburban development;
- (e) Whether suburban road patterns and details such as cul de sac, arbitrary curves, and kerb and channels are avoided;
- (f) The extent to which the maximum of 102 lots within the area defined by the Outline Development Plan in Appendix 37 is met.
- (g) Whether the creation of open space in rural production areas is consistent with the Countryside Areas identified on the Outline Development Plan in Appendix 37.
- (h) Whether the provision of public walkways are consistent with the public walkways identified on the Outline Development Plan in Appendix 37.
- (i) Whether there is a need for the western public walkway taking into account the ability to connect to future public walkways to the west.
- (j) Whether at least 20ha of land is developed as a Lower Density Area with larger allotments (4ha or more) in general accordance with the location identified on the Outline Development Plan at Appendix 37.
- (k) In the event that it is developed first, whether the development of a Lower Density Area in advance of other development avoids frustrating the intentions of the Outline Development Plan or the ability to achieve integrated development over the Outline Development Plan area.

Amendment 49 Insert new matter over which Council has restricted the exercise of its discretion at Clause 12.1.4.78 (Page C12-023) as follows:

In relation to the Countryside Area Management Plan required for the Living 3 Zone west of Dunns Crossing Road, Rolleston as shown in Appendix 37:

- (a) The adequacy of the management plan to achieve open space and/or rural character across the Countryside Area(s) in a manner that is compatible with the surrounding rural residential environment;
- (b) The adequacy of proposed mechanisms to maintain and manage the Countryside Area(s) long term in a consistent manner;
- (c) Whether rural landscape, visual and amenity value characteristics of the Countryside Areas are maintained;
- (d) The extent to which potential adverse nuisance effects on occupiers of adjacent rural residential allotments will be internalised within the Countryside Areas;
- (e) The extent to which adverse effects of plant pests and fire hazard risks will be avoided or remedied; and
- (f) The suitability of proposed access within the Countryside Area(s) along Dunns Crossing Road.

Amendment 50 Insert new Rule 12.1.7.8 (page C12-025) as follows:

Any subdivision that does not comply with Rule 12.1.3.39

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Amendment 51 Insert new paragraph 6 in 'Reasons for Rules' (Page C12-031) as follows:

Rule 12.1.3.39 has been incorporated to give effect to Chapter 12A of the Regional Policy Statement in as far as it relates to the allocation of rural residential households to the Selwyn District Council within the first and second sequence periods shown on Table 1 of Chapter 12A of the Regional Policy Statement.

Amendment 52 Amend Appendix 13 – Transport 'Table E13.9 – Rooding Standards' (Page E13-009) as follows:

Type of Road	Legal Width (m)		Carriageway Width (m)		Kerb and Channel	Footpath(s)
	Min	Max	Min	Max		
<u>Local Roads – Living 3 Zone at Rolleston (as shown within the Outline Development Plan at Appendix 37)</u>	<u>18m</u>	<u>20m</u>	<u>6m</u>	<u>8m</u>	<u>nil</u>	<u>One side only</u>

Amendment 53 Insert new Standard E13.3.1.5 for Appendix 13 – Transport; Rooding Standards (Page E13-009) as follows:

Any local road in the Living 3 Zone at Rolleston shall be constructed in substantial accordance with the recommended road cross section shown in the Outline Development Plan in Appendix 37.

Amendment 54 Include the Outline Development Plan attached at **Appendix E** to this document as a new **Appendix 37** to the District Plan.

Amendment 55 Any consequential amendments and renumbering of provisions as required to give effect to the plan change request.

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For the purposes of this Plan Change Request, any existing text from the District Plan is shown in *italics*, any text proposed to be added by this Plan Change Request is shown as **bold underlined and in italics** and text to be deleted as ~~*striketrough in italics*~~. Please note that only the proposed new and amended provisions to the District Plan are shown in this section and therefore should be read in conjunction with the full text of the District Plan. The provisions proposed below may require some existing provisions to be renumbered / amended accordingly.

The following specific changes are sought to the District Plan to enable the rezoning to proceed:

Amendment 1 Amend Planning Maps 13 and 108 (Sheets 1 and 2) to identify the zoning of the site as Living 3.

Amendment 2 Insert Living 3 Zone and description into Table A4.4 – Description of Township Zones (page A4-011) as follows:

<i>Zone</i>	<i>Description</i>
<u>Living 3</u>	<u>As for Living 2 Zone, but with specific controls and design elements incorporated to ensure development of the land is reflective of and retains elements of rural character expected of the Living 3 zone, which in essence is a rural residential zone, so as to visually set the development apart from the neighbouring urban area. Similar to the Living 2 zone, larger sections (with a lower building density than Living 2), more space between dwellings, panoramic views and rural outlook are characteristic of the Living 3 Zone.</u>

Amendment 3 Insert new paragraph 7 in Use of Zones (page A4-012) as follows:

As with higher density residential areas, rural residential development is provided for through Change 1 to the Regional Policy Statement. Accordingly the District Plan specifically provides for rural residential opportunities as has long been the case in Selwyn District.

Amendment 4 Amend Policy B1.2.3 for Water Supplies to include (Page B1-017) as follows:

*Require the water supply to any allotment or building in any township, **and the Living 3 Zone**, to comply with the current New Zealand Drinking Water Standards and to be reticulated in all townships, except for sites in the existing Living 1 Zone at Doyleston.*

Amendment 5 Insert new paragraph 3 in Explanation and Reasons for Objective B3.4.3 Reverse sensitivity (Page B3-036) as follows:

In the case of rural residential development there is the potential for reverse sensitivity effects to arise from the proximity to rural activities. This issue is addressed through Objective B3.4.3 and B4.1.2.

Amendment 6 Amend point 6 on discussion on Residential Density – Strategy (page B4-002) as follows:

*Density in Living 2 **and 3** Zones is kept low thus reflecting the rural character by maintaining a sense of open space, panoramic views and rural outlook.*

Amendment 7 Insert new paragraph 6 of Explanation and Reasons for Objective B4.1.2 for Residential Density (Page B4-003) as follows:

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Any Living 3 Zone being a rural residential zone shall be located beyond the 'urban limits' but where it can be economically provided with reticulated sewer and water supply, and appropriate stormwater treatment and disposal. The Living 3 Zone will have regard to providing a visual transition area between the 'urban area' and the rural area which exists beyond townships by incorporating certain design elements of rural character, which are common in rural settings so the land is visually set apart from the neighbouring urban area.

Amendment 8 Amend existing paragraph 7 of Explanation and Reasons for Objective B4.1.2 for Residential Density (Page B4-003) as follows:

*New residential areas should be attractively laid out, with allotments of an appropriate shape to build a house, and with access to sunlight. As well as functional utilities, new residential areas need some open space, plantings and landscaping to make them aesthetically pleasing. Objective B4.1.2 is to ensure future residential areas maintain the current attractive layout of Selwyn's townships. For low density Living 2 **and 3** Zones, the careful consideration and application of design treatment to such matters as road formation, kerbs, letterboxes, power supply, entry treatment, fencing, landscaping, lighting and the like will ensure the retention of open, spacious rural character. The market can be relied on to achieve this to a certain extent – many people won't buy sections in an unattractive area. However, not all people have the money to choose allotments in more attractive subdivisions. The District Plan provisions set some "bottom lines" to ensure all new residential areas achieve a standard of aesthetic appeal.*

Amendment 9 Amend Policy B4.1.2 for Residential Density (Page B4-004) as follows:

*Maintain Living 2 **and 3** Zones as areas with residential density which is considerably lower than that in Living 1 Zones.*

Amendment 10 Amend paragraph 2 of Explanation and Reasons for Policy B4.1.2 for Residential Density (Page B4-004) as follows:

*Policy B4.1.2 retains Living 2 **and 3** Zones areas with lower residential density than Living 1 Zones. The policy refers to 'considerably lower' which acknowledges that low density living zones be spacious and reflect something of the rural characteristics in which they are located. Currently they are from 6 to 12 times lower. The Council suggests average section sizes would need to remain between 3 and 6 times lower **in the Living 2 Zone and between 6 and 10 times lower in the Living 3 Zone** than that of Living 1 Zones, to have a visually discernible difference in residential density. If more intensive residential density than this is desired in Living 2 **or 3** Zones, the area should be rezoned to another Living zone.*

Amendment 11 Amend Policy B4.1.7 for Residential Density (Page B4-007) as follows:

*Maintain the area of sites covered with buildings in Living 2 Zones, at the lesser of 20% or 500m² **and in the Living 3 Zone at the lesser of 10% or 500m²**, unless any adverse effects on the spacious character of the area will be minor.*

Amendment 12 Amend paragraph 4 of Explanation and Reasons for Policy B4.1.7 for Residential Density (Page B4-007) as follows:

*Policy B4.1.7 maintains low site coverage in Living 2 **and 3** Zones. The very rationale for Living 2 **and 3** Zones is to provide a low density, residential area. The policy does include some flexibility to accommodate small increases in site coverage. Any effects on the 'spacious' look of the area should be minor. There are no limits on site coverage in Business zones.*

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Amendment 13 Amend Policy B4.1.9 for Residential Density (Page B4-008) as follows:

*Avoid erecting more than one dwelling per site in low density living (Living 2 **and 3**) Zones.*

Amendment 14 Amend paragraph 4 of Explanation and Reasons for Policy B4.1.9 for Residential Density (Page B4-008) as follows:

*Policy B4.1.9 is to avoid multiple dwellings in low density living (Living 2 **and 3**) Zones. The rationale for these zones is to provide a low density, residential area. There is no restriction on the number of dwellings per site in Business 1 Zones.*

Amendment 15 Insert new point 6 on Residential Density – Anticipated Environmental Results (Page B4 – 011) as follows:

Living 3 Zones are low density rural residential areas.

Amendment 16 Insert new Objective B4.3.7 of Residential and Business Development – Objectives (Page B4-030) as follows:

Objective B4.3.7

Ensure that any rural residential development occurs outside the urban limits identified in the Regional Policy Statement and such development occurs in general accordance with an operative Outline Development Plan, supports the timely, efficient and integrated provision of infrastructure, and provides for the long-term maintenance of rural residential character.

Amendment 17 Insert new paragraph 7 of Explanation and Reasons for Objective B4.3.7 for Residential and Business Development (Page B4-031) as follows:

Objective B4.3.7 seeks to ensure that rural residential development occurs outside the urban limits in a manner that accords with the Regional Policy Statement. Given the nature of rural-residential development, Objectives B4.1.1, B4.1.2 and B4.1.3 of the Rural Volume of the District Plan are also relevant when assessing the sustainability of rural land for rural residential purposes.

Amendment 18 Amend Policy B4.3.1 of Residential and Business Development – Town Form Policies (Page B4-033) as follows:

Policy B4.3.1

Ensure new residential, **rural residential or business development either:**

- **Complies with the Plan policies for the Rural Zone; or**
- **The land is rezoned to an appropriate Living Zone that provides for rural-residential development (as defined within the Regional Policy Statement) in accordance with an Outline Development Plan incorporated into the District Plan; or**
- *The land is rezoned to an appropriate Living or Business zone and, where within the Greater Christchurch area, is contained within the Urban Limit identified in the Regional Policy Statement and developed in accordance with an Outline Development Plan incorporated into the District Plan.*

Amendment 19 Amend paragraph 1 of Explanation and Reasons for Policy B4.3.1 (Page B4-033) as follows:

*Zoning is an integral part of the approach the District Plan uses to promote sustainable management of natural and physical resources. New residential, **rural residential** or business activities need to occur on land which is appropriately zoned, to ensure the most appropriate policies and rules in the Plan apply to the activity. Additional requirements apply*

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to those townships within the Greater Christchurch area, whereby new residential or business development within Greenfield areas is to be contained within the Urban Limits identified in the Regional Policy Statement and such development is to be carried out in accordance with an approved ODP that has been inserted into the District Plan. The purpose of these provisions is to consolidate and manage the rate of growth within these townships to ensure the integration of development with the appropriate provision of infrastructure, transport linkages, reserves and other community facilities.

Amendment 20 Amend Rule 4.2.1 for Buildings and Landscaping (Page C4-001) as follows:

Except for the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 38, any principal building shall be a permitted activity if the area between the road boundary and the principal building is landscaped with shrubs and:

- Planted in lawn, and/or
- Paved or sealed, and/or
- Dressed with bark chips or similar material.

Note: Except that fences on boundaries adjoining reserve areas, cycleways or pedestrian accessways identified in the Outline Development Plan for Lincoln in Appendix 18 shall not exceed 1.2m in height.

Amendment 21 Insert the following Rules 4.2.2 and 4.2.3 for Buildings and Landscaping (Page C4-001) as follows:

For the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 38 the following shall apply:

4.2.2 Any principal building shall be a permitted activity if:

- i) The area between all road boundaries and a line parallel to and 15m back from the road boundary is landscaped with shrubs and specimen trees covering as a minimum the lesser of 30% of the area or 250m²; and**
- ii) The number of specimen trees in this area is not less than 1 per 10m of road frontage or part thereof; and**
- iii) The trees are selected from the list below planted at a grade of not less than Pb95; and**
- iv) Shrubs are planted at 'aa' grade of not less than Pb3 and a spacing of not less than 1 per square metre, typically located within a garden area dressed with bark chips or similar material; and**
- v) Any paved surface area within the area does not exceed 100m² in area.**
- vi) The list of suitable specimen trees for the purpose of this rule is: Maple, Silk Tree, Alder, Birch, River She Oak, Leyland Cypress, Monterey Cypress, Lacebark, American sweet gum, Magnolia, Pohutukawa, weeping Kowhai, Common Olive, Pine, Lemonwood, Kohuhu, Ribbonwood, Plane, Totara, Poplar, Oak, Elm, Michelia**
- vii) The Council will require a planting plan to be submitted at building consent stage, prepared by a suitably qualified landscape professional, identifying compliance with the above control.**
- viii) The landscaping shall be maintained and if dead, diseased or damaged, shall be removed and replaced.**

Note: Rule 4.2.2 shall not apply to allotments of 4ha or greater in the Living 3 Zone identified on the Outline Development Plan in Appendix 38.

4.2.3 All fencing or walls on a road or Rural zoned boundary or in the area between the road boundary and the line of the front of the principal building or in the

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area between the Rural Zone boundary and the line of the rear of the principal building;

- i) Shall be limited to a maximum height of 1.2m, be at least 50% open, and be post and rail or post and wire only; and
- ii) Shall be of a length equal to or greater than 80% of the length of the front boundary, of a minimum height of 0.6m and be at least 50% open.

Amendment 22 Amend existing Rule 4.2.2 for Buildings and Landscaping (Page C4-002) as follows:

4.2.24 Any activity which does not comply with Rule 4.2.1, **4.2.2 or 4.2.3** shall be a discretionary activity.

Amendment 23 Amend Rule 4.6.6 for Buildings and Building Density (Page C4-005) as follows:

The erection on an allotment of any building (other than an accessory building) which does not comply with Rule 4.6.1 shall be a non-complying activity in the Living Z, 1A, 1A2, 1A3, 1A4 zones and the Living XA Deferred Zone at Prebbleton and all Living 2, and 2A zones and Living 3 Zones.

Amendment 24 Amend 'Table C4.1 Site Coverage Allowances' (Page C4-005 & 006) as follows:

Zone	Coverage
<u>Living 3</u>	<u>Lesser of 10% or 500m²</u>

Amendment 25 Amend Rule 4.9.2 for Buildings and Building Position (Page C4-008) as follows:

Except as provided in Rules 4.9.3 to 4.9.25, any building which complies with the setback distances from internal boundaries and road boundaries, as set out in Table C4.2 below.

Amendment 26 Amend Rule 4.9.25 for Buildings and Building Position (Page C4-011) as follows:

Except for the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 38, Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes shall be located...

Amendment 27 Insert new Rule 4.9.26 for Buildings and Building Position (Page C4-011) as follows:

Any building in the Living 3 Zone at Rolleston (as shown on the Outline Development Plan in Appendix 38) shall be set back at least:

- i) **15 metres from any road boundary except that on corner lots a minimum setback of 10m applies to one road boundary**
- ii) **5 metres from any other boundary**

Amendment 28 Insert new Rule 4.9.27 for Buildings and Building Position (Page C4-011) as follows:

Any sensitive activity in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 38) shall be setback at least 200m from the northern boundary shared with Lot 3 DP20007 containing a poultry breeder farm, provided that this rule shall cease to have effect upon the cessation of intensive farming operations on Lot 3 DP20007.

Amendment 29 Amend existing Rule 4.9.30 for Buildings and Building Position (Page C4-0012) as follows:

4.9.30 Any activity which does not comply with Rule 4.9.2 and Rules 4.9.4 to 4.9.14 and 4.9.25 **to 4.9.26** shall be a restricted discretionary activity

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- Amendment 30** Amend existing Rule 4.9.34 for Buildings and Building Position (Page C4-013) as follows:
- ~~4.9.34~~**36** *Any activity which does not comply with Rule 4.9.3 or Rule 4.9.27 shall be a discretionary activity*
- Amendment 31** Insert new Rule 4.9.38 for Non-Complying Activities (Page C4-0013) as follows:
- Erecting any new dwelling in the Countryside Area identified on the Outline Development Plan in Appendix 38.**
- Amendment 32** Insert new paragraph 6 within 'Reasons for Rules – Building Positions' (page C4-024) as follows:
- Controls on side and front yard spaces applies to sites in the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 38 in order to retain views between residences and to assist in retaining elements of rural character and provide visual integration and visual attractiveness.**
- Amendment 33** Insert new paragraph 7 (immediately after new paragraph 6 as sought through Amendment 32) within 'Reasons for Rules – Building Position' (Page C4-024) as follows:
- Building within the Countryside Area identified on the Outline Development Plan in Appendix 38 is a non-complying activity. The purpose of the Countryside Areas is to provide a visual link to the surrounding rural landscape. These corridors bisect the residential activity and are to be managed in productive rural use.**
- Amendment 34** Insert new final paragraph within 'Reasons for Rules – Building Position' (Page C4-024) as follows:
- In regard to the Poultry Farm identified on Lot 3 DP 20007 at Rolleston a 200m setback has been imposed in relation to the northern boundary of the Skellerup Block (as shown on the Outline Development Plan in Appendix 38). Building within this area is a Discretionary activity as reverse sensitivity issues may arise if this setback area is not applied.**
- Amendment 35** Insert Rule 5.1.1.6 for Roding and Engineering Standards (Page C5-001) as follows:
- For the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 38, the road shall include the cross sectional treatment as shown in Appendix 38.**
- Amendment 36** Amend Rule 5.2.1.6 for Roding and Engineering Standards (Page C5-002) as follows:
- The vehicular accessway is formed to the relevant standards in Appendix 13 and in addition for the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 38, private vehicular accessways serving less than three sites shall have a maximum formed width of 3.5m at the road boundary and within 10m of the road boundary; and*
- Amendment 37** Insert new paragraph 3 within 'Reasons for Rules - Living Zone Rules – Roding' (Page C5-006) as follows:
- A maximum width applies to accessways within the front 10m of sites in the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 38 in order**

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to avoid dominance of landscaped front yard areas by wide paved accessway surfaces, which could compromise the rural character the zone is expected to create.

Amendment 38 Amend Rule 10.3.2 for Activities and the Keeping of Animals (Page C10-003) as follows:

*The keeping of animals other than domestic pets except as provided under Rules 10.3.3 to 10.3.5 shall be a discretionary activity **(except within the Living 3 Zone Countryside Areas identified on the Outline Development Plan at Appendix 38 provided that such activities are identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40).***

Amendment 39 Insert new Rule 10.15 Countryside Areas – Living 3 Zone, Rolleston (Page C10-011) as follows:

Permitted Activities – Countryside Areas – Living 3 Zone, Rolleston

10.15.1 Rural activities (excluding forestry, intensive livestock production and dwellings) within the Living 3 Zone Countryside Areas identified on the Outline Development Plan at Appendix 38 shall be a permitted activity provided that such rural activities are identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40.

Restricted Discretionary Activities – Countryside Areas – Living 3 Zone, Rolleston

10.15.2 Rural activities (excluding forestry, intensive livestock production and dwellings) within the Living 3 Zone Countryside Areas identified on the Outline Development Plan at Appendix 38 shall be a discretionary activity except where such rural activities are identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40.

10.15.3 Under Rule 10.15.2, the Council shall restrict the exercise of its discretion to:

10.15.3.1 the degree to which the proposed rural activities maintain open space and/or rural character and rural amenity of the Countryside Area(s);

10.15.3.2 the extent to which potential adverse nuisance effects on occupiers of adjacent rural residential allotments will be internalised within the Countryside Areas.

Amendment 40 Amend paragraph 2 within 'Reasons for Rules - Keeping of Animals' (Page C10-012) as follows:

*Resource consent for a discretionary activity is required for: commercial rearing of animals for sale of progeny, meat, skins, wool or other products; the keeping of animals other than domestic pets **(except within the Living 3 Zone Countryside Areas identified on the Outline Development Plan at Appendix 38)**; and for the keeping of more than 15 domestic pets (excluding progeny up to weaner stage). Those activities may be granted resource consent, depending on whether adverse effects can be adequately mitigated, and if there is consistency with the relevant objectives and policies of the plan. **The exception provided for the Living 3 Zones Countryside Areas regarding keeping of animals recognises that rural activities (subject to some specific exceptions) are anticipated and intended to occur within the designated Countryside Areas. The potential adverse effects associated with the keeping of animals other than domestic pets (e.g. horse grazing) within the Living 3 Zone is managed through the requirement for a management plan to be in place prior to such activities occurring, and as such, are deemed appropriate for the Zone.***

Schedule of Proposed Amendments – Skellerup Block (28 March 2011)

- Amendment 41** Insert new final paragraph within 'Reasons for Rules – Countryside Areas – Living 3 Zones' (Page C10-014) as follows:

Countryside Areas – Living 3 Zone

Rule 10.15 provides for rural activities (subject to some specific exceptions) to occur within the designated Countryside Areas within the Living 3 Zone identified on the Outline Development Plan at Appendix 38 as a means of achieving and maintaining rural character within the Living 3 Zone. While such activities have the potential to create adverse environmental effects, the requirement for those activities to be identified by and undertaken consistent with the Countryside Area Management Plan required by Rule 12.1.3.40 will ensure that any adverse effects are appropriately managed over time.

- Amendment 42** Insert new Rule 12.1.3.38 for Subdivision General Standard (Page C12-007) as follows:

Rolleston

Any subdivision of land within the area shown in Appendix 38 (Living 3 Zone at Rolleston) complies with:

- i) the Countryside Area layout of the Outline Development Plan at Appendix 38;**
- ii) the location of the Lower Density Area as shown on the Outline Development Plan at Appendix 38;**
- iii) the establishment of shelterbelt planting comprising three rows of Leyland Cypress along the common boundary with Lot 3 DP 20007;**
- iv) the roading layout of the Outline Development Plan at Appendix 38; and**
- v) where any conflict occurs with Rule E13.3.1 the cross sections in Appendix 38 shall take precedence.**

- Amendment 43** Insert new Rule 12.1.3.39 for Subdivision General Standard (Page C12-007) as follows:

In respect of that land identified at Appendix 38, no rural residential allotments shall be created prior to 1 January 2017. From 1 January 2017, no more than 73 rural residential allotments may be created by subdivision prior to 31 December 2026.

- Amendment 44** Insert new Rule 12.1.3.40 for Subdivision General Standard (Page C12-006):

Any subdivision application within the Living 3 Zone west of Dunns Crossing Road that includes any part of the Countryside Areas as identified on the Outline Development Plan included at Appendix 38 shall be accompanied by a Countryside Area Management Plan which addresses the following matters:

- (a) The ownership and management structure for the Countryside Area(s);**
- (b) Mechanisms to ensure that the management plan applies to and binds future owners;**
- (c) The objectives of the proposed rural use of the Countryside Area(s);**
- (d) Identification of the rural activity or activities proposed for the Countryside Area, which meet the above objectives;**
- (e) Measures to maintain and manage open space and/or rural character;**
- (f) Measures to manage plant pests and risk of fire hazard;**
- (g) Measures to internalise adverse effects including measures to avoid nuisance effects on occupiers of adjacent rural residential allotments; and**
- (h) Measures to provide for public access within the Countryside Area(s) along Dunns Crossing Road.**

- Amendment 45** Amend 'Table C12.1 – Allotment Sizes' (Page C12-012) as follows:

Schedule of Proposed Amendments – Skellerup Block (28 March 2011)

Township	Zone	Average Allotment Size Not Less Than
Rolleston	<u>Living 3</u> <u>(Appendix 38)</u>	<p><u>At least 20ha of the land within the area defined by the Outline Development Plan at Appendix 38 shall be developed as a Lower Density Area in the location shown on the Outline Development Plan with a minimum and an average allotment size of no less than 4ha.</u></p> <p><u>The balance of the land on the Outline Development Plan outside the above area shall be developed with an average allotment area of no less than 5000m² with a minimum allotment size of 4000m²</u></p> <p><u>The maximum number of allotments within the area defined by the Outline Development Plan at Appendix 38 shall be 73.</u></p>

Amendment 46 Insert the following matter over which Council has restricted the exercise of its discretion at Clause 12.1.4.77 (Page C12-023) as follows:

In relation to the Living 3 Zone (Skellerup) at Rolleston as shown in Appendix 38:

- (a) **Whether the pattern of development and subdivision is consistent with the Outline Development Plan in Appendix 38;**
- (b) **Whether local roading, and trees and planting on roads and lots, are proposed in general accordance with the Outline Development Plan, road cross section(s) and associated planting schedules and requirements shown in Appendix 38;**
- (c) **Whether the roading and lot pattern follow a rectilinear pattern with orientations generally established by the surrounding road network, consistent with the typical subdivision patterns of the Rolleston rural area;**
- (d) **Whether the roading pattern and proposed hard and soft landscape treatments in the road reserve will create a rural character to the development and distinguish it from conventional suburban development;**
- (e) **Whether suburban road patterns and details such as cul de sac, arbitrary curves, and kerb and channels are avoided;**
- (f) **The extent to which the maximum of 73 lots within the area defined by the Outline Development Plan in Appendix 38 is met.**
- (g) **Whether the creation of open space in rural production areas is consistent with the Countryside Areas identified on the Outline Development Plan in Appendix 38.**
- (h) **Whether at least 20ha of land is developed as a Lower Density Area with larger allotments (4ha or more) in general accordance with the location identified on the Outline Development Plan in Appendix 38.**
- (i) **In the event that it is developed first, whether the development of a Lower Density Area in advance of other development avoids frustrating the intentions of the Outline Development Plan or the ability to achieve integrated development over the Outline Development Plan Area.**
- (j) **Whether shelterbelt planting will achieve screening of activities occurring on Lot 3 DP 20007.**

Amendment 47 Insert the following matter over which Council has restricted the exercise of its discretion at Clause 12.1.4.78 (Page C12-023) as follows:

In relation to the Countryside Area Management Plan required for the Living 3 Zone west of Dunns Crossing Road, Rolleston as shown in Appendix 38:

Schedule of Proposed Amendments – Skellerup Block (28 March 2011)

- (a) The adequacy of the management plan to achieve open space and/or rural character across the Countryside Area(s) in a manner that is compatible with the surrounding rural residential environment;
- (b) The adequacy of proposed mechanisms to maintain and manage the Countryside Area(s) long term in a consistent manner;
- (c) Whether rural landscape, visual and amenity value characteristics of the Countryside Areas are maintained;
- (d) The extent to which potential adverse nuisance effects on occupiers of adjacent rural residential allotments will be internalised within the Countryside Areas;
- (e) The extent to which adverse effects of plant pests and fire hazard risks will be avoided or remedied; and
- (f) The suitability of proposed access within the Countryside Area(s) along Dunns Crossing Road.

Amendment 48 Insert the following Rule 12.1.7.8 (page C12-025) as follows:

Any subdivision that does not comply with Rule 12.1.3.39

Amendment 49 Insert the following new paragraph 6 in 'Reasons for Rules' (Page C12-031) as follows:

Rule 12.1.3.39 has been incorporated to give effect to the Regional Policy Statement in as far as it relates to the allocation of rural residential households to the Selwyn District Council within the first and second sequence periods shown on Table 1 of Change 1 to the Regional Policy Statement.

Amendment 50 Amend Appendix 13 – Transport 'Table E13.9 – Roading Standards' (Page E13-009) as follows:

Type of Road	Legal Width (m)		Carriageway Width (m)		Kerb and Channel	Footpath(s)
	Min	Max	Min	Max		
<u>Local Roads – Living 3 Zone at Rolleston (as shown within the Outline Development Plan at Appendix 38)</u>	<u>18m</u>	<u>20m</u>	<u>6m</u>	<u>8m</u>	<u>nil</u>	<u>One side only</u>

Amendment 51 Insert new standard E13.3.1.5 for Appendix 13 – Transport; Roading Standards to include (Page E13-009) as follows:

Any local road in the Living 3 Zone at Rolleston shall be constructed in substantial accordance with the recommended road cross section shown in the Outline Development Plan in Appendix 38.

Amendment 52 Include the Outline Development Plan attached at **Appendix E** to this document as a new **Appendix 38** to the District Plan.

Amendment 53 Any consequential amendments and renumbering of provisions as required to give effect to the plan change request.

S42A Landscape Report

Report prepared for Selwyn District Council

by Andrew Craig *Registered Landscape Architect*

April 2011

1.0 INTRODUCTION

1.1 The purpose of this report is to assess landscape matters arising from a private plan change request relating to two sites referred to as the 'Holmes' (92ha) and 'Skellerup' (72ha) Blocks. The land for both sites is currently zone Rural Outer Plains where the minimum dwelling density is 20 hectares. The request seeks rezoning of this to Living 3¹ effectively resulting in a rural residential type environment. Additionally each plan change site will accommodate five 4ha allotments thereby matching the minimum lot size for the Rural Inner Plains Zone.

1.2 It is understood that the proposed plan changes seek the following;

	PC 8 (Holmes)	PC9 (Skellerup)
<i>Number of allotments</i>	97 + 5x4ha lots	68 + 5x4ha lots
<i>Minimum allotment size</i>	4000m ²	4000m ²
<i>Maximum average size</i>	5000m ²	5000m ²
<i>Maximum size allotment</i>	40,000m ² (x5)	40,000m ² (x5)

The layout of the plan change sites is as shown in the request application as the Option 3 outline development plans (ODPs) dated 4 February 2011². By way of background, the current design has resulted from a series of options subject to discussion with Council officers over the last two years. Consequently the plans now incorporate a lot more green open space and have significantly less allotments than that originally proposed.

1.3 A central landscape issue is what would constitute a rural residential environment? The Council has recently prepared and notified Plan Change 17 which among other things sets out to define this. Further it attempts to direct the location and extent of future rural residential activity determined by a number of factors including those concerned with character and amenity. Plan Change 17 is not yet operative and so the direction it seeks has yet to be tested. To a certain extent the PC8&9 requests will do this which will include consideration of character and amenity. However other submitters in the course of making PC17 operative will also advance opinions on what constitutes rural residential activity, where it should be located and what its extent should be. Consequently these matters are not yet definitive, where at this stage they can only be regarded as iterative, particularly with reference to PC17.

1.3 The key issue concerning landscape matters centre on the question of how a rural residential zone is defined in terms of its character and amenity. Fundamental to this is what residents expect from such an environment. The overarching aim of PC17 is to meet those expectations, which will be described in more detail later. Concerning PC 8 and 9 the issue is whether these can be delivered.

1.4 To address these issues, it is intended to discuss the following;

¹ SDP proposed PC17 refers to the rural residential zone as Living 4

² ODPs prepared by Harrison Grierson Consultants Ltd

- The context of rural residential activity within the Canterbury Plains landscape.
 - What constitutes rural residential character and amenity?
 - Do the PC8 and 9 proposals align with what is expected of a rural residential activity?
 - Submissions
- 1.5 In preparing this report I have read the plan change request applications, especially focussing on the landscape assessment of environmental effects (AEE). I have also visited the sites with respect to the proposal.
- 1.6 It is not my intent to repeat the landscape assessment prepared by the applicant as I found this to be generally thorough. However, there are some points of difference concerning the conclusions which I will discuss in more detail. I will also consider the District Plan provisions and amendments proposed by the applicant.

2.0 The context of rural residential activity within the Selwyn rural district

- 2.1 The rural zones within Selwyn District are divided according to a combination of landform and land use. They include the following:
- Rural Plains - inner
 - Rural Plains - outer
 - Rural Port Hills³
 - Rural Malvern Hills⁴
 - Rural High Country⁵
 - Rural - Existing Development Areas
- 2.2 Fundamentally the difference between the zones centres on the proportion of open space to built form. This affects the presentation of rural character where the greater amount of open space there is the more rural an environment will appear. The rural Inner Plains is the densest rural zone at one dwelling per 4ha, ranging up to the High Country where the ratio is one to 100ha.
- 2.3 PC17 promotes an average site density of two dwellings per hectare. Consequently there is a significant eightfold increase in density between the Rural Inner Plains and the proposed rural residential zones. PC8 and 9 also advance the same density⁶ as that anticipated by PC17. However, the application sites are located within the Rural Outer Plains Zone where the site density is one dwelling per 20ha.
- 2.4 Under PC17 future rural residential zones will be encouraged to locate in the Rural Inner Plains Zone. One reason for this is that the zone is close to the District's major urban centres as well as that of Christchurch. In landscape terms, because the Rural

³ Includes Outstanding Natural Landscapes and Features

⁴ Ditto

⁵ Ditto

⁶ PC8 Amendment 47 Table C12.1 and PC69 Amendment 45 Table C12.1

Inner Plains is relatively dense and in land use terms complex, it is better able to absorb the presence of rural residential activity. That does not rule out the presence of rural residential zones within the Outer Plains Zone provided they are close to settlements, such as the case for PC8 and 9. In other words, they would need to maintain existing and anticipated landscape character patterns.

- 2.5 Finally with regard to the immediate landscape setting of the plan change sites, the applicant's landscape architect (Mr Ben Espie) has described this in some detail in his evidence. I generally agree with his observations in this regard.

3.0 What constitutes Rural Residential character and amenity?

- 3.1 Based on field observation and literature review, an idea of what constitutes rural residential development becomes evident. In generic terms perhaps the most apt description is as follows⁷;

'Rural residential development refers to land in a rural setting, used and developed for dwellings that are not primarily associated with agriculture. Some agriculture may take place on the land, however, [it will be] ancillary to the use for a dwelling. It is likely to be carried on for 'lifestyle' reasons and is unlikely to provide a significant source of household income. Rural residential land is typically also used for non-agricultural home occupations or for large gardens. These lots are larger than typical residential lots, but are usually too small for agricultural use.'

- 3.2 From the same source lot sizes greater than 4000m² are cited as constituting rural residential site density. Despite the site size, rural residential development is considered primarily a low density residential activity rather than a high density rural activity. Generally rural character and amenity starts to substantially diminish with a site density of less than 4hectares. Rural residential activity is not to be confused with rural lifestyle, which is essentially a rural activity undertaken on lots of no less than 4 hectares. Equally the rural residential zone needs to be distinguished from low density residential living environments (L2 for example) which are located within township boundaries, albeit at the perimeter.

- 3.3 In proposed PC17 rural residential activity is defined⁸ as follows;

The zone [proposed Living 4] is characterized by the presence of generally low density dwellings located on parcels that offer generous open space. Rural residential allotments are substantially larger than those found in the associated townships, but significantly smaller than rural zone lots. Living 4 Zones convey a strong rural character, while recognising that their primary purpose is for living. The location, extent, layout and site density of the Living 4 Zone convey a significant level of rural character and amenity in order to meet the expectation of residents for a semi-rural environment, rather than one that is perceived as a low density living zone.

⁷ Victorian Government 'Rural Residential Development Guidelines' 2006

⁸ SDC PC17 Draft Schedule of District Plan Amendments Attachment 1 'Amendment 3 – Zone Description'

- 3.4 One of the crucial concerns flagged in the above zone description centres on the expectation of residents. It is very important that residents within a rural residential zone are able to appreciate its 'rural flavour'. Without this the adjective 'rural' becomes redundant. With this in mind PC17 observes that the following characteristics need to prevail.

To achieve this anticipated character and amenity, Living 4 Zones are predominantly surrounded by the rural zone.

And goes on to state that;

'...minimum average lot sizes are reasonably large, with the building bulk and location development controls ensuring ample open green space is provided to preserve rural openness. Generally the number of allotments within any given rural residential node is low to avoid more urban characteristics.

- 3.5 To achieve the outcomes identified in PC17 rural residential activity will generally incorporate the following summarised characteristics.

- Lots greater than 5,000m²
- A limited number of lots
- Location proximate to urban centres
- Low site coverage – 10% or 400m², whichever is the lesser
- Setbacks – 20m from road boundaries and 15m from all other boundaries
- Transparent fencing

Other methods are encouraged to facilitate rural residential character and amenity. Principally this includes the avoidance of urban motifs such as;

- Kerb and channel
- Paved footpaths
- Street lighting – although this may be sparingly use at street intersections for example
- Street furniture such as seating and bus shelters
- Fancy subdivision gateways

- 3.6 Overall, it is anticipated that the Rural Residential Zone will be characterised by the presence of generally low density dwellings located in areas of generous green open space. This latter will primarily be provided by surrounding rural land. As discussed, it is expected that dwellings will be located on lots that are substantially larger than those found in the townships, but significantly smaller than rural zone lots. It is important that rural residential zones convey a strong rural 'flavour' while recognising that their primary purpose is for living activity. Consequently residents in the zone will have some appreciation that they live in a distinctly semi-rural environment, rather than one that is perceived as a low density living zone. As a result, the location, extent, layout and site density of rural residential zones needs to convey a significant level of rural character and amenity in order to meet the expectations of residents.

- 3.7 Meeting the expectations of residents is fundamental to how rural residential zoning is designed and implemented. As mentioned, rural residential zones will be primarily surrounded by the rural zone, while maintaining proximity to existing townships and settlements. The reason for this is so that the presence of infrastructure can be sustainably utilized, while advantage can be taken of nearby community facilities. In the development of rural residential zones, strongly developed linkages can therefore be developed, especially where they can take advantage of existing natural and physical features.
- 3.8 To achieve the above outcomes, minimum lot sizes will be reasonably large. Building bulk and location will also be controlled so as to provide ample green open space commensurate with the provision of rural 'flavour' and amenity. Generally the numbers of lots in a rural residential subdivision is not expected to be high, as this can lead to a more urban character. However, the layout of rural residential subdivisions can influence lot numbers and dwelling density. This aspect will be discussed in more detail shortly.
- 3.9 Where it is appropriate, the retention of typically rural features will help reinforce the sense of rural character in the Rural Residential Zone. This may include retaining existing shelter belts or significant tree groups, water races and rural heritage features if they exist. The protection and enhancement of natural features will substantially assist also, that provide significant amenity benefits to residents while enabling ecological and conservation values to establish.
- 3.10 The above then are the generic conditions which I would consider necessary to provide rural residential character and amenity. As alluded, there will be certain contextual circumstances where rural residential outcomes are delivered despite the conditions discussed above. In other words, there will be exceptions to the rule. This might occur where the following variables are present.
- A very low number of sub-standard (<5000m) lots, where the lot numbers are likely to be less than 10 or thereabouts.
 - The layout of lots – linear layouts will generally guarantee rural outlook for all as opposed to compact rectilinear layouts. Diagram 1 illustrates this effect.
 - Concentrating smaller lots on the periphery of Rural Residential Zones with larger interior lots – see Diagram 2.
 - The orientation of public open space – namely road corridors – as a means of providing visual connection to nearby rural environments.
- 3.11 As stressed, the most important outcome is for rural residential residents to appreciate the rural nature of their neighbourhood. They have to harbour some sense that they live in a rural setting, and in large part this is going to be dependent on the provision of at least some rural outlook. This will occur in combination with the aforementioned low building density and avoidance of urban motifs.

- 3.12 Ultimately, the basic test for any rural residential development proposal is going to revolve around one very simple question; *can future residents appreciate that they will live in a rural 'flavoured' setting?* Essentially this is the question to be asked of the PC8 and PC9 proposal, which I address next.

Surrounding rural area

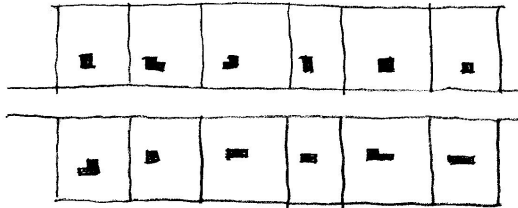
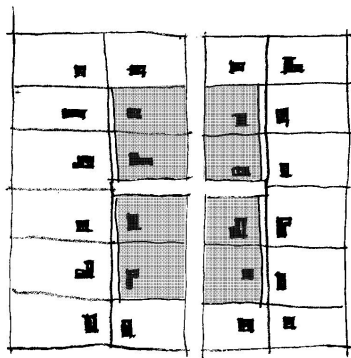


Diagram 1

Linear layout (top diagram) is better able to provide for rural residential outlook than a more compact layout (bottom diagram). Rural outlook for the interior sites is more difficult to achieve for the interior lots shown shaded in the bottom diagram.



Surrounding rural area

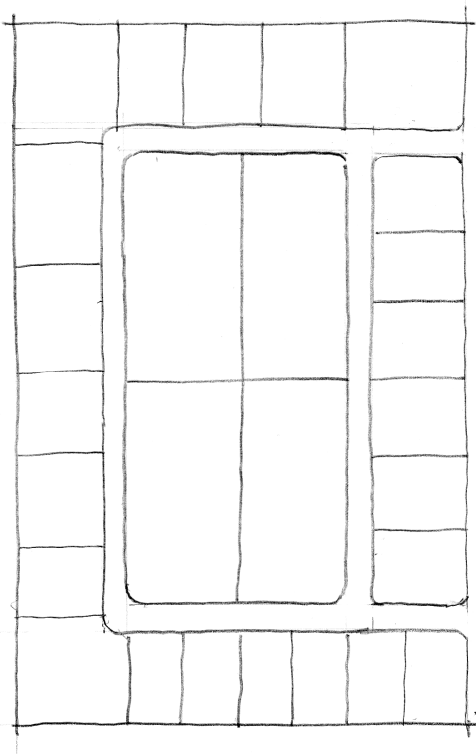


Diagram 2

By having smaller lots on the perimeter and larger in the middle, rural characteristics and amenity is more appreciable throughout the site

4.0 The PC8 and PC9 Proposals

- 4.1 In the Plan Change request landscape outcomes are addressed by Mr Ben Espie (landscape architect) and in the proposed amendments to the District Plan provisions. In the latter a number of rules are proposed that will in their implementation influence the landscape character and amenity of the application sites should they be re-zoned. These will be addressed in more detail shortly.
- 4.2 In his landscape assessment Mr Espie describes the landscape and visual effects that will arise from rezoning, concluding that essentially they will result in rural residential environment. For the most part I agree with his observations and analysis, although with respect to the proposal there are some small differences of opinion which I will address shortly.
- 4.3 In general terms on looking at both ODP's and the proposed rules it is evident that what is proposed will achieve high levels of landscape amenity. This will arise from the following conditions.
 - Land use that will largely be devoted to amenity landscaping although on the larger lots rural production may occur.
 - An average lot size of one dwelling per hectare.
 - A high proportion of green open space in proportion to built form – proposed site coverage for both plan change sites is lesser of 10% or 500m² [proposed rule 'Table C4.1 Site Coverage Allowances']. PC 17 is lesser of 10% or 400m².
 - Generous setbacks.

- The provision of large areas of internal open space (privately owned 'Countryside Area' to be used for rural production⁹) in association with some road corridors.
 - Proposed street tree planting.
 - The provision of a community focal point or reserve.
 - The provision of buffer planting (comprising native plants¹⁰).
 - The provision of rural type fencing (post and wire or post and rail) design and transparency [proposed rule 4.2.3].
 - The absence of urban motifs.¹¹
 - The retention of selected shelter belts and planting of others.
- 4.4 I accept Ben Espie's general observations that the rural character of the application sites will change existing rural character, particularly given that it is currently zoned 'Rural Outer Plains' where the minimum site density is one dwelling per 20ha. I also accept Mr Espie's analysis of effects within the receiving environment.¹²
- 4.5 Mr Espie stresses that the following factors will deliver rural character to future residents.¹³
- The provision of the open space corridors referred to as 'Countryside Areas' which will allow the infiltration of rural elements into each site interior while creating modules of development
 - The provision of large trees including shelter belts which will reinforce the aforesaid modules.
 - The avoidance of urban motifs or design characteristics.
 - Low site coverage and generous setbacks.
 - Sufficient open space within lots to enable some rural activity to occur.
- 4.6 I generally agree that this will be the case, although there are some aspects of the proposal that in my opinion require refinement in order to better deliver the kind of rural residential outcome anticipated by PC17. Or to put it another way, there are some gaps between what PC17 seeks and what is proposed. However, as discussed earlier PC17 is still in an iterative phase and so too through this process are the two plan change proposals.

⁹ Espie para.49

¹⁰ Espie para. 44

¹¹ Espie para. 79-80

¹² Espie: summarised in paras 89-92

¹³ Espie: summarised in paras 93 -96

5.0 Points of difference and recommendations

- 5.1 My chief concern relates to the high number of proposed allotments, particularly in the Holmes Block. Here the density effects are compounded by the 4000m² lot sizes and the compact rectilinear layout of the blocks. As discussed earlier, lots of less than 5000m² could easily be entertained in rural residential developments, provided other favourable factors are present – namely fewer lots overall and a zone layout that is more linear rather than cubic. I do acknowledge however that the ‘Countryside Areas’ that infiltrate the blocks significantly assists in the countering of these effects and therefore better assist the delivery of rural residential character. Nonetheless in my opinion I believe that the collective effects of the large number of lots in combination with the compact block layout can be countered by increasing most sub 5000m² square lots to a minimum size of 5000m² as indicated on the Appendix 10 recommended amended ODP. Not all lots would need to be 5000m², but this would only be workable where they adjoin or are opposite the rural zone or the proposed 4ha lots.
- 5.2 Additionally, I also recommend that the maximum site coverage is set at 400m² bearing in mind that this could be exceeded subject to application of the relevant assessment matters proposed by the applicant and / or those promoted by PC17. By setting these standards there is assurance that the rural residential experience will be unequivocally delivered.
- 5.3 The 5000m² minimum site size amendment would only apply to the lots in the Holmes Block as all the lots in the Skellerup Block are no less than 5000m².
- 5.5 Finally it would be desirable to provide a more robust and enduring boundary alongside the Burnham School Road frontage with respect to the Holmes Block. The reason for this is that it reinforces containment and the sense the block is a discrete rural residential entity. Another advantage is that it future proofs rural outlook should the adjoining rural land succumb to further residential zoning. And lastly it would help overcome reverse sensitivity effects from the adjoining rural land. The Appendix 1 map shows the extent and location of this ‘Countryside Area’.
- 5.4 With these recommended changes I am confident that rural residential outcomes will be achievable in concert with the standards being proposed by the applicant. I will address the proposed standards when considering recommended conditions of consent.
- 5.5 By way of assessing the proposal as a means of identifying potential points of difference, I have listed the following characteristics that should prevail in a rural residential zone. These are based on research and from onsite observations of existing rural residential developments in the Canterbury region, and are as follows.

- *The presence of substantial areas of open space in proportion to built form.*

This will be achieved subject to my recommended changes

- *A sense that the subdivision is located in a rural setting which is achieved through the provision of frequent views into the rural hinterland beyond.*

5.6 This will be achieved where a high degree of reliance is placed on the proposed 'Countryside Area' corridors which will provide rural type outlook for those dwellings located in the site interior. The only location where this will not readily occur from dwellings will be for those that do not directly adjoin the 'Countryside Area' or the adjoining rural zone, or proposed 4ha lots. Mr Espie argues that this will be overcome where residents will still appreciate their rural setting when accessing their properties via views along the road corridors to the rural land beyond, and that this will be facilitated by the linear layout of these. While this is true, relative to the lots facing the 'Countryside Area' or the adjoining rural zone, these interior lots will experience the least sense of rural character. One way to help overcome this is to reduce the site coverage from the proposed lesser of 500m² or 10% to 400m² universally and to have a minimum lot size of 5000m² for houses in such locations.

- *A generally low number of dwellings so as to avoid the collective effects of apparent relative high density.*

5.7 Overall for both blocks the number of lots is higher than what might be expected for a rural residential environment. One reason for keeping lot numbers low is to avoid the collective effects of houses which in my experience take on a suburban appearance despite the low density lot sizes. The photograph below illustrates this effect. However, to counter this, the applicant has effectively divided each block into a series of discrete residential enclaves separated by the 'Countryside Areas'. This has the effect of significantly reducing the collective effects arising from the presence of many dwellings, which in turn is reinforced by setbacks, site coverage and transparent fencing. Internal road corridors also facilitate this effect. So while the number of lots appears large in plan form, from ground level their extent is not going to be fully appreciated. The planting described in proposed standard [4.2.2] will also substantially assist in this regard.

- *Buildings that are well set back from road frontages (15 -20m) so as to provide a high level of green open space.*

5.8 Amendment [27] to Rule 4.9.25 proposes a 15m setback¹⁴ for the proposed L3 zone at Rolleston. This will achieve the desired outcomes that the setback rule seeks, namely the abundance of open space along road frontages. From on site observation of existing rural residential areas this I consider to be one of the key means of delivering the open space character necessary to achieving expected outcomes. However it is important that this takes place in the presence of other measures, namely transparent fencing which enables the flow of open space.

- *Relatively low site coverage – no more than 5% or 400m² – whichever is the lesser.*

5.9 The applicant's propose 500m² which is too high in my opinion. However, I acknowledge that there may be circumstances where this level of site coverage may achieve anticipated results, but these will be entirely circumstantial. So on that basis I

¹⁴ Except on corner sites one frontage can be 10m and internal boundary setbacks are 5m

prefer that the 400m² standard be applied where it is understood that anything in excess of that is subject to the necessary assessment or discretionary matters.

- *A minimum site density of 1 dwelling per 5000m²*

5.10 This density can be quite variable and will depend on other factors such as the number and orientation of lots, the availability of rural outlook, along with the configuration or proportions of subdivision layout. In this case there is limited opportunity to accommodate some sub 5000m² lots subject to the above variables, which in turn are reflected in my recommended conditions.

- *The lack of urban motifs such as paling fences, kerb and channel, fancy street furniture etc.*

5.12 For the most part the applicant proposes to avoid the above identified urban motifs. This would include avoiding the level of street lighting found in urban settings, since a characteristic of rural areas is quite high darkness at night. To achieve this, my recommendation would be to locate street lighting at intersections only for landscape amenity purposes; although I appreciate that there may be other matters to consider in this regard.

- *Transparent fences – especially within front yard (street frontage) setbacks.*

5.13 Standards are proposed that will result in the transparent fences which are considered necessary to achieve rural residential character and amenity.

- *The presence of large scale tree planting – that larger lot sizes will allow without unduly affecting neighbours.*

5.14 The applicant proposes standards ensuring tree planting is carried out within the road setbacks to a distance of at least 15m. It has also been my observation that residents will plant large trees in any case since they have sufficient land to do so. Further tree planting is also proposed for the road corridors in addition to the retention and planting of shelter belts. Consequently I am confident that sufficient tree planting will occur at a scale expected in a rural residential subdivision.

- *The provision of key views through the orientation or alignment of roads.*

5.15 This will be achieved because the road layout in both ODPs is linear and based on a grid pattern. Further the 'Countryside Areas' are also oriented in the same way and further terminate in rural areas, thereby providing views to them.

- *Some degree of separation from existing settlements so as to engender a sense of a discrete rural residential community.*

- 5.16 The Holmes Block lies opposite the L2 zone at Rolleston while the Skellerup Block does so in part – for about half its Dunns Crossing Road frontage. The other half is opposite the Rural Inner Plains zone. The L2 minimum lot size for Rolleston is 5000m² – about the same as that for the proposed Plan Change 8 and 9 sites. So in site density terms alone there will be little to distinguish the two adjoining zones. On this matter I note that the Selwyn District Plan has this to say about the character of Living 2 zones:

Density in Living 2 Zones is kept low thus reflecting the rural character by maintaining a sense of open space, panoramic views and rural outlook.¹⁵

And...

For low density Living 2 Zones, the careful consideration and application of design treatment to such matters as road formation, kerbs, letterboxes, power supply, entry treatment, fencing, landscaping, lighting and the like will ensure the retention of open, spacious rural character.¹⁶

These District Plan descriptions do prompt the question of; what is the difference between the PC8 and 9 proposals and the Living 2 zone?

It appears to me the difference is that the Plan Change sites will display characteristics which are distinctive as referred to in the above discussion leading to a rural residential flavour that is not otherwise provided for in the L2 zone.

- 5.17 Reinforcing a degree of separation between the existing Rolleston Living zones will also be the provision of a 'Countryside Area' alongside the Dunns Crossing Road frontage. It is also apparent from the ODPs that this separation will be further strengthened by the provision of 'rural buffer planting' for the Skellerup Block and shelter belt planting for the Holmes Block. The Skellerup block also has 4ha sites fronting over half of its boundary with the L2 land.
- 5.18 Overall therefore, both blocks will maintain a reasonably high level of separation from Rolleston Township aided by the foregoing factors and the low density L2 zone.
- *Integration with nearby settlements.*
- 5.19 In landscape terms integration concerns the high amenity connectivity with the surrounding environment. At best it capitalises on natural and physical opportunities to provide this and usually involves the sharing of common space. For example this may include the mixing of stormwater management with pedestrian and vehicle routes.
- 5.20 The proposals do allow for some degree of connectivity in this regard, but linkages to Rolleston to date are entirely reliant on existing roads. Public walkways are shown on the ODPs to follow Dunns Crossing Road but I am uncertain whether this is to be implemented as part of site development and whether they are within the legal road

¹⁵ SDP Township Volume Part B Growth of Townships – Residential Density Strategy

¹⁶ SDP Township Volume Part B Growth of Townships – Explanation and Reasons

or 'Countryside Areas'. A proposed amendment [49(f)] in the form of a discretionary matter suggests that this should be within the Countryside Area. Overall integration with Rolleston is presently limited in landscape terms although future development in the L2 zone may open up opportunities.

- *Retention, where appropriate, of characteristically rural features such as shelter belts and tree copses. Possibly too, historic or typical farm buildings.*

- 5.21 The ODPs indicate that shelter belts will be present as will tree copses within the road reserves. It is not clear from the ODPs which shelter belts are those being retained or intended to be planted. In any event the sites will display these features which typify rural Canterbury. In this regard I agree with Mr Espie when he states;

The Countryside Area and shelterbelt vegetation will mean that a rural productive character is particularly evident and, in the long term, visual evidence of residential land use will be subservient to this. [52]

- 5.22 As far as I am aware there are no other features on the plan change sites that would merit retention such as water races and historic farm buildings.
- 5.23 In summary, it would appear that the proposed plan changes will achieve the kind of outcomes expected for rural residential living, subject to some further amendment and refinement of some provisions.

6.0 Proposed District Plan Amendments

- 6.1 A number of amendments affect landscape character and amenity outcomes. Most will deliver desirable character and amenity outcomes, but some merit further consideration. These largely concern proposed standards where I have selected those of concern as follows.

Amendment 21 Insert new Rules 4.2.2, 4.2.3 & 4.2.4 for Buildings and Landscaping (Page C4-001 & 002) as follows:

For the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37 the following shall apply:

4.2.2 Any principal building shall be a permitted activity if:

i) The area between all road boundaries (other than with State Highway 1) and a line parallel to and 15m back from the road boundary is landscaped with shrubs and specimen trees covering as a minimum the lesser of 30% of the area or 250m²; and

ii) The number of specimen trees in this area is not less than 1 per 10m of road frontage or part thereof; and

iii) The trees are selected from the list below planted at a grade of not less than Pb95; and

iv) Shrubs are planted at 'aa' grade of not less than Pb3 and a spacing of not less than 1 per square metre, typically located within a garden area dressed with bark chips or similar material; and

v) Any paved surface area within the area does not exceed 100m² in area.

***vi) The list of suitable specimen trees for the purpose of this rule is:
Maple, Silk Tree, Alder, Birch, River She Oak, Leyland Cypress,***

Monterey Cypress, Lacebark, American sweet gum, Magnolia, Pohutukawa, weeping Kowhai, Common Olive, Pine, Lemonwood, Kohuhu, Ribbonwood, Plane, Totara, Poplar, Oak, Elm, Michelia

vii) The Council will require a planting plan to be submitted at building consent stage, prepared by a suitably qualified landscape professional, identifying compliance with the above control.

viii) The landscaping shall be maintained and if dead, diseased or damaged, shall be removed and replaced.

Note: Rule 4.2.2 shall not apply to allotments of 4ha or greater in the Living 3 Zone identified on the Outline Development Plan in Appendix 37.

6.2 The rule above sets out in considerable detail landscaping requirements for road boundary setbacks. I think this rule will be very difficult for the Council to administer not only due to its complexity, but also because to implement it effectively it would need to be applied in an enduring manner. This would entail regular monitoring to not only ensure planting is carried out at site development, but that it remains so in perpetuity.

6.3 In my observation and experience people will naturally landscape road frontages in rural residential zones. I would therefore be confident that this will happen in the absence of such a rule, although assured outcomes are desirable in this case given the numbers of lots and the relatively small size of many. I do agree though that there is scope to control the location and extent of the area to be landscaped. Such a rule might read, or near equivalent, as follows:

That apart from one vehicle crossing and access not exceeding 5 metres in width all land within 15 metres of a road frontage, excepting State Highway 1, will be devoted to landscaping; including the provision of one specimen tree capable of growing to at least 8 metres high being planted for every ten metres of frontage and to be spaced at no less than 5 metres and no greater than 15 metres.

6.4 I would not include in the Plan recommended tree species although it might be desirable to alert people via an appendix to the District Plan listing undesirable species, as does the Christchurch City Plan. Some trees create a nuisance such as poplars whose root systems are inclined to invade underground services and disturb paving. Birches which are listed as recommended species contain known allergens and their planting should not be encouraged.

6.5 In summary landscaping rules should be kept to a minimum in living zones, especially where amenity land use is likely to occur in any case. However, it is reasonably common for the vendor or body corporate to impose landscaping conditions by way of covenants on land owners with a view to achieving particular landscape outcomes. Often these include building design controls. The overall aim is to achieve consistently high design standards throughout the subdivision. But such conditions would and should be in addition to Plan standards.

- 6.6 Minor changes are suggested in the discretionary matter below as shown – underlined.

Amendment 49 Insert new matter over which Council has restricted the exercise of its discretion at Clause

12.1.4.78 (Page C12-023) as follows:

In relation to the Countryside Area Management Plan required for the Living 3 Zone west of Dunns Crossing Road, Rolleston as shown in Appendix 37:

(a) The adequacy of the management plan to achieve open space and/or rural character across the Countryside Area(s) in a manner that is compatible with the surrounding rural residential environment;

(b) The adequacy of proposed mechanisms to maintain and manage the Countryside Area(s) long term in a consistent manner;

(c) Whether rural landscape, visual and amenity value characteristics of the Countryside Areas are able to be maintained;

(d) The extent to which potential adverse nuisance effects on occupiers of adjacent rural residential allotments will be internalised within the Countryside Areas;

(e) The extent to which adverse effects of plant pests and fire hazard risks will be avoided or remedied; and

(f) The suitability of proposed access within the Countryside Area(s) along Dunns Crossing Road.

Amendment 2 Insert Living 3 Zone and description into Table A4.4 – Description of Township Zones (page A4-011) as follows:

Zone Description

Living 3 As for Living 2 Zone, but with specific controls and design elements incorporated to ensure development of the land is reflective of and retains elements of rural character expected of the Living 3 zone, which in essence is a rural residential zone, so as to visually set the development apart from the neighbouring Living 2 urban area. ~~Similar to the Living 2 zone, larger sections (with a lower building density than Living 2), more space between dwellings, panoramic views and rural outlook are characteristic of the Living 3 Zone.~~

- 6.7 The reason for deleting the above sentence is that the Rolleston L2 zone sections at 5000m² are the same size as most of those proposed in the PC 8 and 9 blocks, so essentially there is no difference in building density.

- 6.8 Apart from the above no further changes are recommended.

7.0 Submissions

- 7.1 In reading the summary of submissions it is apparent that the salient landscape character concern focuses on site density where the one dwelling per hectare is

sought, largely to align with the density promoted by PC1. I am satisfied that rural residential character and amenity is achievable on lot sizes of less than one hectare provided certain conditions prevail. For the most part these will prevail with respect to the plan change sites subject to the conditions I recommend, as listed next.

8.0 Conclusion

8.1 The essential 'test' in the consideration of proposed rural residential zoning is whether it will meet the expectations of future residents. These people have to be able to appreciate that they do indeed live in a residential area that conveys a significant degree of rural character or 'flavour'. And that this has to be available to all residents. It is important therefore that the zone does not convey the sense that it is little more than a low density suburb, such as what might occur in the Living 2 zone or if rural residential areas become too large, with central lots detached and remote from much larger rural landholdings. While low density is a critical component of a rural residential zone, other conditions have to be present for it to embody rural characteristics. In summary these include;

- Rural outlook or its near equivalent
- The absence of typically urban motifs including 'fancy' street furniture
- Open space transparency – open fences
- A low proportion of built form to open space
- Prosaic road grid layout
- Bold and simple landscape elements – eg tree plantings
- Generous setbacks, especially from road frontages
- Discernable separation from urban centres or settlements
- Generally low number or allotments

8.2 Apart from the need to refine some aspects of them, the PC8 and 9 proposals generally meet all of these pre-conditions. The greatest departure from the above criteria concerns the number of allotments overall. I am aware that residents in rural residential communities prefer them to be relatively small although the threshold is not easy to pinpoint. This is largely because each zone and its design will present unique conditions that may affect the perception of size. In this case the problem of size is mostly addressed via the introduction of reasonably generous open space corridors that infiltrate each block – the 'Countryside Areas'. The effect is to create enclaves that are sufficiently separated so as to reduce the apparent overall scale of the entire zone. I consider these to be the features that redeem the proposals; the ones that tip the balance in terms of delivering rural residential character and amenity.

8.3 Another consideration revolves on the question of; how will residents (and visitors) perceive the overall scale of the zone? At ground level as opposed to a plan view, it is my observation that higher densities where there are many adjoining lots of less than 5000m² results in the domination of housing. There is a danger that this will occur for some parts of the proposal, hence my recommendation that the size of a number of lots is increased as identified on my Appendix 1 plan. Above that and with

all other conditions in place it is also my observation that it is very difficult to discern the full extent of a rural residential zone from any one vantage point. This is particularly the case on flat topography where panoramic views are precluded by intervening vegetation and buildings. For most of the proposed PC8 and 9 zones this will be the case, especially more so as vegetation matures and increasingly dominates the landscape.

- 8.4 Finally, I conclude that the proposed PC8 and 9 zones will largely deliver its future residents an environment that conveys rural residential character. However, in order to provide higher levels of certainty that this will in fact occur, I then make the following recommended amendments.

9.0 Recommended Amendments

The following are recommended with a view to providing a high level of assurance that rural residential results are achieved.

1. That the lots identified on the attached Appendix 1 plan are increased to a minimum size of 5000m².
2. That street lighting is located at intersections only (subject to meeting District Plan subdivision standards)
3. That the proposed plan provisions are amended as discussed above.

Andrew Craig *Registered Landscape Architect*

April 2011

References

Department of Sustainability and Environment (Government of Victoria, Australia) *Rural Residential Development Guidelines*, 2002

Ministry for the Environment *The impact of rural subdivision and development on landscape values*, 2000

Selwyn District Council *The Selwyn District Plan*

Plan Change 8 & 9

SELWYN PLANTATION BOARD PRIVATE PLAN CHANGE REQUEST

Technical Report on Urban Design

Prepared for

Selwyn District Council

by

Boffa Miskell Limited

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1.0 INTRODUCTION

1. Boffa Miskell Ltd has been engaged by Selwyn District Council (SDC) to prepare a Technical Report on Urban Design responding to proposed private Plan Changes 8 and 9 (PC8 and 9) to the operative Selwyn District Plan (SDP). This will be appended to the Section 42a (s42a) Report of Mr Cleese alongside other technical reports.
2. My full name is Timothy John Church. I am employed as a Principal/ Urban Designer with Boffa Miskell Ltd, an environmental consultancy specialising in planning, design and ecology. Boffa Miskell is an original signatory to the New Zealand Urban Design Protocol (Protocol) in March 2005¹.
3. I hold the qualifications of a Master of Urban Design from University of Sydney and a Bachelor of Landscape Architecture (with honours) from Lincoln University. I am a member of both the Christchurch Urban Design Panel and New Zealand Urban Design Forum.
4. I have practised as an Urban Designer for the past nine years and Landscape Architect for the previous four years. Prior to joining Boffa Miskell in January 2006, I was an Associate Urban Designer at Levitt Bernstein, a London-based architectural practice.
5. My work at Boffa Miskell has recently included technical reports and council hearing evidence on urban design for Plan Change 10: Improving the Amenity in the High Density Zones (on behalf of QLDC); Plan Change 27: Intensification of Central New Brighton (on behalf of CCC); and Plan Change 29: Business 4 and Retail Park Zones Height and Setback (on behalf of CCC). All these plan changes have now become operative. I have just completed the hearing for Proposed PC53 aimed at improving the amenity of the Living 3 (L3) and Living 4 (L4) zones in Central Christchurch, on behalf of the CCC.
6. I have also been involved with the preparation of the Rolleston Structure Plan and have carried out preliminary urban design work relating to the Rolleston Town Centre and Breach Block land, adjacent to Selwyn District Council's headquarters.
7. The applications for PC8 and 9 have been lodged by Selwyn Plantation Board Limited (Applicant). They were notified on 14 August 2010 with submissions closing on 24 September 2010 (extended due to the Darfield Earthquake). A summary of submissions and a call for further submissions were notified on 10 November 2010. Further submissions closed on 25 November 2010. A total of 33 submissions were received, all of which were in opposition. Some amendments have been made by the Applicant in response to submissions and these latest amendments, circulated on 18th February, have been considered in this report.

¹ The Urban Design Protocol is a non-statutory document administered by the Ministry for the Environment. A wide range of public and private sector stakeholders nationwide have made a voluntary commitment to undertake initiatives to deliver quality urban design. It identifies seven essential design qualities that together create quality urban design, including: Context, Character, Choice, Connections, Creativity, Custodianship and Collaboration. These are referred to as the '7C's'.

8. PC8 and 9 relate to two separate rural blocks and currently seek the following:
- Holmes Block: PC8 proposes to rezone approximately 92ha of existing rural zoned land (Outer Plains) to a new Living 3 zone for 97 rural residential 'Regular Lots' with an average density of one household per 5020m² and five 4ha 'Large Lots'. The property is located on the western outskirts of Rolleston west of the PC1 Urban Limit and directly adjacent to the State Highway.
 - Skellerup Block: PC9 proposes to rezone approximately 72ha of existing rural zoned land (Outer Plains) to a new Living 3 zone for 68 rural residential 'Regular Lots' with an average density of one household per 5157m² and five 4ha 'Large Lots'. The property is located on the southern outskirts of Rolleston to south of the PC1 urban limit.
9. The combined number of rural residential allotments totals 176 with PC8 being proposed for development over the next five years with PC 9 proposed not to be released until 2016.
10. The amendments and additions proposed to the District Plan are described in detail in the application and associated amendments and are summarised within Mr Clease's s42a planning report. An Outline Development Plan (ODP) has been provided by the Applicant for each plan change.
11. I have carried out my own assessment of these private plan change requests and have drawn my own conclusions in regard to PC 8 and 9. I have visited both the Holmes Block (PC8) and Skellerup Block (PC9) on 7th March 2011.
12. This technical report is divided into five sections:
- Scope
 - Strategic Context
 - Site Context
 - Discussion of Urban Design Issues
 - Summary of Recommendations

2.0 SCOPE

13. The technical report reviews proposed PC8 and 9 from an urban design perspective and informs the overall S42a report being prepared by Mr Clease.
14. In preparing my report I have been asked by Selwyn District Council and Mr Clease, the Reporting Officer, to include the following:
- Assess the strategic context of the plan changes, with a focus primarily on the urban design aspects of Proposed Change 1 to the Canterbury Regional Policy Statement and the Rolleston Structure Plan.

- Consider the position taken by Selwyn District Council through its Rural Residential Background Report and Plan Change 17;
 - Peer review of the plan change applications, the urban design issues contained within the applicant's landscape and visual assessment and the urban design outcomes within each request, including the related provisions being promulgated in the plan change to avoid any adverse effects associated with the rezoning and future development of the land;
 - Provide an overall recommendation on the appropriateness of the methodologies used to formulate PC8 and 9 in relation to the design and function of the rural residential nodes and the impact of these on the environment; and
 - Assess the submissions received on PC8 and 9, particularly those that relate to urban design outcomes.
15. While the documentation for PC8 and 9 provides landscape reports prepared by Mr Espie, there has been no specific urban design report presented by the Applicant at the time of writing. As such, I have responded to the proposed plan change based on the information presented and without any technical explanation of their urban design rationale.
16. I have attempted to differentiate between Homes and Skellerup Blocks and their respective plan changes where possible. However, the matters I address are often equally valid for both blocks.

3.0 SITE CONTEXT

17. The Holmes and Skellerup Blocks are located on the south-western side of the existing town of Rolleston.
18. Rolleston is located approximately 23km southwest of Christchurch's central city along State Highway 1. It is the largest town in Selwyn District. The town centre and residential parts of the town are located south of the State Highway and Main South Railway Line corridor through the town with the growing Izone Business Hub directly to the north.
19. The older parts of the town are formed around a grid street pattern integrated with rural roads that radiate out from State Highway 1, two of which connect with Lincoln. More recently a town centre has re-established on Rolleston Drive, just outside the original grid, with a number of 'loop road and lollypop' residential subdivisions surrounding it. Beyond this first layer of suburban subdivisions, other similar subdivisions remain isolated in a fragmented mix of undeveloped urban zoned land and larger rural residential allotments of varying size. This latter pattern of development extends out from the centre of the town in a mainly south and western direction to meet Dunns Crossing and Goulds Roads. Only one Living 2 subdivision extends beyond Dunns Crossing Road between Burnham School and Brookside Roads. Other edges of the town are less distinct and directly abut the rural land that surrounds the town.

20. The Holmes and Skellerup Blocks share the western side of Rolleston with The Pines Wastewater Treatment Plant (Pines WWTP) and The Pines Resource Recovery Park (Pines RRP), both situated along Burnham School Road, and Tegal Foods Limited's intensive poultry farming sheds, adjacent to the northern boundary of the Skellerup Block along Dunns Crossing Road. Rolleston Prison is located directly across State Highway 1 to the north with Burnham Military Camp, some 4km further down the highway, is also on its northern side.
21. A number of strategic documents, primarily the Rolleston Structure Plan and Plan Change 7, guide the future site context and these are outlined below².

4.0 STRATEGIC CONTEXT

22. This section identifies the strategic context from an urban design perspective, including an overview of the following:
- Resource Management Act
 - Canterbury Regional Policy Statement – Proposed Change 1
 - Rolleston Structure Plan
 - Selwyn District Plan
 - Plan Change 7
 - Rural Residential Background Document
 - Plan Change 17

4.1 Resource Management Act

23. The purpose of the Resource Management Act (1991) (RMA) set out in Part 2 is 'to promote the sustainable management of natural and physical resources' (Section 5(1)). The Act adopts an enabling approach, but is concerned with how these resources are managed and the way in which proposals set about 'avoiding, remedying or mitigating any adverse effects of activities on the environment' (Section 5(2) (c)).
24. Other matters I consider relevant to urban design, to which particular regard must be given, are set out in Section 7:

'The efficient use and development of natural and physical resources (Section 7(b));

The efficiency of the end use of energy (Section 7(ba));

'The maintenance and enhancement of amenity values (Section 7(c));' and

² Rolleston Structure Plan – Rolleston Structure Plan (fig. 5.2, p44)

*'The maintenance and enhancement of the quality of the environment.
(Section 7(f)).'*

25. In terms of understanding the potential amenity effects arising from the plan change requests, the RMA defines amenity values as:

'Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.'

4.2 Canterbury Regional Policy Statement – Proposed Change 1

26. The Proposed Change 1 (Development of Greater Christchurch) to the Canterbury Regional Policy Statement (RPS-PC1) outlines the proposed objectives and policies to manage growth across the Greater Christchurch sub-region in a sustainable and consistent way. Along with its predecessor, the Greater Christchurch Urban Development Strategy, both seek to manage growth throughout the Selwyn, Waimakariri Districts and Christchurch City over the next 35 years.
27. Environment Canterbury (ECan) publicly notified RPS-PC1 in July 2007, with four further Variations being notified in August 2008. It has since gone through a hearing with the subsequent Council Decisions on Submissions and Further Submissions being notified in December 2009. While many aspects of this decision are currently under appeal to the Environment Court, which is currently on hold due to the Canterbury earthquakes, it is my understanding that Council hearings will still need to have regard for it.
28. RPS-PC1 provides a strong signal for the locations of future growth in Greater Christchurch by proposing urban limits for greenfield development, Intensification Areas and Key Activity Centres (KAC) to promote consolidated and integrated urban development in Greater Christchurch. It also directs territorial authorities to carry out a number of plan changes and other such methods in the future to better align their existing District Plan provisions. To this end, SDC has prepared the Rolleston Structure Plan, Plan Change 7, Rural Residential Background Document and various design guidance documents.
29. In terms of the current position on rural residential development, the Commissioners' recommendations were inconclusive and directed the territorial authorities, including SDC, to determine the level of provision and particular locations through a subsequent review process. However, they did note the need for a coordinated approach:
- 'In our view the longterm aim should be to ensure that those [rural residential] areas are specifically zoned by the territorial authorities, rather than being randomly selected by developers and advanced as private plan change requests.'* (para 341)
30. The commissioners' also signalled the importance of linking rural residential with those towns that are identified as KACs in of their decision (para 844). This related specifically Prebbleton, identifying, amongst other issues, that it was not suited to further rural residential development due to it not being a KAC.

31. In reference to the provisions for urban development around Rolleston, the Commissioners recognise that there is already considerable business and greenfield residential land provided for under RPS-PC1:

'The Business land provision section of this decision has already made findings in respect of the approval of significant extra areas of Business land to the west of State Highway One.

So far as residential land to the east of the State Highway is concerned, Variation 1 proposed a very significant addition to the Urban Limits extending from Dunns Crossing Road to the south...

An unusually large number of ODP areas eventuated from that very significant provision of 5,375 households...' (paras 847-849)

32. The commissioners' referred to evidence suggesting three types of rural residential considered to be in demand and their particular qualities, with the latter two being most in demand:

'(i) The demand for larger allotments enabling the running of a number of animals and/or potentially economic intensive horticultural operations requiring something in the order of 4 hectares, or no less than that.

(ii) Secondly, the demand for allotments capable of running a few animals only, and/or an extended garden/orchard area, and ranging anywhere from say 5,000 square metres to 2 hectares.

(iii) Thirdly, what could for lack of a better term be called 'larger lot' lifestyle allotments ranging anywhere from 2,000 square metres to say 1 hectare.' (para 330)

33. However, it is noteworthy that the density definition did change following the decision and this has increased the average allotment size from 0.5Ha to 1Ha:

'Rural Residential Activities: Residential units outside the Urban Limits at an average density of no less than one per hectare.'

34. Given the context of the Commissioners discussion, I have identified below the relevant parts of RPS-PC1 as notified.

35. Objective 1 'Urban Consolidation', provides for both the consolidated growth within towns and a limitation on the amount of rural residential outside their urban limits.

'Urban Development in Greater Christchurch shall be managed to achieve consolidation of existing urban areas, to avoid unsustainable expansion outside existing urban areas and to bring about:

...

(e) A move towards sustainable and self-sufficient growth of the towns of Rangiora, Kaiapoi, Woodend, Lincoln, Rolleston and consolidation of the existing settlement of Prebbleton;

(f) Growth in rural-residential development to equate to no more than 5% of the planned growth of households within urban areas.'

36. Although the 5% figure in clause (f) has been found by the commissioners' to be inconsistent with other allocated numbers contained in Policy 6, described below, the direction of RPS-PC1 to limit rural residential is clear. In allowing some rural residential growth, the explanation under the Objective 1 focuses on providing choice:

'Rural residential development is provided for to a limited extent in recognition of the desirability of providing a range of choice in housing types without compromising the overall intent of consolidation in this Regional Policy Statement.'

37. Policy 6 'Integration of Urban Form, and Infrastructure and Sequencing within Identified Urban Limits' allocates a total of 600 rural residential allotments to Selwyn District and spreads these evenly over three periods of household growth up to and between 2017, 2026 and 2041. Proposed PC 8 and 9 request almost one third of this allocation.

38. Policy 14 'Rural Residential Development', clause (iv), guides territorial authorities as to appropriate locations of any proposed rural residential development. It identifies two relevant sub-clauses that in my opinion should be considered in relation to urban design:

- support existing or upgraded community infrastructure...*

- where adjacent to or in close proximity to an existing urban or rural residential area, be able to be integrated into or consolidated with the existing settlement'*

39. In further clauses, the RPS-PC1 emphasises the requirement for an integrated design and maintenance of rural character through the ODP and imposes a restriction on further subdivision to smaller, more urban lots:

(v) An Outline Development Plan is prepared which sets out an integrated design for subdivision and land use, and provides for the long-term maintenance of rural residential character.

(vi) A Rural Residential development area shall not be regarded as in transition to full urban development.

40. The reasons given for providing for a restricted allocation of rural residential allotments and reducing the size to below that of a typical 'lifestyle block' is given in the explanation to Policy 14 below:

'Provision for rural residential development enables a choice of living environments and provides a rural living environment which is more space conserving than the four hectare minima of most rural zones within Greater Christchurch. Rural residential development can have significant effects disproportionate to the numbers of households living within this form of development, and more than limited provision would undermine Objective 1 and Policies 1[urban limits] and 2 [intensification].'

4.3 Rolleston Structure Plan

41. Rolleston is predicted to grow from its current population of approximately 7,000 to 20,000 people by 2041 and could reach 50,000 by 2075. The Rolleston Structure Plan, adopted by Councillors in September 2009, provides a cohesive approach to accommodate this significant population growth. It was prepared in part to deliver the Greater Christchurch Urban Development Strategy and RPS-PC1.
42. The Structure Plan incorporates the entire town within a defined Metropolitan Urban Limit (MUL), set through the RPS-PC1 process, and does not just focus on the newer areas allocated for residential and business growth, 'The Structure Plan's purpose is to consider how existing and future development in Rolleston should be integrated in order to ensure that sustainable development occurs and makes best use of natural resources.'(p 6)
43. An overarching vision statement indicates the anticipated outcomes from the implementation of structure plan over the long term. Three key objectives have then guided the Structure Plan proposals, centred on sustainability, good design and realistic aims. Under these a number of principles were developed to provide points of departure for the Structure Plan and future development proposals, including subsequent Outline Development Plans. It was anticipated that these principles would also set the basis for assessing each individual response to the overall Structure Plan proposals.
44. The actual Structure Plan figure was an integration of a number of layers³. The remaining content of the structure plan was divided up into four sections explaining these layers that included the 'Centre Strategy', 'Land Use Patterns and Community Facilities', 'Movement Network' and 'Infrastructure'. At the end of each section an 'Action Plan' and a 'Checklist', against all three key objectives, were prepared. In addition, two further figures were presented identifying the proposed 'Key Neighbourhoods of Rolleston'⁴ and 'Staging of Greenfield Residential Development'⁵, over three time periods short (2016), medium (2041) and long term (2075).
45. The structure plan follows a centres-based approach. It establishes a hierarchy of centres based on the existing Rolleston Town Centre and supported by outlying Neighbourhood and Local Centres. Higher density residential densities surround these centres with major routes connecting between them to facilitate more sustainable transport options.
46. Four major developments were proposed, including 'A refocused town centre', 'A new Recreation Precinct', 'A new 100 hectare Regional/District Park' and 'A mix of housing in Rolleston'.
47. Although the structure plan relates primarily to the area within the MUL, the wider context of Rolleston remains highly important. The inclusion of the 100 ha Regional/District Park, outside the MUL, is just one example of the close, 'symbiotic' relationship that the town needs to have with its rural and peri-urban hinterland to

³ Rolleston Structure Plan – Rolleston Structure Plan (fig 5.2, p44)

⁴ Rolleston Structure Plan – Key Neighbourhoods of Rolleston (fig 5.3, p46)

⁵ Rolleston Structure Plan – Staging of Greenfield Residential Development (fig 5.4, p48)

sustainably manage its growth. There are a range of others and particular references relevant to PC8 and 9 are provided below as part of the 'Discussion of Urban Design Issues'.

4.4 Selwyn District Plan

48. The Selwyn District Plan (SDP) is split into a Township Volume and Rural Volume. Both are relevant when considering rural residential activities in the District, particularly if proposed adjacent to existing townships such as Rolleston. The Township Volume prescribes the objectives, policies and rules to sustainably manage the living and business zones of the District. The Rural Volume of the District Plan incorporates provisions to manage rural land in the District, which include the Rural Inner and Outer Plain Zones.
49. The current zoning of the Holmes and Skellerup Blocks is Rural Outer Plains Zone with a minimum density ratio of one dwelling per 20ha. The Holmes Block is adjacent to a Living 2 Zone, providing for allotments up to 5000m² in size, and the Skellerup Block adjacent to a Living 2A Zone, providing for allotments up to 10 000m² in size. Both these Living Zones are primarily located on the eastern side of Dunns Crossing Road.
50. In the Rural Volume, Policy B4.1.1 discourages residential densities greater than what are prescribed in the District Plan to preserve rural amenity and avoid reverse sensitivity effects. However, an exception is made to these minimum residential densities under Policy B4.1.2, where a dwelling is able to be constructed on any sized allotment for all rural zones, except the Rural Inner Plains Zone, if the following are met:
- Any balance land needed to comply with the minimum density ratio is protected from further development by way of covenant;
 - The clustering of dwellings is minimised to avoid creating new villages or settlements;
 - An appropriate balance of land adjoining the house allotment is of a shape and size to maintain a sense of 'open space'; and
 - The allotment is of an appropriate size and shape to avoid adverse effects on adjoining properties, the road network or potential reverse sensitivity effects.
51. Given the close relationship of the Holmes and Skellerup Blocks to Rolleston township, I consider the following SDP objectives and policies are relevant:
- Objective B4.3.1 facilitates the expansion of townships where it does not adversely affect: (a) Natural or physical resources; (b) Established activities; (c) Amenity values of the township or rural area; or (d) Sites with special ecological, cultural, heritage or landscape values.
 - Objective B4.3.2 promotes new residential development that adjoins existing townships at compatible densities, or at lower densities around townships to achieve a compact township shape. Residential growth is anticipated to align with the preferred growth direction for the townships and to demonstrate consistency with the other related provisions in the District Plan.

- Policy B4.3.2 requires any land that is rezoned for new residential development to adjoin an existing living zone within a township. An exemption is provided for low density living environments, where they need not adjoin a boundary provided they are located in a manner that achieves a compact township shape.
 - Policy B4.3.5 encourages townships to expand in a compact shape and lists the benefits that can be achieved by consolidating urban development.
 - Policy B4.1.3 caters for the development of low-density lifestyle living activities in locations either within, or around the edge of, townships where they achieve the following:
 - Achieves a compact township shape;
 - Consistency with preferred growth options for townships;
 - Maintains the distinction between rural areas and townships;
 - Maintains a separation between townships and Christchurch City boundary;
 - Avoids the coalescence of townships with each other;
 - Reduces the exposure to reverse sensitivity effects;
 - Maintains the sustainability of the land, soil and water resource; and
 - Efficient and cost-effective provision and operation of infrastructure.
52. There are a number of other objectives and policies in the District Plan relating to physical resources that are of relevance to rural residential development. These include the need to ensure that the following are provided:
- Appropriate infrastructure;
 - Safe and efficient road network;
 - Access to safe and attractive pedestrian and cycle links;
 - Conflict with established strategic infrastructure is avoided;
 - Availability of utility services; and
 - Residents are provided access to suitable community facilities and reserves.
53. Plan Change 8 and 9 propose a new Living 3 Zone, which is closely related to the existing Living 2 Zone. In the Township Volume, Living 2 Zones are described as having a lower ratio of built forms to open space and development traits that are reflective of the rural character expected of low density living environments. Living 2 Zones are made up of larger sections that provide:

- More space between dwellings;
- Panoramic views; and
- Rural outlook.

4.5 Plan Change 7

54. Plan Change 7 (PC7) rezones land identified in RPS-PC1 and the Lincoln and Rolleston Structure Plans to provide for the future urban growth of both townships. It provides for coordinated urban growth management through community or council-led planning approach with less reliance is placed on developer-led private plan changes. PC 7 was approved for public notification by Council on 24 February 2010 and a Council Hearing is scheduled for early May.
55. The plan change supports the consolidation of townships while achieving good urban design outcomes. It rezones approximately 585 ha of land in Lincoln and Rolleston to a new “Living Z” or “Living Z Deferred” zone for residential development. It requires Outline Development Plans (ODP) before development can occur with criteria that will need to be addressed within the ODP to support the implementation of the key aspects of both Structure Plans. Staging requirements are incorporated to meet Stage 1 (2007-2020) and Stage 2 (2021-2041) of RPS-PC1.
56. ODP1, or the ‘Stonebrook’ development, is in the first stage of growth provided for under PC7 and will extend greenfield development to the western edge of the MUL, adjacent to the Holmes Block.

4.6 Rural Residential Background Report

57. The Rural Residential Background Report (RRBR) has informed the preparation of PC17 and was adopted by Council on the 22nd February 2011. The purpose of the report was to investigate methods to manage rural residential development in the eastern portion of Selwyn District.
58. The RRBR researched a number of potential forms of residential development to identify more sustainable rural residential environments. The ‘peri-urban’ nodal approach is preferred with potential for the following qualities:
- Avoids ribbon development along infrastructure alignments;
 - Sets definitive boundaries to limit growth and reduce the risk of and peri-urban sprawl or the blurring of the urban edge, whilst not precluding the future residential growth;
 - Provides a degree of separation from urban areas utilising natural features, greenbelt buffers and physical barriers;
 - Avoids acting as gateways to townships but provides connections from rural residential developments to urban areas;
 - Establishes informal links between urban areas and the rural periphery via green open space that supports connectivity;

- Within comfortable cycling and walking commuter distances to reduce reliance on motor vehicles, preferably via direct, safe and pleasant routes;
- Avoids the collective effects of higher densities, such as less peace, quiet, openness and privacy, through relatively small nodes of less than 50 allotments;
- Achieves environmental gains through the protection of significant ecological, amenity or landscape values; and
- Located in close proximity to infrastructure services, such as reticulated water and sewer connections.

59. A 'Township Study Area' assessment was carried out specifically for Rolleston and illustrated in a series of analysis maps⁶.

The report prescribes a set of generic and area-specific criteria, based on the theoretical and contextual research undertaken and six guiding principles⁷. This aimed to ensure that rural residential households are well located, meet character expectations and are appropriately staged⁸.

60. Plan Change 17 (PC17) proposes to incorporate a strategic planning framework into the District Plan to manage rural residential activities in the eastern part of the District. It is specifically concerned with providing for the strategic growth of rural residential activities on the periphery of townships within the Greater Christchurch area of Selwyn District. PC17 has been recently notified and at the time of writing is out for submissions, due to close in late April.

61. PC17 proposes to rezone a portion of rural zoned land outside the Urban Limits of Townships to accommodate approximately 170 households, which has been determined to be the optimal number that is able to be sustainably managed in the District up to 2016. PC8 represents 102 or 60% of this allocation with PC 9 proposed to follow thereafter.

62. The criteria and research provided through the RRBR was used to complete the 'preferred locations' assessment' for rural residential development in Rolleston⁹. Of the two potential sites identified through the assessment process, 30ha of the Holmes Block was the only site on the south-western side of Rolleston. This was nominated for 50 rural residential households for the period up to 2016. The Skellerup Block was not identified.

⁶ Rural Residential Background Document Report, February 2011 (Chapter 5, p58 and Appendix 6, Maps 1a-e and Appendix 7)

⁷ Rural Residential Background Document Report, February 2011 (Chapter 4, p35)

⁸ Rural Residential Background Document Report, February 2011 (Chapter 6, pp85-94)

⁹ Proposed Plan Change 17 – Rural Residential Activities, February 2011 (Attachment 2, pp4-11)

5.0 DISCUSSION OF URBAN DESIGN ISSUES

63. This report responds to urban design related issues raised through submissions on PC8 and 9. I have structured my response under the following topic headings:
- Urban Form and Coordinated Growth
 - Community Cohesion and Continuity
 - Urban Containment and Edge Conditions
 - Character and Amenity Provisions
 - Choice and Diversity
64. In discussing these topics, each section is structured as follows:
- Identifying relevant submissions;
 - Providing an urban design response;
 - Selecting relevant aspects of the Rolleston Structure Plan;
 - Considering these against the proposed plan changes; and
 - Conclusions.
65. My discussion below should be read in the context that some allowance for rural residential has been made under RPS-PC1 and PC17 for the Selwyn District. As such, the focus of my discussion is more on the location(s) and scale of the proposed plan changes under this strategic context.

5.1 Urban Form and Coordinated Growth

Relevant Submissions

66. A number of general submissions were made opposing PC8 and 9 that have referenced issues related to Urban Form and Coordinated Growth. These are listed below and quoting particular aspects of concern:
- D Booth (S3 D1) oppose the plan changes, particularly ‘the density of the development proposal’...‘This calls into question the Countryside Areas and consistency with the Rolleston Structure Plan’
 - Malvin Griebel (S4 D1) and Janice Griebel (S5 D1) both oppose the plan changes, particularly the role of the Selwyn Plantation Board ‘...as to the effect the removing of trees without their being replaced has on our environment when taking into account global warming’...‘[and] take into account that SPB should be using this land for other, environmentally friendly purposes such as replanting trees, re-pasturing for cattle.’

- Bob Paton (S13 D1) and Alison Burrowes (S16 D1) oppose the plan changes, particularly as 'Land Zoned Rural Outer Plains... is most suited to dairying or dairy support or forestry'...' the Inner Plain Zone would also be more suited to rural residential development.'
- Canterbury Regional Council (S18 D1) oppose the plan changes, particularly that Plan Change 8 and 9 '...due to the large number and relatively small lot size of the rural residential development proposed at this location, would not integrate with, or consolidate, with existing rural or activities of the locality or with the nearby Rolleston township but will form a low density suburb detached from Rolleston.'
- B&A George and S&S Cunningham (S20 D1) oppose the plan changes, particularly 'that land re-zoned for rural residential purposes should be situated close to employment opportunities. It is submitted that a vast majority of people who may purchase the proposed sections are likely to be employed in Christchurch rather than Rolleston'
- Denwood Trustees (S22 D1) oppose the Plan Change, particularly 'this would also result in an intervening area of land currently held in a number of relatively small titles, some with existing dwellings, and similar size to each of the PC8 and 9 blocks, being left 'sandwiched' between and separating the two proposed rural residential blocks'...'the Holmes (PC8) and Skellerup (PC9) are comparatively large, regular in shape and in single ownership, so could support a range of economic productive uses'

67. Specific Relief:

- Poultry Industry Association of NZ Inc. & Tegal Foods Ltd. (S8 D2) seeks an amendment that should the Plan Change be approved, the scale should be reduced to be more consistent with Plan Change 1 (i.e. a lower number of lots).
- New Zealand Transport Agency (S11 D1) seeks an amendment that the minimum allotment size be increased to 1 hectare to be in alignment with the definition of 'rural residential' in PC1.
- New Zealand Transport Agency (S11 D2) seeks an amendment that the maximum number of allotments permitted within a staging period in new rule 12.1.3.39 is reduced to properly reflect the average density requirement in PC1 of 1 household per hectare.

Urban Design Response

68. In my view, good urban form is ensuring a close match between higher density residential land use and convenient access to residents' key destinations, such as employment, shopping, community facilities and the like. The more closely integrated built form and local activities are the more effective and efficient the utilisation of existing and planned infrastructure, such as public transport, is. There are, of course, other social benefits that I will touch on later. This principle closely aligns with the 'compact cities' and centres-based, mixed use approaches to planning for sustainable urban growth as purported through RPS-PC1.

69. Urban edges tend to be the fastest growing areas around many towns and cities and hold high strategic, spatial, economic and environmental significance. At lower densities, the consumption of land can be far more than higher-density urban centres and the spread of development can proceed at a greater rate than population growth. These urban edges, commonly referred to as 'peri-urban' areas, can develop in a piecemeal way relative to those within existing parts of a town, where there is an established urban context to 'stitch' into. Land parcels also gradually get smaller and more fragmented in peri-urban areas, even for non-urban land uses. Conflicts invariably arise between different land uses with different needs. In my opinion, planning for continuity of urban form in these areas becomes harder to predict and, therefore, need to be managed in a sustainable way.
70. The proposed rural residential developments are one of many land uses that compete to occupy these peri-urban areas, in addition to maintaining the existing rural land. There are more intensive rural activities utilising the efficiency benefits of being close to urban areas, such as the intensive poultry farming sheds adjacent to the Skellerup Block. There are the large public utilities required to service the town, but are inappropriate to locate within an urban area, such as The Pines RRC and Pines WWTP near the Holmes and Skellerup Blocks. There are also other uses to consider that may associate with tourist, cultural, recreation or businesses uses that need to utilise rural settings and/or a proximity to large infrastructure. These types of uses are already evident along State Highway 1 between Christchurch and Rolleston, where light industrial units, tractor sales yards, holiday parks, churches, large retail outlets and other such activities have incrementally crept into the rural land. In most cases a multitude of small decisions have cumulatively lead to widespread alteration in peri-urban land uses, often over relatively short time periods. From an urban design perspective, decisions regarding the most appropriate activities for peri-urban areas around towns, such as Rolleston, should be weighted on what is the most efficient urban form and which provides the most benefit for their urban residents.
71. In several respects rural residential development can be seen as a potential liability for the wider community. There are considerable inefficiencies inherent in dispersed, single use rural residential developments where housing is separated from employment and community services. In my experience, it demands an extensive road network to provide and facilitate access to low density residential development with a high dependence upon cars and commercial service vehicles. Other infrastructure inefficiencies include providing communications, electricity, sewerage and water facilities where long runs of network services are required to serve very low densities. Social infrastructure such as schools, police stations and health service facilities, are also likely to be affected by trying to accommodate enlarged and dispersed administrative boundaries. I consider this represents a distinct shift from a productive rural activity involving a limited number of people, to one of mass consumption of a broad range of resources, services and values. In many instances this type of activity is discretionary in nature and can displace those more essential activities further out where urban form relationships can be undermined.
72. For rural residential developers and residents themselves, there are additional establishment, functional and maintenance commitments related to creating, living in and managing larger allotments. The breakdown in urban form relationships described above, result in residents being less able to access key destinations, such as employment, shops, professional services and recreational and cultural activities,

through public transport or being within convenient distances for walking (800m) or cycling (1.5km).

73. These can be compounding issues in relation to land-take. Multiple cars are typically required within a household to provide for a diverse range of movement needs, leading to bigger garages or hard stand areas. Poorer access to community facilities is also more likely to lead to a desire for residents to provide for their own recreational activities, such as tennis courts and swimming pools. In my opinion, many of these amenities can be reasonably substituted for community based facilities, where urban form efficiencies can be gained and quality improved, providing a critical mass of residents can be achieved within a higher density urban environment.
74. There are also longer term consequences resulting from decisions made now, as such changes from rural to urban uses are difficult to reverse. In my opinion, the existing urban form inefficiencies for rural residential development will potentially become greater over time. An important consideration in urban development today is to create resilient communities. This aims to minimise the risk of future dependency by providing the ability for residents to adapt to increasing costs of mobility from rising energy costs. This is particularly relevant in the context of Rolleston's existing low levels of self sufficiency in employment and retail provision.
75. As RPS-PC1 and PC17 provide for some rural residential, urban form considerations indicate those areas with good proximity and with the strongest links to the existing and planned community should be prioritised when identifying appropriate locations for developments.

Rolleston Structure Plan

76. While aspirational, the vision statement in the structure plan document sets the tone for the policies it contains. The following excerpt from the vision indicates that the future development of the town is anticipated to lead by example in relation to sustainable development:

'Rolleston is recognised as one of the most desirable places to live and work in the region and businesses are keen to establish themselves here. This has been boosted by the reputation gained by the town's long term approach to sustainable development, which is now frequently used as a successful model by other towns facing the ongoing impacts of energy shortages and climate change.'

...

'Most places are within an easy walk if parents want to take the kids down to the park to play or dash down to the local shops for milk; if they need a bit more they just catch the bus into town.'

77. To achieve this, the emphasis of the structure plan has been on resuming the early intentions of a planned community at Rolleston, which integrates with and enhances the more recent market-led one, where subdivision was largely uncoordinated and disconnected.

78. The Rolleston Structure Plan attempts to orientate medium to higher density residential development around defined mixed use centres, primarily based on a 'refocused' existing town centre¹⁰. These are linked together via the utilisation of the existing rural road alignments and supplemented with new interconnecting roads through larger greenfield development blocks. The location of centres and a proposed central park 'n' ride facility, linking with express routes to Christchurch, enables both orbital and destination-based public transport routes to be created¹¹.
79. Under the 'A Well Designed Rolleston' objective, the design principle that address urban form specifically is Principle 4, 'Higher density development at nodal points:
- *Closely match the spread of population density to centres and/or key movement corridors, including public transport routes, which require the highest levels of activity and provide the higher quality amenities.*
 - *Establish smaller block sizes within higher density areas to maximise the choice of routes and reduce travel distances.'* (p16)
80. The centre strategy is the main framework for the structure plan and a clear hierarchy of land use and movement patterns has been established. This revolves around the existing town centre with outlying Neighbourhood Centres, located on the main radial routes, and local centres, servicing daily needs within more comfortable walking distances (i.e. 400m or five minutes).
81. To the west of the structure plan, two neighbourhood centres have been identified, one for each of the proposed Brookside and Goulds Road neighbourhoods¹². Recent discussions with Mr Wood, a policy planner at SDC, indicates that the Brookside Neighbourhood Centre, closest to the Holmes Block, is unlikely to be delivered due to the lower density of existing lots in this existing part of Rolleston. However, he noted a local centre of approximately 450m² in size is proposed within the Stonebrook ODP, close to where it is indicated on the structure plan. The formation of the Goulds Road Neighbourhood Centre is currently proposed within the SR6 ODP, or Fosters development, in Stage 1 of the greenfield residential development in Rolleston¹³. This is currently associated with a 'proposed main (primary) road', which links across the southern half of the Rolleston Structure Plan between Weedons Road and Dunns Crossing Roads, and intersects with the southern part of the Skellerup Block. In addition, one of two outlying local centres is shown to be on a 'proposed local (secondary) road', which intersects with the northern part of the same block.
82. In my view, Section 7.2.4 'Benefits of Higher Densities' most succinctly summaries this sustainable urban form approach from a residential land use perspective and reinforces the restriction on re-subdividing rural residential land under RPS PC1:
- 'There are many benefits of higher density housing being located close to town and neighbourhood centres. Higher densities enhance the viability of the centres due to a larger population within a comfortable walking distance.'*

¹⁰ Rolleston Structure Plan – Rolleston Structure Plan (Fig 5.2, p44)

¹¹ Rolleston Structure Plan – Public Transport Route Patterns (Fig 8.5, p115)

¹² Rolleston Structure Plan – Key Neighbourhoods of Rolleston (Fig 5.3, p46)

¹³ Rolleston Structure Plan – Staging of Greenfield Residential Development (Fig 5.4, p48)

Public transport services are also more feasible when there are concentrations of people close to bus stops and interchanges along transport corridors. An increase in walking to shops and usage of public transport reduces dependency on the car, which in turn creates less pollution, less demand for parking and greater health benefits. On greenfield developments it is important to set reasonable target densities early and not rely on piecemeal infill to increase density over time. After residential areas have established, there is often difficulty in managing transition issues over time. This is due to expectations of existing residents being accustomed to lower density amenities and other constraints to intensification, such as land acquisition and infrastructure capacity. In a town expansion like Rolleston, it is prudent to provide opportunities for higher density living and growth around centres during the initial development stages, before such issues arise.’ (p82)

83. This is further reinforced with the provision of community and education facilities:

‘The development of facilities within Rolleston such as a High School, swimming pool and recreation centre will reduce the need to travel to obtain these services and help build a stronger community.’ (p101)

84. The most community facilities identified in the structure plan are centrally located within the town, concentrated either near the town centre or Recreation Precinct. The High School, likely to have a large catchment area, is intended to be co-located with the Recreation Precinct. The two established primary schools, Rolleston and Clearview, are also in close proximity. Others identified are indicative, but again tend to be associated with the proposed neighbourhood structure, including the Goulds Road Neighbourhood closest to the Skellerup Block¹⁴. The existing parts of the town, such as Brookside Neighbourhood, closest to the Holmes Block, would continue to associate with those primary schools already established and pupils would likely need to travel further.
85. From a transport perspective, section 8.1 introduces the anticipated outcomes for the ‘Movement Network’:

‘A cohesive and efficient movement network is required for vehicles, pedestrians and cyclists. The new movement routes created as Rolleston develops will integrate with existing routes, providing effective linkages and efficient movement for all types of travel. There will be a focus on encouraging the community to use alternative transport methods reducing the use of private vehicles. Movement by walking, cycling and public transport reduces energy consumption, reduces greenhouse gas emissions, increases social interaction and helps build healthy communities.’ (p104)

Proposed Plan Changes

86. The potential for alternative peri-urban land uses for some or all of the Holmes and Skellerup Blocks that could provide more effective and efficient urban form relationships, but do not appear to have been considered in the s32 analysis. Neither

¹⁴ Rolleston Structure Plan – Key Neighbourhoods of Rolleston (Fig 5.3, p46)

does the status quo option recognise the retention of the land for future unforeseen uses as a potential benefit.

87. The ODPs that have been presented do not adequately demonstrate the contexts in which they sit or relationship with the proposed urban form of Rolleston, as presented in the structure plan document. Nevertheless, the Holmes Block is positioned adjacent to the existing and established routes of Burnham School and Brookside Roads, which lead toward Rolleston Town Centre over 2km to the east. There is also the local centre as proposed in the Stonebrook ODP, providing mainly for daily needs, and I recommend coordinating the alignment of the access road into Stonebrook with the proposed entrance off Dunns Crossing Road to facilitate access to this centre. However, the unlikely provision of a Neighbourhood Centre in Brookside means that most residents in the development will probably need to drive to Rolleston Town Centre for most of their regular goods and services, such as a range of local shops, childcare, community facilities and social services. I consider this to be a limiting factor to the number of allotments that can be efficiently accommodated in the Holmes Block, due to the number of residents left without convenient access to a larger centre.
88. I also consider the lack of public transport and distance from other existing and proposed community facilities within central Rolleston, including the facilities proposed in the Recreation Precinct and schools, remains a concern.
89. The Skellerup Block is more differentiated from the Holmes Block in that it is more associated with future greenfield development. Until these routes and supporting community facilities are established, particularly the neighbourhood centre on Goulds Road, I find it difficult to support the development of a rural residential block in this isolated location and I, therefore, support the recent PC9 amendment to stage the development in 2016. If it were to proceed, I recommend the development contributes to the proposed main (primary) road linking the Block with the Neighbourhood Centre on Goulds Road as it would directly benefit from these urban amenities. Again, from an urban form perspective, I do not consider the number of allotments proposed for the Skellerup Block could be sustainably managed in this location and recommend these be reduced or removed.

Recommendations

90. I recommend further considerations should be given to alternative peri-urban land uses that better contribute to sustainable management of the town and its rural context.
91. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:
- Identify on each ODP key community linkages to be established with existing and proposed facilities within the MUL, as indicated in the Rolleston Structure Plan. Amend ODPs and assessment matters to ensure these are direct, pleasant and varied.
 - Coordinate the proposed road alignment connecting the Holmes Block to Dunns Crossing Road with that proposed for the Stonebrook development opposite to facilitate access to its local centre.

- Coordinate the proposed road alignment connecting the Skellerup to Dunns Crossing Road with that proposed for the Neighbourhood and Local Centre within the Goulds Road Neighbourhood.
- Utilise development contributions from the Skellerup Block to facilitate the proposed main (primary) road link with it and the proposed Neighbourhood Centre on Goulds Road.

92. In response to submissions seeking specific relief:

- I concur with the Poultry Industry Association of NZ Inc. & Tegal Foods Ltd. (S8 D2) seeks an amendment that should the Plan Change be approved, the scale should be reduced to be more consistent with Plan Change 1 (i.e. a lower number of lots). I consider these should be closely aligned with the RBRR/PC7 nodal approach providing for 50 allotments.
- I consider the recent ODP amendments, dated 11th February 2011, addresses the submissions by the New Zealand Transport Agency (S11 D1 and D2) seeking an amendment that the minimum allotment size be increased to 1 hectare to be in alignment with the definition of 'rural residential' in PC1. This is achieved through the addition of five 'Large Lots' in each Block and the re-distribution of a large proportion of land into the Countryside Areas shown on the ODP.

5.2 Urban Containment and Edge Conditions

Relevant Submissions

93. A number of general submissions were made opposing PC8 and 9 that have referenced issues related to Urban Containment and Edge Conditions. These are listed below and quoting particular aspects of concern:

- D Booth (S3 D1) oppose the plan changes, particularly 'Inappropriate use of Outer Plans zoned land for rural residential purposes'
- Malvin Griebel (S4 D1) and Janice Griebel (S5 D1) both oppose the plan changes, particularly with regard to the Greater Christchurch Urban Development Strategy 'This Strategy very clearly marks the boundary as being Dunns Crossing Road...There is currently, nor in the foreseeable future, any shortfall in the provision of housing in the Rolleston area as defined by that Strategy. Should the SPB succeed with their proposals, then there would be no certainty to landowners and the community as to the extent of the urban boundary...Currently the boundaries for housing are very neat, clear and accepted by most. By permitting PC8 and 9, the SDC would be introducing an amoeba effect to these boundaries...'
- Bob Paton (S13 D1) and Alison Burrowes (S16 D1) oppose the plan changes, particularly as 'the plan changes will result in a major and fundamental change to the integrity of Rolleston township plan to 2045 as set in the Rolleston Structure Plan and LTCCP'

- B&A George and S&S Cunningham (S20 D1) Oppose Decline the Plan Change, particularly as 'The Council needs to complete its rural residential planning process in a comprehensive manner without ad hoc private plan change applications undermining its efforts to provide for the District'
- Denwood Trustees (S22 D1) oppose the plan changes, particularly 'The boundaries of PC8 and 9 are clearly entirely related to land ownership considerations rather than based on logical and defensible zone boundaries...'
- General submissions indicating there is sufficient zoned land within the MUL of the Rolleston Structure Plan to accommodate growth needs, include:
 - L & L Field & Lanlee Ltd S10 D1 oppose the plan changes
 - R & B Salthouse S12 D1 Oppose Decline the Plan Change
 - Bob Paton S13 D1 oppose the plan changes
 - Alastair King S15 D1 oppose the plan changes
 - Alison Burrowes S16 D1 oppose the plan changes
 - Susan Chaney S27 D1 oppose the plan changes

94. Those submitters seeking specific relief, include:

- Paul Mason (S31 D2) seeks an amendment 'that as an alternative the development should not proceed until all residential land in the District Plan has been developed.'
- Ernest Smith (S21 D1) seeks an amendment to 'significantly reduce (by at least 50%) the number of lots allocated to SPBL. This could be achieved by deleting either one of Plan Changes 8 or 9'

Urban Design Response

95. The existing residents of Rolleston are in a fortunate position that rural land is always in reasonably close proximity and this currently characterises it as a 'rural town'. There are those residents in larger cities that rarely experience rural life, as it is so detached, and this provides a point of difference for towns like Rolleston. I consider the rural land has an important value for both defining and contrasting the town.
96. Rural residential developments occupy land between the built up edge of an urban area and the truly rural hinterland. As discussed above, they are often intermediate land uses that seek to maintain connections between urban and rural land. They can also share this space with other peri-urban uses, but are distinct from other parts of a town where there is usually greater continuity of urban development.
97. Progressive development of peri-urban areas can erode the edge with the potential loss of a consistent or legible relationship between rural and urban land. It establishes a 'blurred edge' to the town and rural residential and other peri-urban uses can result in it being difficult to identify the outer boundary of this zone. In my opinion, this blurred

edge can appear messy and uncoordinated, with many hard elements that continue to dominate beyond the urban edge. From an urban design perspective, this blurred edge flattens density gradients and creates a diminished sense of arrival and departure from a town, which can dilute the 'gateway' experience. This can accentuate a sense of 'placelessness' that can often be felt by smaller towns when gradually absorbed into larger conurbations, such as Christchurch.

98. To achieve a strong edge that maintains integrity and distinctiveness of rural and urban environments, clear relationships need to be established between urban areas and open spaces, inside and outside urban boundaries. This can be difficult with a continually migrating urban edge, such as in the initial stages of Rolleston's development, but can achieve a more stable state between defined outer boundaries as towns fill out.
99. The pressure to develop rural land is often increased by land speculation by developers and land owners who seek to convert it to urban uses to achieve a steeper 'planning gain'. This tends not to be a controlled process induced for the wider benefit of the town, but decisions by individual developers for a limited number of purchasers who benefit from the rural values protected up to this time.
100. From an urban design perspective, I consider it important to concentrate on the needs of the town, and regard nearby non-urban areas as the means to satisfy these needs through the provision of land and resources. Non-urban resources could include protected landscapes and uses that embody environmental values, such as recreation and open space; essential infrastructure, such as utility installations and major urban infrastructure; tourist uses or more intensive agriculture. These often have large land requirements, yet equally need to coexist close to urban areas.
101. Given the uncertainty about the future needs, it would be prudent to retain the possibility for a range of flexible land use options around the town. Peri-urban areas can potentially provide us with valuable areas on the periphery of urban areas where innovative responses can assist in the process of human adaptation to rapid change. They can be sites which aid resilience of natural and human systems in times when issues, such as climate change, have uncertain consequences for the ability of urban communities to sustain themselves. In my opinion, these should be prioritised according to the economic, social and environmental needs of the town. Although quite urban, the Izone Business Hub to the north of Rolleston's town centre is one such example of the types of non-residential uses that have been considered and can bring economic benefits to the town
102. In my opinion, there is a diminished incentive for greater urban living if neighbourhoods are further detached from the amenity of rural land or, at least, larger open spaces. The productiveness of urban areas and the well-being of residents will depend on both the quality and type of relationships between urban areas and their rural hinterlands.
103. The protection of rural land, or land for appropriate future peri-urban uses, and the containment of urban growth are interacting measures. Urban growth boundaries or Metropolitan Urban Limits (MUL) as used in Greater Christchurch are widely used internationally. When properly applied they can achieve considerable benefits, such as the separation of rural from urban land, the containment of urban areas, or the orderly release of urban land. The clearer the demarcation and the more land that is reserved for urban purposes, the more successful a MUL is likely to be in preventing

urbanisation of rural land and equally encourage intensification of an existing urban area.

104. In my experience, the use of ring roads as a means to define between urban and rural areas is considered an unsatisfactory method, as it can lead to further urban development clustered around the roadway, the opposite effect from what is intended.
105. A common and well tested response, particularly in British towns and cities, is to establish an additional 'green belt', usually located between the urban growth boundary and a defined outer boundary. This can achieve both a strong urban edge and the large open space amenity and recreational infrastructure that benefit a community.
106. Both MULs and green belts can either be managed through a staged release of land, often through a deferred zoning; fixed in place over time; or as a combination of the two. In all cases it requires a strong regulatory policy and/or land purchase programs to give them effect. Regulation is required across urban, peri-urban and rural land uses. For instance, unregulated lot sizes outside the MUL may increase the attractiveness of rural residential and life-style blocks and lead to development that 'leap-frogs' a green belt.

Rolleston Structure Plan

107. The structure plan vision clearly aligns itself with the anticipated outcomes of a strong urban containment approach:

'While [Rolleston] has kept a close association with Christchurch, it remains a town in its own right. The town has been successful in drawing a distinctive character from its close associations with the rural landscape in which it discretely sits - you can still catch glimpses of the Port Hills or Southern Alps as you move around the town.'

108. The RPS-PC1 process initiates a regulatory approach of applying an urban limit to existing and proposed growth areas within Greater Christchurch. Rolleston has been identified through this process as one of the largest greenfield growth areas:

'The Rolleston metropolitan urban limit (MUL) has a potential long term land capacity of up to 50,000 should full intensification of existing areas and development of all greenfield areas (886 Ha) occur. This could be accomplished within 70 years. As a result, Selwyn District Council has developed the Rolleston Structure Plan to provide a strategic framework to guide the development process.' (p6)

109. The considerable extent of the MUL, adopted by Council in July 2008, provides sufficient greenfield land to accommodate future urban growth and help avoid dispersed settlement patterns. This also provides the Council with the ability to maintain a compact town through the programmed release of land. Due to the lack of significant landscape features within the immediate Rolleston context, as discussed in Mr Craig's landscape report, the MUL has been defined in other ways:

'Overall, the Structure Plan provides for consolidated, sustainable and coordinated development and the staged provision of all services. Its MUL

was developed on nonnatural growth boundaries, including State Highway 1 (Main South Road), the proposed airport noise contour, The Pines (wastewater treatment plant) and rural roads. Within the MUL, cadastral boundaries have generally been used to define the growth areas.’ (p42)

110. In particular, the western boundary of the MUL follows Dunns Crossing Road with the exception of a small existing L2 zone across the road, which is also included¹⁵. Both the Holmes and Skellerup blocks are outside this urban boundary.
111. Through the structure planning process a further mechanism for containing the town and defining the edge was introduced. The ‘greenbelt’ concept was adopted and described in section 7.7.1:

‘A landscape buffer strip will be created between the MUL and the surrounding rural areas. The size and width would be approximately 50 metres. The width may vary to accommodate existing landscape features and linkages into the MUL. The ‘Green Belt’ concept would incorporate horse riding/cycleways and running/walking tracks, ecological habitat creation, stormwater management areas, specimen and avenue tree planting, shelterbelts for wind protection, and could integrate the road boundary reserve areas into the landscape treatment. The design of planting in the greenbelt should aim to retain distant views where possible while also providing shelter from wind. This design co-ordination between the greenbelt and adjacent roads could also include intersection design and avenue plantings that extend into the town. A strong visual sense of open rural character and amenity in the design of the buffer is important. The greenbelt concept could also mitigate potential reverse sensitivity issues of rural activities on residential living. This open space feature of the structure plan is a unifying landscape element. It would create a clear rural/urban spatial edge to Rolleston providing a distinctive identity to Rolleston, and sense of arrival at the town within the rural plains landscape.

As part of the open space network and ‘Greenbelt’ concept, it is proposed that the section of State Highway 1 between Dunns Crossing Road and Weedons Road is enhanced with amenity highway plantings. At the turn-off points to Rolleston township (Dunns Crossing, Rolleston Drive and Weedons Roads), further landscape treatment through plantings as ‘gateway’ entries could be established. Similarly, the proposed 100 hectare Park could be integrated into the Greenbelt landscape treatment providing broad linkages for jogging, mountain biking etc.’ (p93)

112. As part of the key objective to create a ‘A Sustainable Rolleston’ is the principle of ‘Self-Sufficiency’. The greenbelt and other open spaces, such as a 100ha park on the eastern edge of the town, are identified for non-urban uses that are intended to benefit the urban community:

‘A green belt, green corridors and 100 Ha park have been incorporated in the Structure Plan to provide ecological services, capacity for local energy

¹⁵ Rolleston Structure Plan – Staging of Greenfield Residential Development (Fig 5.4, p48)

generation, food production (e.g. community gardens) and strong links to the rural hinterland... (p101)

113. It is my understanding from earlier discussions with Council officers that the detailed implementation of the greenbelt is yet to be resolved. It is currently shown within the MUL in most areas and this potentially raises issues with the definition of density calculations within RPS-PC1. However, it will most likely require delivery through the subdivision process with the potential for some purchase of land by Council to facilitate its continuity around the edge of town.
114. The greenbelt as illustrated on the structure plan crosses Dunns Crossing Road to enclose the Living 2 zoned land on the far western side of the town and includes part of the Holmes Block where it returns eastward.
115. In terms of other sustainable development considerations, the Rolleston Structure Plan indicates that:

'As one of the largest greenfield growth areas within Greater Christchurch, there is a significant opportunity to integrate sustainability initiatives over a broad scale and showcase Rolleston as a sustainable town.' (p12)

116. Under the 'A Sustainable Rolleston' key objective the 'Self-Sufficiency' principle indicates other possible uses for the remaining peri-urban areas outside the MUL. This promotes the concept of a self-reliant town, involving:

'creating a sense of place within the wider rural landscape, and providing opportunities to live, work and play locally. It also promotes the concept of self-sufficiency in water management, waste and energy generation.'

[The] Structure Plan aims [to]:

...

- Create and emphasise connections between town and country (such as jobs, markets, food, energy generation and visual connections).*
- Energy production within or near the town, such as solar water heating, wind generation, co-generation (heat / steam / electricity) and waste as energy (biofuel, digesters). (p15)*

Proposed Plan Changes

117. The risk that this rural residential development becomes a 'holding zone' for further and more intensive urban development, which is not foreseen by the structure plan, has been addressed through a RPS-PC1. I support the proposed plan changes providing this assurance.
118. I note that a Countryside Area of 50m has been provided along the western side of Dunns Crossing Road. This is consistent with the proposed depth of greenbelt along the MUL boundary of the structure plan on the eastern side of Dunns Crossing Road. While I consider PC8 and 9 potentially undermine the expansive rural outlook anticipated from the township side of this urban edge, compared with retaining the

current Outer Plains zoning of the Holmes Block, I regard this as a reasonable balanced approach to achieving some visual separation without imposing a substantial physical barrier.

119. However, the Holmes Block ODP provides no 'Countryside Area' along Burnham School Road, yet, as discussed above, the structure plan identifies a short section of the MUL that follows this road. It is also likely to be a well used route for residents of Rolleston travelling to and from The Pines RRP and, in my view, should be representative of other urban edge conditions. If PC8 is to be approved, I recommend a similar transition area of equivalent depth should be provided along this edge. Furthermore, I recommend that its function is more than a 'visual transition area' and provide for those qualities anticipated for other sections of the greenbelt, as identified in the structure plan, such as 'horse riding/cycleways and running/walking tracks, ecological habitat creation, stormwater management areas, specimen and avenue tree planting, shelterbelts for wind protection', while aiming to 'retain distant views where possible'¹⁶. As the greenbelt would be more consistent along the Dunns Crossing Road, given the constraints of the existing subdivision patterns, proposed also functions as the main greenbelt between Burnham School Road and the State Highway. I support the Applicant's proposition of a public walkway along the Countryside Area along the eastern boundary and seek that the greenbelt concept is extended. However, I defer to the landscape report of Mr Craig for appropriate detailed design outcomes required from these Countryside Areas.
120. As PC8 and PC9 are the first such rural residential developments proposed on the edge of Rolleston since the structure plan was adopted, they will set a precedent for how the greenbelt will be treated in relation to these and other peri-urban land uses. The greenbelt was anticipated to be the primarily interface with rural land and this is now being tested. I consider there are two issues at stake. Firstly the partial loss of the town's rural setting and outlook for those using the greenbelt. Secondly, how to redefine the edge of peri-urban land uses once development has 'leap-frogged' the greenbelt and periphery rural roads alongside the MUL.
121. On the first point, if PC 8 and 9 were both to proceed I have calculated approximately 65% of Dunns Crossing Road will be developed in rural residential allotments, including the existing allotments near the corner of Brookside Road. If fully developed, this would become unavailable to expansive rural views for those occupying the western edge of Rolleston. I consider this extent unacceptable for rural residential developments and recommend that at least one of the developments be deleted to reduce this impact. In my view, the most likely candidate would be that of the Skellerup Block with its longer profile to the road, its more isolated location along Dunns Crossing Road and detachment from existing allotments.
122. On the second point, I consider further edge definition is required, so as to avoid the potential risk of future expansion of rural residential uses into rural land. The revised ODPs for the Holmes and Skellerup Blocks indicate 'Rural Buffer Planting' along all rural edges, which I regard as an insufficient deterrent when greenbelts and rural roads may be compromised as a result of these proposed plan changes. Recently issued ODP from the Applicant, dated 11 February 2011, indicates the additional use of larger 4Ha allotments on some rural edges. While I consider this a positive

¹⁶ Rolleston Structure Plan – Rolleston 'Green Belt' (p93)

amendment, it remains inconsistently treated. The Holmes block is more suited to clearer delineation with non-natural boundaries on two of the three new boundaries, including State Highway 1 and Burnham School Road. The amended ODP illustrates the use of larger, 4Ha allotments on the remaining western boundary, which I consider to be a good outcome to 'fill in' the gap between the Holmes Block and the Pines WWTP. The Skellerup Block is much less strongly delineated; although, I note there is a water race on its western and southern boundary. However, I defer any further detailed considerations as to the landscape treatments required to Mr Craig.

123. In my opinion, the introduction of larger 4Ha lots further assists the containment of the Skellerup Block within the surrounding rural land, where provided, and improves the rural outlook for those allotments deeper within the Block. I recommend this approach be used elsewhere along remaining rural edges.
124. However, in introducing Large Lots into both ODPs, there is a risk that where they meet the Countryside Areas the development within these lots would potentially undermine the visual connections to the rural land beyond. I further recommend view shafts are incorporated into both ODP to protect this amenity.
125. Furthermore, the nature of existing development along State Highway 1, particularly between Christchurch and Rolleston, is already substantially compromised through other peri-urban development clustering around this major national route. While this is less obvious on the western side of Rolleston, with the exception of Burnham Military Camp and Rolleston Prison, I consider the development of the Holmes block to remain less of an impact than the Skellerup Block, as I consider there is little precedent for this development typology elsewhere around the rural setting of Rolleston.
126. In regard to mitigating of the impacts of peri-urban uses along the highway boundary of the Holmes Block, I consider that the proposed 'State highway Buffer Planting Treatment Required' shown on the ODP will provides some visual mitigation. From an urban design perspective, I consider this would be strengthened further by the continuation of the tree lined avenue planting proposed in the RSP for the approach and route through Rolleston. This would need to be extended along State Highway 1 for the length of the Holmes Block frontage and mimic a similar approach on the eastern approach to Rolleston, originating at Weedens Road intersection.

Recommendations

127. I recommend the Skellerup Block be deleted due to loss of rural outlook for a considerable length of the MUL boundary along Dunns Crossing Road, when combined with existing Living 2 Zoned land and the proposed Holmes Block.
128. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:
 - The Holmes Block ODP provides a Countryside Area, including a walkway, along Burnham School Road, at least along that section of the boundary that follows the MUL. This should provide for the qualities of the greenbelt as anticipated within the RSP.

- Introduce larger 4Ha lots with the remaining rural edges of Skellerup Block to contain further expansion of rural residential development and improve the rural outlook for those allotments deeper within the Block.
- Incorporate view shafts through the Large Lots in both ODPs to protect views from the Countryside Areas to rural land beyond.
- As part of the 'State Highway Buffer Planting Treatment Required', extend the tree lined avenue planting proposed in the RSP to the western end of the Holmes Block along the State Highway, to mimic a similar approach on the eastern approach to Rolleston, originating at Weedens Road intersection.

129. In response to submissions seeking specific relief:

- I agree in part with Paul Mason (S31 D2) who seeks an amendment 'that as an alternative the development should not proceed until all residential land in the District Plan has been developed.' The recent PC9 amendments staging the Skellerup Block to 2016 are sufficient to develop in parallel with the Goulds Road Neighbourhood in Stage 2A of the RSP, but I do not consider this should be delayed further with planned stages further the east of the MUL.
- I concur with Ernest Smith (S21 D1) seeks an amendment to 'significantly reduce (by at least 50%) the number of lots allocated to SPBL. This could be achieved by deleting either one of Plan Changes 8 or 9'. I have indicated, for the reasons given above, that I recommend PC9 (Skellerup Block) is to be deleted and the nodal approach applied to the Holmes Block.

5.3 Community Cohesion and Continuity

Relevant Submissions

130. At least one general submission was made opposing PC8 and 9 that referenced issues related to Community Cohesion and Continuity. This is listed below and quoting particular aspects of concern:

- John & Lisa Barclay (S31 D1 - PC9 only) oppose the plan changes, particularly 'why would the Council allow the Selwyn Plantation Board be allowed to go out of sequence when others are not. This is again going back to the willy nilly subdivisions...'

Urban Design Response

131. I consider the creation of highly valued urban environments, such as experienced in many town centres, market places, parks or streets, is dependent on the successful and ongoing occupation of public spaces. While the rural or natural environment is often valued for its peacefulness, urban spaces are energised through lively social interaction and the interest they stimulate through a diversity of people using them. I consider this greatly enhances the sense of place established for a town, such as Rolleston.

132. In my opinion, extensive rural residential developments potentially undermine achieving a critical mass of population who choose to reside and invest in an urban

environment over time and ensure they sustain a vibrant and interesting living environment and a community feel that continues to motivate people to move there.

133. The desire for residents moving out of towns and cities can be a reaction to the poor quality of urban environments, physically and socially, and the perception, often reinforced by developers, of newer and more attractive lower density housing on the urban edge. This referred to as the 'flight from blight' phenomenon¹⁷. Following such flight, the lack of income and investment reduces the ability of local authorities to fund solutions to urban issues and to prevent further deterioration, ultimately leading to urban decay, and greater polarisation of communities. Rolleston is a growing town where there is not only existing community infrastructure to renew, but also proposals for a range of new infrastructure to fund over time. By default this seeks to minimise the provision for rural residential developments where residents invest outside the urban limits, live in relative isolation and as such contribute less to the informal social life of the town.
134. Instead of readily identifiable urban communities, rural residential developments are often discontinuous and typified by designs that promote dispersed living arrangements. In my experience, this fails to fulfil residents' desire to maintain close social connections. Although 'telecommuting' using modern IT technologies makes communication easier, this remains a poor substitute. It generates regular, longer distance travel to and from urban areas or at least between/within other rural residential developments for social, cultural, recreational or work purposes, while also seeking to receive visitors in the opposite direction. This is not only an inefficient use of time, but can also stressful and tedious for residents. Furthermore, evidence suggests residents rarely venture into city centres or metropolitan areas in the evenings or at weekends, meaning occupation times of urban areas are also inconsistent.
135. I also consider that residents who have to consistently drive cars for most of their movement needs are less able to participate in town life. Indeed, it can further alienate urban communities through severance due to traffic and dispersal of urban uses to provide greater car parking.
136. Where rural residential is provided for, the aim is to minimise fragmented development. There is an inherent tension to visually detach yet physically integrate with existing community and there is a need to resolve this creatively through the design process. This could be exasperated by the staging of development resulting in poor cohesion between rural residential developments and growing urban areas, at least over the short to medium term. In my opinion, the directness, interest and a variety of routes can minimise actual and perceived travel times to encourage more walking and cycling to destinations on a regular basis.
137. It is also important to set up social structures in a way that a sense of community can establish quickly and coherently. In my opinion, this is best achieved through contiguous growth outward from existing urban communities. Where possible utilising key community facilities and open spaces as 'generators' or catalysts for development, can provide mutual benefits and a fulcrum point from which growth can radiate from.

¹⁷ Bradford, D. and Kelejian, H. (1973) "An Econometric Model of the Flight to the Suburbs", Journal of Political Economics, 81, 566-89

Coordinated staging of development is therefore as critical for a sense of community as it is for infrastructure in my opinion.

Rolleston Structure Plan

138. Part of the vision statement expressed early in the structure plan, reinforces the importance of community cohesion and continuity over the long term:

‘... Despite the town’s impressive growth in recent years, the town has come together well and the community spirit remains strong.’ (p10)

139. As mentioned above and discussed in the structure plan under the objective ‘Realistic and Achievable Rolleston’ a neighbourhood-by-neighbourhood approach has been taken, which allows incremental expansion of the town into the future. Brookside Neighbourhood is in close proximity to the existing town centre, adjacent to recent subdivisions and is already zoned for residential land uses. Although some ODPs are still being consented, it is likely that the land within the Brookside Neighbourhood, closest to the Holmes Block, will likely establish first. Furthermore, Brookside Park is a substantial public open space that could be used as focal point for building a broader community.

140. The importance of regeneration, in addition to providing for the growth of Rolleston, is incorporated under the ‘Well Designed Rolleston’ objective and Principle 6 ‘Regenerate Existing residential areas through shared amenities’ which encourages developers to:

‘utilise new investment as an opportunity to improve or develop new amenities where deficiencies are recognised and allow new residents to tap into and help sustain existing community facilities.’ (p17)

141. The proposed creation of a local centre within the Brookside Neighbourhood, as discussed in the previous section, is an example of where this type of regeneration opportunity arises. The proposed location of the centre will facilitate the interaction of existing residents in adjacent subdivisions with the new greenfield development of Stonebrook.

142. There is also close links within the section 5.3 Structure Plan Staging with provision of community infrastructure, including the following expectations to:

- *Encourage the growth of the Town Centre and neighbourhood centres in a logical manner, allowing continuity of social, employment and retail functions within the Town Centre, with the whole Rolleston township growing and developing in a coordinated way.*
- *Plan for greenfield residential development to occur in a way that encourages neighbourhoods to consolidate around centres and which initially supports the development of the Recreation Precinct.*

143. It goes on to identify the specific areas that have been identified for the sequence of staging for greenfield development:

- *In the first stage, provide for greenfield development to grow in a south-westerly direction, between Goulds Road and adjoining existing Living zoned land to the east.*
- *At the same time, provide for greenfield development in other areas closest to the existing town centre.*
- *In the next stage, provide for the ongoing development of greenfield land to the south-west, filling out the remaining neighbourhood and providing other facilities to complement the 'centres' – such as an additional primary school.'* (p47)

144. This indicates that the initial greenfield development stages work southwards from the Recreation Precinct in a south west direction in the general direction of the Holmes Block. When referring to the staging plan the greenfield development closest to the Holmes block, but within the MUL, will not occur until Stage 2A or between 2017-2026. This would likely originate from the Goulds Road Neighbourhood Centre and therefore reach the outer limits of the MUL, near the Skellerup Block, later rather than earlier in the timeframes given.

Proposed Plan Changes

145. The Holmes and Skellerup Blocks are clearly differentiated when considering the degree of community continuity that can be achieved in the early stages of Rolleston's growth. There are a higher proportion of existing community facilities and residential areas already extending to the MUL boundary and in reasonable proximity to the Holmes Block. Current proposals shown in the Stonebrook ODP¹⁸ indicate the remaining undeveloped greenfield areas within this north-west quarter of the MUL could also be infilled and include a new local centre. While this is not at the densities expected in other parts of the structure plan, there is likely to be a reasonably cohesive community established prior to or in parallel with development of the Holmes Block. The Skellerup Block is more likely to be out-of-sequence by being related to a later stage of greenfield development and, in my view, its community would potentially face a longer term detachment from Rolleston. In this respect, I consider with the recent amendments made to PC9, which stages the rural residential development on the Skellerup Block to 2016, to be a better outcome.
146. In my opinion, the cohesiveness of the community within Rolleston will likely be impacted by the presence of the Holmes and Skellerup Blocks, which could appear like appendages to the town. In my opinion this could dilute the sense of place across areas like the Brookside Neighbourhood, adjacent to the Holmes Block, which is already fractured by different densities and characters. In this respect, the visual detachment through the use of the Countryside Area is a positive feature to help achieve a more cohesive community within the Brookside Neighbourhood, while minimising the actual separation distance for ease of access. I also consider the establishment of a further 'Key Gateway' at the intersection of Dunns Crossing Road and Burnham School Road would be a further beneficial feature to achieve this and I recommend the development contributes to its formation.

¹⁸ Plan Change 7 - Rolleston ODP Area 1 Map

147. Moreover, a curious anomaly of the structure plan and its MUL is a small cluster of larger residential blocks on the western side of Dunns Crossing Road, also bordered by Burnham School Road in the north and Brookside Road in the south. This could potentially be better integrated into a broader rural residential community structure through development of the Holmes Block. For these reasons, I consider the Holmes Block will provide more continuity of development and feel less out of place than if the Skellerup Block is developed amidst extensive rural land.
148. In my opinion, the Countryside areas are not so wide that they disrupt the continuity of development through to each Block and will minimise any 'us and them' mentality between communities. For this latter reason, I recommend that the plan changes prevent the potential of establishing a 'gated community', but instead contribute further to the continuity of the wider community through clearly defined walking routes/ circuits that embrace the residents of Rolleston.
149. The ODPs for the Holmes and Skellerup Blocks are dispersive by the nature of their density and design. To encourage more walking and cycling to local centres and community facilities, a greater importance is placed on achieving high quality connections from door to destination. In my opinion, there needs to be some coordination in the location of public walkway access points between the ODPs and those proposed within Rolleston. As discussed in section 5.1, I recommend the routes between the Holmes Block and Stonebrook ODPs need to be more closely aligned to ensure they provide direct and visually clear passage and, preferably, a choice of routes that maintains interest for residents, as further discussed in Mr Mazey's transport report. While I consider the road cross sections presented in each plan change offer the potential for pleasant routes, on plan they appear long and potentially monotonous. The nature of each allotment will provide some interest, but I recommend provision of distinctive art instillation or landscaped rest stops along the routes would be of further benefit to users in addition to the Community Focal Point/ Reserves and should be considered in detail at subdivision consent stage.
150. Although there are some design improvements that could be made to the ODPs, I remain concerned that a higher dependency on car usage from those living within these rural residential developments will have widespread impact on the quality of urban spaces within Rolleston. This could manifest itself through greater severance of communities across busy roads and greater car parking demands around various centres and community facilities that dilute their vitality. The traffic report indicates there is capacity to accommodate the trips, but I recommend more consideration is given to the impacts of this additional traffic loading on the cohesion of the community.

Conclusions

151. The Applicant should further consider the potential severance and amenity impacts on urban communities and associated centres and community facilities within the MUL from greater car dependence and commuting residents.
152. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:

- The contribution from PC8 to the establishment of a further 'Key Gateway' at the intersection of Dunns Crossing Road and Burnham School Road to maintain and enhance a legible entrance to Rolleston.
- Add a note to the ODPs to prevent the establishment of a 'gated community', and contribute further to the continuity of the wider community through providing clearly defined walking routes/ circuits that embrace the residents of Rolleston.
- Coordinate the proposed road alignment connecting the Holmes Block to Dunns Crossing Road with that proposed for the Stonebrook development opposite to facilitate access to its local centre.
- Provide for distinctive art instillation or landscaped rest stops along the routes to complement the Community Focal Point/ Reserves already provided in the ODPs. This should be considered in detail at subdivision consent stage.

5.4 Character and Amenity Provisions

Relevant Submissions

153. A number of general submissions were made opposing PC8 and 9 that have referenced issues related to Character and Amenity Provisions. These are listed below and quoting particular aspects of concern:

- Malvin Griebel (S4 D1) and Janice Griebel (S5 D1) both oppose the plan changes, particularly in relation to their environment 'The erection of dwellings instead of just paddocks from us will adversely effect our environment; looking at houses instead of just paddocks with cattle grazing...'
- Canterbury Regional Council (S18 D1) oppose the plan changes, particularly that '...it is considered development of the site may exhibit a low density urban character'
- John & Lisa Barclay (S31 D1) oppose the plan changes 9, particularly questioning 'How can this subdivision blend with the rural look of existing properties opposite when the supposed rural buffer has a minimum of 15 driveway access points as well as the two internal access roads'...'to maintain any semblance of the rural character the access to all properties should from within the subdivision and egress via the town new roads only. These roadsides are currently used by equine enthusiasts. How are we supposed to ride horses around he road safely? There will be no rural look whatsoever'. 'I will personally miss my views of the Southern Alps which are iconic for me...views will become less open and more residential especially with all if the roadside sections having direct access onto Dunns Crossing Road.'

Urban Design Response

154. Intensification of residential areas reduces the amount of some private amenity the residents have. Ideally this gets transferred to the public realm, or common areas, of the town where it can potentially be shared by all. This can increase the extent and quality of the amenity while also increasing the efficiency of its establishment and

reducing maintenance burden on individuals. The provision of public amenity, such as urban parks, therefore, aims to offset or mitigate the intensification of residential areas.

155. Historically, the setting aside of large areas of parkland within urban areas was motivated by overcrowding and industrialisation within towns and cities and aimed to provide greater health benefits, proximity to the wide open spaces and to maintain some connection with nature. In post-industrial times, this thinking has progressed to provide a varied network of open spaces that actually connect with rural land via green corridors and waterways. These public open spaces can fulfil a multifunctional role, which provide different types of passive and active recreation, urban ecology and other soft infrastructure.
156. There is also a perceived value in maintaining links to rural land, in my view, as it sets the context in which residents live and is often a key differentiator to attract them to a smaller town, rather than a sprawling city. The fact that rural land is in close proximity to a town, makes these types of landscapes more highly cherished and emphasises the non-production role played by rural areas.
157. There is also a growing demand to increase access to rural land and this is particularly evident with the 'Right to Roam' movement in the UK, but also more locally in the establishment of walking and cycling tracks in the Port Hills and local forest lands (i.e. McLean's Island and Bottle Lake Forest) on the edge of Christchurch. It is now recognised that all the recreation resources of a town should be seen as a 'recreational system', comprising both public and private, indoor and outdoor, within and outside its urban boundary, which offers a wide variety of substitutable opportunities to residents and visitors alike¹⁹.
158. However, even though residents may not be able to access rural land physically, it is still perceived to be there or available to view when desired. It is increasingly being recognised that towns and districts are competing to attract scarce and transitory investment, particularly in these recessionary times. The amenity provided within and around a town can contribute greatly to a lifestyle appeal and therefore its ability to attract future residents and the businesses that can support and service them. In considering the extent of rural residential, there is a risk that the very rural qualities that attract residents to a town and make it a popular place to live are compromised by the subsequent loss of amenity in accommodating them. This has been referred to as the "regional open space paradox"²⁰ where the qualities of the town and rural environment can both be compromised through its own success.
159. Changes should not be looked at in isolation from the wider urban context as the processes and patterns observed at the urban edge are intricately linked to other initiatives within the town. Rural residential development potentially undermines the incentives for investing in urban regeneration and intensification within older parts of a town and more intensive greenfield developments that surround them.
160. There are also additional risks that any displacement of residential population from more intensively developed urban neighbourhoods to rural residential areas potentially reduces or delays ability to establish and support this urban amenity. The lack of or

¹⁹ Rodgers, B. (1969) "Leisure and Recreation", Urban Studies, 6, 368-383.

²⁰ Low Choy, D. C. (2004) "The Regional Open Space Paradox", Queensland Planner, 44(3), 12-15.

lesser quality of this amenity through underinvestment, potentially reduces incentives for more intensive development and, therefore, becomes a compounding problem for a town seeking to establish itself.

161. There are other reciprocal impacts, for example, increased traffic on roads constructed to facilitate easy movement to, around, or between urban areas. In my experience, the addition of more traffic on urban streets and parking demand in a town centre or community facility car parks introduces a range of amenity impacts for urban residents within the town.

Rolleston Structure Plan

162. The vision for Rolleston, as expressed in the structure plan, focuses on maintaining the character of a rural town and describes the amenity benefits from potential interweaving of various experiences that can occur with urban life:

'The town has been successful in drawing a distinctive character from its close associations with the rural landscape in which it discretely sits - you can still catch glimpses of the Port Hills or Southern Alps as you move around the town. Enhancing the natural character of Rolleston has reflected Ngai Tahu's association and identity with the landscape and will also enhance the town's distinctive character.'

...The various festivals and weekly market are events that gather the community together in the town square on a regular basis. Many combine a visit to the town centre with their trip to see the new exhibition at the art gallery, their kids competing at the nearby Recreation Precinct or following a long walk, bike or horse ride around the town's green belt.

...All in all, residents are pretty proud of Rolleston and what's been achieved over the last few years. It hasn't lost what residents enjoyed about Rolleston when it was smaller, but has grown better as it's matured.'

163. Section 5.2.1 'Character Features Development Drivers and Neighbourhoods' of the structure plan emphasises the careful balancing that will need to occur as Rolleston at least doubles in size, yet recognising the need to retain the features that attracts residents to live there:

'One of Rolleston's distinctive features is its "rural town" feel. However, due to its size as the biggest town in Selwyn and close links to Christchurch, the future growth of Rolleston will need to adopt more urban approaches. The Structure Plan aims to strike a balance between the two and seeks to enhance...rural or existing character features throughout the town' (p45)

164. In formulating the structure plan there was an appreciation that residents who choose to move to Rolleston are attracted to the rural amenity that larger cities, like Christchurch, are less able to offer. The structure plan has made a concerted effort to provide open spaces and character within the MUL that can offer some of the benefits of rural living, such as outlook on to wide open spaces and less formal recreational opportunities. In my opinion, there will be the ability for residents to seek out those parts of Rolleston within the MUL that best offer these types of experiences without overly compromising on the density imperative. At the end of the 'Open Space'

chapter, the checklist for 'A Well Designed Rolleston' summarising the intended outcomes of the structure plan that strongly contribute these qualities:

'Open spaces of varying size, uses and qualities will be integrated into all aspects of the Structure Plan, from high quality intensively used spaces in the town centre to more informal provisions in the 100Ha District Park. These are linked together via green corridors or feature avenues along existing rural roads. Indicative cross sections provided through open spaces, including the green belt, ensure there are public edges to all surrounding developments for accessibility and safety.'

Existing rural character features (i.e. shelter belts, water races) have been incorporated into green corridors or their retention has been encouraged throughout all developments. Similarly, the maintenance and enhancement of strategic views to the Southern Alps and Banks Peninsula have also been promoted.

The large Recreation Precinct is located centrally within the MUL, yet on the fringes of a number of more intensively developed neighbourhoods that cluster around it.' (p100)

165. The structure plan considers, under the objective of Realistic and Achievable Rolleston, the resource efficiency and greater pulling power of users when public open space, community facilities and centres are considered together as a concentrated form of amenity provision:

'Co-location with other facilities allows for an integrated design and management. A critical mass of users is able to be established to support a local centre and initiate more intense, higher quality, development in close proximity.' (p101)

166. Under the same objective, the principal of 'Maintaining and managing quality places' highlights that the structure plan needs to consider the potential long term implications to the community, if these capital investments are not supported thorough good urban design and careful management:

'Implementing high quality developments on the ground is only the start of the process. When developing a Structure Plan that spans generations, it is important to work carefully through the design process and set in place clear management structures early. This ensures the town matures sensitively and avoids any capital investment becoming a liability for the town in later years.' (p21)

167. There is a concentration of core community facilities located centrally within the structure plan as a means to evenly service and provide amenity to both the existing and new urban communities. Neighbourhood centres surround them, but the integrity of their walkable catchments is not generally affected by the presence of these larger spaces at the heart of the town. Other more linear spaces are also provided that link public open spaces together into a network and integrate them into the rural fringe at arrival and departure points:

'The gateway and avenue features are indicated in the short term to quickly establish a maturity for the town and coordinate with planned upgrades for key rural roads within the MUL.' (p101)

168. Avenue planting along State Highway 1 is one of the proposed features on the 'Public Open Space' map²¹, where it follows the northern edge of the town and where it dissects it along the southern boundary of Izone Business Hub. This continues an existing avenue of trees on the eastern side, linking up the town with Weedens Road, and finishes near the Holmes Block at the intersection with Dunns Crossing Road.
169. 'Key Gateways' are also shown positioned at three intersections with State Highway 1 and at the intersection of Lowes Rd and Dunns Crossing Road. The structure plan does not currently show one at the intersection of State Highway 1 and Dunns Crossing Road, as this was not considered a major entrance into Rolleston at the time.

Proposed Plan Changes

170. I consider the incorporation of the Countryside Areas within recent versions of the ODPs is a positive and innovative feature of the rural residential developments and will likely help to integrate PC8 and 9 into both rural and urban contexts. I acknowledge that these have reduced the average allotment size to below that provided for in RPS-PC1 and, like public open spaces in urban environments, transfer some private amenity into common areas under collective management. However, I do not consider them to be an effective substitute for the existing openness of rural land and recommend a greater mix of larger allotments are provided to break up the more concentrated residential areas centrally located within each Block.
171. If the plan changes do proceed, I concur with the intention to provide a 'visual transition area' along Dunns Crossing Road to maintain a rural feel for those travelling on the outskirts of the town. Given the potential increased prominence of the intersection of Dunns Crossing and Burnham School Roads on the edge of the MUL, I consider it is necessary to add an additional key gateway into town the town at this point. In my opinion this will further reinforce the distinction of the town limits with peri-urban uses on its fringes. I recommend some contribution is made to establishing this through the plan change process.
172. I also commend the use of rectilinear patterns within the ODPs and consider this does achieve some of the character traits of the rural land that design principles within the structure plan are seeking from greenfield developments. I remain unconvinced as to how responsive the layout is to the actual field boundaries and other existing landscape features within the Holmes and Skellerup Blocks and have deferred analysis of this aspect to Mr Craig. From an urban design perspective, I have concerns that an overly uniform approach to the allotment layouts and a limited hierarchy of routes will raise issues with wayfinding and legibility throughout the blocks, particularly for visitors. I recommend this be addressed through a reduction in allotment numbers and a greater mix of allotment and block sizes.
173. It is unclear in the plan change documentation what the purpose of and features expected within the Community Focal Point/Reserve within each development are. I

²¹ Rolleston Structure Plan – Public Open Space map (figure 7.3, p90)

consider there is the potential to provide communal facilities that may be able to minimise some travel distances, inefficient provision on each allotment and encourage informal social interaction, such as children's play facilities, tennis courts, post boxes and the like. I recommend more consideration is given to these.

174. Furthermore, the Holmes block is relatively close to formal sports fields at Brookside Park, located on the western edge of Rolleston. Many local recreation needs could be fulfilled there and I recommend carefully integrating the access routes within the ODP with those along Duns Crossing Road. The detail of this is best achieved when applying for subdivision consent. The Skellerup Block is less accessible and will be more reliant on the Council or other developers completing the proposed greenbelt link to Brookside Park.
175. In my opinion, the potential loss of amenity, such as expansive views, proximity and access to the edge of rural land, for residents of the town should be recognised. As recommend above, I regard the completion of the proposed greenbelt is an important aspect of this. I also recommend that assurances are sought through the plan change process that these rural residential developments will not become gated communities thereby preventing recreational access around and through this peri-urban area and that a note to this effect could be added on the ODP.
176. One of my primary concerns is the impact the development of 175 number lots outside the MUL of Rolleston will potentially have on the investment in regeneration of existing urban land and uptake of planned greenfield development. There is a risk that this may affect the speed, extent and quality of delivery of urban amenity if this growth is threatened. I recommend minimising the number of rural residential allotments outside the MUL to minimise these risks.

Recommendations

177. The Applicant should further consider the potential impact of PC 8 and 9, developed outside the MUL, on the investment in regeneration of existing urban land and uptake of planned greenfield development within Rolleston township. There is a risk that this may affect the speed, extent and quality of delivery of urban amenity to support sustained growth.
178. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:
- A greater mix of larger allotments is provided to break up the more concentrated residential areas centrally located within each Block.
 - The contribution from PC8 to the establishment of a further 'Key Gateway' at the intersection of Dunns Crossing Road and Burnham School Road to maintain and enhance a legible entrance to Rolleston.
 - Improve way finding and legibility throughout the Blocks, particularly for visitors, through a reduction in allotment numbers and a greater mix of allotment and block sizes.

- Provide for shared communal facilities that may be able to minimise some travel distances, inefficient provision on each allotment and encourage informal social interaction, such as children's play facilities, tennis courts, post boxes and the like.
- Careful integration of access routes within the ODP with those along Duns Crossing Road through the subdivision consent process.
- Add a note to the ODPs to prevent the establishment of a 'gated community', and contribute further to the continuity of the wider community through providing clearly defined walking routes/ circuits that embrace the residents of Rolleston.

5.5 Choice and Diversity

Relevant Submissions

179. A number of general submissions were made opposing PC8 and 9 that have referenced issues related to Choice and Diversity. These are listed below and quoting particular aspects of concern:

- Susan Chaney (S27 D1) oppose the plan changes, particularly 'The sections are too small for animals... neighbours would complain'
- John & Lisa Barclay (S31 D1 - PC9 only) oppose the plan change, particularly relating to the small allotments 'I know of numerous people that want 1ha-20ha [allotments]. The reasons are various including the privacy, going to more self sufficient society, areas to accommodate various hobbies...The proposed subdivision of smaller lots (less than 1ha) is not appropriate....They become sick of maintenance or decided to cash in. People investing in lots of 1ha or more are generally aware of the maintenance that will be required...In fact all it is really is large sections with large dwellings and large garden. It is not rural living at all. Some of it is; however adjacent to rural land which gives a rural feel.'
- General submissions indicating there are opportunities for alternative rural residential locations in the District, include:
 - Robert Barker (S1 D1) oppose the plan changes
 - Mark Larson (S2 D1) oppose the plan changes
 - Poultry Industry Association of NZ Inc. & Tegal Foods Ltd. (S8 D1) oppose the plan changes
 - Bob Paton (S13 D1) oppose the plan changes
 - Sam Carrick (S19 D1) oppose the plan changes, but only if it adversely affects the equitable allocation of rural residential land
 - B&A George and S&S Cunningham (S20 D1) oppose the plan changes

- Denwood Trustees (S22 D1) oppose the plan changes
- The West Melton/ Newtons Road Group (S23 D1) oppose the plan changes
- K McIntosh, Wha Jung & Se Kyung Lee (S24 D1) oppose the plan changes
- BC & MA Coles Family Trust (S25 D1) oppose the plan changes
- John & Lisa Barclay (S31 D1 - PC9 only) oppose the plan change

180. Those submitters seeking specific relief, include:

- Sam Carrick (S19 D1) oppose the plan changes, but only if it adversely affects the equitable allocation of rural residential land around the other townships

Urban Design Response

181. 'Choice' is one of the qualities recognised in the 'Seven Cs' of the NZ urban design protocol.

'Quality urban design fosters diversity and offers people choice in the urban form of our towns and cities, and choice in densities, building types, transport options, and activities. Flexible and adaptable design provides for unforeseen uses, and creates resilient and robust towns and cities.'

182. As indicated in the above quote, choice and diversity are closely related. While the benefits of choice are relatively clear, diversity is less so. Diversity of residents improves the tolerance of a community to difference and, through this, allows the freedom for more personal expression. This can promote creativity within an urban community, improving its ability to respond to different opportunities, be innovative and, therefore, competitive and resilient to change.

183. In my opinion, this is best achieved in an urban environment with a fine-grained mix of uses that avoids the monotony of both highly segregated activities and lower densities. The challenge is to create a diversity of living arrangements and attract a mix of residents, so there is a dynamic and vitality in a town. This creates an urban environment where residents move around on different schedules and for different purposes, but who continue to use many facilities in common. This increases the potential for informal social interaction.

184. I do not consider that it is necessary to have a forced mix of incompatible uses but at least relies on good access and mobility, as discussed in the section on 'Urban Form and Coordinated Growth' above. This allows residents to naturally find a neighborhood or community group that they associate with while ensuring the creative energies of diversity is harnessed. Proximity, which increases the chances of social interaction, is therefore important.

185. Providing for choice and diversity also reduces the risk of excluding resident groups, it is important that residents can find the type of accommodation option that suits their particular needs or that those who already live in the town have ability to relocate

within their own community as their needs change. It is inevitably a fine balance, in my view, between catering for residents' needs and desires while also having a strategic and balanced view of the town.

186. In my opinion, rural residential developments can provide opportunities for self sufficiency for individual residents, rather than operating wholly within a community-based system. I consider there is an inherent flexibility and adaptability in larger rural residential lots for a range of land uses and which can remain relevant over the long term.
187. In particular, rural residential development would suit those looking to 'downshift' the intensity of their lives or operate more in live-work situations. From a living perspective, these types of lot sizes can provide sufficient land to grow produce in gardens, orchards and to keep small livestock, minimising dependency and frequency of travel into urban areas. From a working perspective, small home-based businesses can operate with less land constraints if, for example, separate office quarters or storage areas were needed to be established. 'Telecommuting' and other decentralised business activities make it easier to avoid excessive travel in those situations where living and work can be combined and reliance on other employees is limited. Moreover, the edges of urban areas tend to be close to higher order distribution networks, such as highways and rail links. These types of infrastructure typically occupy the peri-urban areas as higher speeds and the larger land take requirements are less inhibited.
188. Another potential consequence of too much choice, in terms of providing for a high number of residents to live in rural residential developments, is the influence it can have on other activities and their distribution. The dispersal of workers to fringe parts of a town can in turn influence the relocation of businesses to provide employment for these dispersed populations and/or retailers to service them. This can potentially change the dynamics within urban areas and may reduce the choice and diversity of other activities within the town. I consider, providing some choice is acceptable, but not so much that it compromises other urban qualities.

Rolleston Structure Plan

189. Choice of accommodation was considered an important quality within the MUL and was communicated early in the vision statement:

The residents of the district find it relatively easy to find just the right place to live as they look to move house within the community they are familiar with, staying close to friends; or to relocate into the town for new work or retirement off the farm

190. Under the 'A Sustainable Rolleston' objective and its 'Improved Wellbeing' principal, the concept of diversity was also introduced. One of the key structure plan aims was to create:

'Varied and accessible community services that reflect the cultural diversity of the community' (p14)

191. Both choice and diversity are then addressed within the 'A Well Designed Rolleston' objective, particularly through Principle 5:

‘Overlapping mix of land uses’

- *Provide a wide variety of land use activities (e.g. retail, office, community facilities) within comfortable walking distance of the highest population densities;*
- *Utilise a mix of uses to encourage a diverse and compatible range of activities, particularly in centres;*
- *Provide a choice of housing typologies to cater for a range of different lifestyles.’ (p16)*

192. These key aims and principals are then incorporated in to section 5.2 ‘Key Aspects of the Structure Plan’ under the sub-heading of ‘Land use patterns and community facilities’:

‘A mix of living zones will be provided in Rolleston to create diversity in the community and deliver a range of residential housing types to meet community needs. For greenfield areas in Rolleston, the Structure Plan provides a density spread of 20, 15 and 10 households per hectare. In these areas section sizes would range between 375m² to 750m². Higher proposed densities are concentrated in close proximity to the town centre and supporting neighbourhood centres, including some comprehensive housing developments within or immediately adjacent to these. Further residential infill and intensification is anticipated in underdeveloped parts of existing zoned land.’ (p43)

193. Section 7.1.2 ‘Urban Grain’, further reinforces the relationship between urban form and choice:

‘New housing developments in Rolleston will fit into an overall structure, which identifies important links and areas where a tighter urban grain with smaller lot sizes and shorter blocks are most appropriate. The most compact patterns are intended to occur closer to town and neighbourhood centres with more relaxed patterns on the fringes. This approach matches the increase in population within walking distance of the centres, providing greater permeability and variety of routes, while also increasing the choice of lot sizes and housing typologies within the town.’ (p78)

194. These illustrate that there are a variety of lot sizes provided for within the MUL, beyond the intensification areas located around the various centres. There is also the flexibility to provide larger lot sizes in the context of Rolleston’s rural character, as explained under the ‘Land Use’ chapter of the structure plan:

‘Due to Rolleston’s ‘rural town’ character the densities on the lower end of the benchmarking spectrum are more relevant: however they illustrate that the minimum density required close to urban centres and public transport is approximately 15HH/Ha.’ (p83)

195. I consider the large extent of rural residential land within PC8 and 9 potentially compromises this message. However, analysis of the existing Rolleston context in Section 7.2.3 ‘Current Densities’ indicates there are the existing Living 2 (5,000m²) and

Living 2A (10,000m²) zoned land in the district plan that provides for comparable densities to those proposed for the Living 3 zone in PC8 and 9. The structure plan proposes to infill these over time in line with RPS-PC1 density targets of 10 households per hectare within the Urban Limits. This in turn, is likely to increase the demand for rural residential forms of development within rural zoned land on the periphery of townships. It could be argued, in my view, that this type and number of rural residential allotments could be appropriately redistributed beyond the urban limit with minimal net loss on the existing baseline.

196. The Holmes Block is in close proximity to the existing zoned areas of Living 2 (up to 5000m²) and Living 1B deferred land, which already provide choices for larger rural residential allotments over the short term. Although in the latter case, the Council has recently been working with residents to manage the transition from larger lots towards Living 1B (750-1200m²) densities. There are also a large number of recently developed Living 1 (up to 750m²) lots, which are unlikely to be redeveloped in the short or medium term. As discussed earlier, the ODP for the remaining undeveloped land in this area, the Stonebridge development, is unlikely to change this mix in any considerable way. I consider there will be a particularly flat density gradient in this north-western quarter of the structure plan, until the neighbourhood centre becomes a more viable proposition. This is only likely to occur when the demand for infill the larger lots in this area is stimulated and the area is able to regenerate.
197. Adjacent to the north-western corner of the Skellerup Block, there is existing provision for Living 2A (up to 10 000m²) sections. In my opinion, these could create a barrier between smaller zoned land, discussed above, and a range of densities provided within the greenfield development areas. It is unclear how quickly these would be subdivided into smaller sections, as indicated in the structure plan. In my experience, this poses a number of land management issues, which would require a high degree of cooperation between a multiple and discrete land owners, and is likely to take longer than releasing larger and contiguous rural land parcels with fewer owners. The consequences of this, in my view, are that the connections and finer land use mix required to fully promote choice and diversity in this part of the structure plan will be limited in the short to medium term.

Proposed Plan Changes

198. The number of allotments provided for across PC8 and 9, 102 in Holmes Block and 73 in Skellerup Block, equates to a high proportion of the RPS-PC1 allocation for SDC. While the brief of the structure plan did not allow for the consideration of rural residential development, this type of development is anticipated within RPS-PC1 to provide for a diversity and range of living environments. However, this was not specifically allocated to a particular town in the Selwyn District and, if exclusively provided for around Rolleston, it will likely diminish the choice and diversity for other townships. Although, I do agree that there is a case for priority around the KACs of Rolleston and Lincoln, where existing employment and community services are best provided in closer proximity to residents of rural residential developments. I have not assessed the potential for Lincoln and other towns within the District to provide for rural residential developments, but I consider if there are opportunities to more evenly allocate allotments across towns, particularly with Lincoln, then this would enhance the choice and diversity available to a wider spectrum of residents.

199. I acknowledge the introduction of larger 4Ha 'lifestyle' blocks into the recent ODPs, increase the variety of allotments available and potentially creating options for residents to be more self sufficient. However, I remain concerned with the limited variety and high degree of regularity evident in other allotment sizes and configurations. I recommend considering this further in combination with recommendations made in the section on 'Character and Amenity' above.
200. Without some influence over the type of residents that could most suitably use these peri-urban areas, then I consider there remains a risk that these rural residential developments would result in having a very limited mix or type of resident and simply become a segregated dormitory suburb with little to offer in diversifying the town's community or business structures. While the plan change documents establish a demand for rural residential lots, as identified in the valuer's report, there appears to be little discussion on why this type of activity is needed and what contribution they make to the wider Rolleston community. While I recognise rural residential developments can cater well for those residents wanting to isolate themselves from urban areas, I consider more justification is required with respect to how much representation is appropriate to achieve a balanced community and why this should be prioritised over or displace alternative activities that could provide other choice and diversity benefits.
201. I also acknowledge the potential for additional residents living around Rolleston to positively contribute to the success of the town. However, I consider a wide range of choice and diversity can be more effectively provided through the continual infill and greenfield growth of the town, which supports the centre strategy and community facilities provided for through the structure plan. I recommend limiting the number of allotments provided to target more appropriate urban choices avoid any compromise to the town's centre-based growth strategy.

Recommendations

202. The Applicant should further consider the justification as to how much representation is appropriate to achieve a balanced community and why this should be prioritised over or displace alternative activities that could provide other choice and diversity benefits to Rolleston.
203. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:
- Provide a greater mix of larger allotments to provide greater choice for and diversity of residents.

6.0 SUMMARY OF RECOMMENDATIONS

204. In summary, I recommend the following considerations and amendments to the proposed plan change provisions as collated from the previous sections of this report:

6.1 Urban Form and Coordinated Growth

205. I recommend further considerations should be given to alternative peri-urban land uses that better contribute to sustainable management of the town and its rural context.

206. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:

- Identify on each ODP key community linkages to be established with existing and proposed facilities within the MUL, as indicated in the Rolleston Structure Plan. Prepare assessment matters to ensure these are direct, pleasant and varied.
- Coordinate the proposed road alignment connecting the Holmes Block to Dunns Crossing Road with that proposed for the Stonebrook development opposite to facilitate access to its local centre.
- Coordinate the proposed road alignment connecting the Skellerup to Dunns Crossing Road with that proposed for the Neighbourhood and Local Centre within the Goulds Road Neighbourhood.
- Utilise development contributions from the Skellerup Block to facilitate the proposed main (primary) road link with it and the proposed Neighbourhood Centre on Goulds Road.

207. In response to submissions seeking specific relief:

- I concur with the Poultry Industry Association of NZ Inc. & Tegal Foods Ltd. (S8 D2) seeks an amendment that should the Plan Change be approved, the scale should be reduced to be more consistent with Plan Change 1 (i.e. a lower number of lots). I consider these should be closely aligned with the RBRR/PC7 nodal approach providing for 50 allotments.
- I consider the recent ODP amendments, dated 11th February 2011, addresses the submissions by the New Zealand Transport Agency (S11 D1 and D2) seeking an amendment that the minimum allotment size be increased to 1 hectare to be in alignment with the definition of 'rural residential' in PC1. This is achieved through the addition of five 'Large Lots' in each Block and the distribution of a large proportion of land into the Countryside Areas shown on the ODP.

6.2 Urban Containment and Edge Conditions

208. I recommend the Skellerup Block be avoided due to loss of rural outlook for a considerable length of the MUL boundary along Dunns Crossing Road, when combined with existing Living 2 Zoned land and the proposed Holmes Block.
209. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:
- The Holmes Block ODP provides a Countryside Area, including a walkway, along Burnham School Road, at least along that section of the boundary that follows the MUL. This should provide for the qualities of the greenbelt as anticipated within the RSP.
 - Introduce larger 4Ha lots with the remaining rural edges of Skellerup Block to contain further expansion of rural residential development and improve the rural outlook for those allotments deeper within the Block.
 - Incorporate view shafts through the Large Lots in both ODPs to protect views from the Countryside Areas to rural land beyond.
 - As part of the 'State Highway Buffer Planting Treatment Required', extend the tree lined avenue planting proposed in the RSP to the western end of the Holmes Block along the State Highway, to mimic a similar approach on the eastern approach to Rolleston, originating at Weedens Road intersection.
210. In response to submissions seeking specific relief:
- I agree in part with Paul Mason (S31 D2) who seeks an amendment 'that as an alternative the development should not proceed until all residential land in the District Plan has been developed.' The recent PC9 amendments staging the Skellerup Block to 2016 are sufficient to develop in parallel with the Goulds Road Neighbourhood in Stage 2A of the RSP, but I do not consider this should be delayed further with planned stages further the east of the MUL.
 - I concur with Ernest Smith (S21 D1) seeks an amendment to 'significantly reduce (by at least 50%) the number of lots allocated to SPBL. This could be achieved by deleting either one of Plan Changes 8 or 9'. I have indicated, for the reasons given above, that I recommend PC9 (Skellerup Block) is to be deleted and the nodal approach applied to the Holmes Block.

6.3 Community Cohesion and Continuity

211. The Applicant should further consider the potential severance and amenity impacts on urban communities and associated centres and community facilities within the MUL from greater car dependence and commuting residents.
212. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:

- The contribution from PC8 to the establishment of a further 'Key Gateway' at the intersection of Dunns Crossing Road and Burnham School Road to maintain and enhance a legible entrance to Rolleston.
- Add a note to the ODPs to prevent the establishment of a 'gated community', and contribute further to the continuity of the wider community through providing clearly defined walking routes/ circuits that embrace the residents of Rolleston.
- Coordinate the proposed road alignment connecting the Holmes Block to Dunns Crossing Road with that proposed for the Stonebrook development opposite to facilitate access to its local centre.
- Provide for distinctive art instillation or landscaped rest stops along the routes to complement the Community Focal Point/ Reserve already provided in the ODPs. This should be considered in detail at subdivision consent stage.

6.4 Character and Amenity Provisions

213. The Applicant should further consider the potential impact of PC 8 and 9, developed outside the MUL, on the investment in regeneration of existing urban land and uptake of planned greenfield development within Rolleston township. There is a risk that this may affect the speed, extent and quality of delivery of urban amenity to support sustained growth.
214. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:
- A greater mix of larger allotments is provided to break up the more concentrated residential areas centrally located within each Block.
 - The contribution from PC8 to the establishment of a further 'Key Gateway' at the intersection of Dunns Crossing Road and Burnham School Road to maintain and enhance a legible entrance to Rolleston.
 - Improve way finding and legibility throughout the Blocks, particularly for visitors, through a reduction in allotment numbers and a greater mix of allotment and block sizes.
 - Provide for shared communal facilities that may be able to minimise some travel distances, inefficient provision on each allotment and encourage informal social interaction, such as children's play facilities, tennis courts, post boxes and the like.
 - Careful integration of access routes within the ODP with those along Duns Crossing Road through the subdivision consent process.
 - Add a note to the ODPs to prevent the establishment of a 'gated community', and contribute further to the continuity of the wider community through

providing clearly defined walking routes/ circuits that embrace the residents of Rolleston.

6.5 Choice and Diversity

215. The Applicant should further consider the justification as to how much representation is appropriate to achieve a balanced community and why this should be prioritised over or displace alternative activities that could provide other choice and diversity benefits to Rolleston.
216. If PC8 and 9 were to proceed, I recommend reducing the overall number of allotments within the Holmes and Skellerup Blocks to reflect the nodal approach of RBRR/PC17 and to incorporate the following recommendations:
- Provide a greater mix of larger allotments to provide greater choice for and diversity of residents.

Tim Church
Principal/ Urban Designer
Boffa Miskell Limited

**Section 37 of the Resource Management Act 1991
Report on Waiver or Extension of Time Limits
Private Plan Change Applications**

Application number: PC090008 Holmes Block and
PC090009 Skellerup Block

Applicant: Selwyn Plantation Board Limited

Site address: 385 Burnham School Road and Dunns Crossing Road

Legal description of site: PC090008 - PT SEC 1 RES 309, PT RES 302, PT RES 1759, RS 3295 and PC090009 - PT LOT 4 PT RES 1342 PTS R S 31354 31356

Description of application:

PC090008 - private plan change application to rezone 92ha of land zoned rural (outer plains) to living 3. The application seeks to create 125 rural-residential allotments with associated servicing and development controls.

PC090009 - private plan change application to rezone 72.7ha of land zoned rural (outer plains) to living 3. The application seeks to create 100 rural-residential allotments with associated servicing and development controls.

Background

The requests were publicly notified together on the 14th August 2010. The initial closing date for submissions was the 10th September 2010. A decision pursuant to Section 37A of the RMA91 extended the closing date for receiving submissions by an additional 10 working days. This extended timeframe was deemed to be reasonable to enable interested parties affected by the recent earthquake event and ongoing civil defence emergency to consider the requests and lodge submissions. This decision amended the closing date to the 24th September 2010.

A total of 7 late submissions were received after the closing date. A summary of these late submissions, the date they were received and the number of working days that had passed since the closing date is provided as follows:

Late submission	Date Received	Working days (post close of submissions)
S31 J & G Burdis	30Sep10	4
S32 N Sole	29Sep10	3
S33 Dryden Trust	14Oct10	19
S34 J Baxter	2Nov10	26
S35 G & P Poole	2Nov10	26
S36 G & J Meadows	2Nov10	26

S37 P Tilling	2Nov10	26
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The late submissions received from J & G Burdis (S31), N Sole (S32) and Dryden Trust (S33) all outlined that the need to focus on earthquake recovery and associated business activities were the reasons why the submissions were received after the closing date.

The late submissions received from J Baxter (S34), G & J Poole (S35), G & J Meadows (S36) and P Tilling (S37) were a pro forma of the original submission of Mr B Paton (S14). Mr Paton confirmed that the reasons these submissions were received late was due to overseas commitments. No formal response to Council's correspondence seeking clarification of the reasons for the late submissions has been received from the submitters outlined above.

The applicant has confirmed in writing that they do not believe a waiver of any of the late submissions through an extension of time is warranted under the current set of circumstances. This advice has been provided on the basis that the original closing date was extended by two weeks in response to the earthquake event and ongoing recovery and that late submitters continue to have the ability register their interest by lodging further submissions.

Reasons why a waiver or extension of the time limits specified in the Act should be extended

It is considered necessary that a waiver be granted for receiving the late submissions from J & G Burdis (S32), N Sole (S32) and Dryden Trust (S33) on the grounds that the recent earthquakes and ongoing civil defence emergency resulted in these persons not being able to meet the stated deadline. The nature of the earthquake event is such that some people have been affected more directly than others. Correspondence from the above submitters identifies that they were significantly affected by the earthquake, to the extent that were unable to lodge a submission within the prescribed time limit.

The primacy given to earthquake recovery over the everyday statutory administrative tasks undertaken by District Council's has been recognised in the Canterbury Earthquake RMA Order 2010. This legislation enables Council's to waive standard timeframes under the RMA91 where earthquake response and recovery warrants an extension of time limits. These statutory timeframes are able to be extended by up to 6 months.

The 19 working days required to be waived to accept the above late submissions is considered to be reasonable and appropriate given the uniqueness of the recent earthquake event. Section 37A (a) enables a local authority to extend the timeframes by no more than double the specified timeframe without the approval of the applicant.

It is considered that there are insufficient grounds to waive the late submissions received from J Baxter (S34), G & P Poole (S35), G & J Meadows (S36) and P Tilling (S37). This is on the basis that: (a) the submissions are a pro forma of an original submission and do not raise any additional matters for consideration; (b) the late submissions were received after more than double the timeframe specified in the RMA91; (c) the applicant has not agreed to an extension of time; and (d) there have been no unique circumstances identified by the submitters as to why the submission deadline was not met (i.e. earthquake response and recovery).

How long will the waiver or extension apply for?

It is considered that 19 additional working days to enable the late submissions received from J & G Burdis (S32), N Sole (S32) and Dryden Trust (S33) to be accepted is appropriate for the reasons outlined above. This notice extends the closing date for receiving submissions from Friday 24th September to Thursday 14th October 2010.

There are considered to be insufficient grounds to grant an extension of time to the late submissions received from J Baxter (S34), G & P Poole (S35), G & J Meadows (S36) and P Tilling (S37) for the reasons outlined above. These submissions are considered to be void and should not be considered in the further substantive consideration of these requests. The late submitters continue to have an ability to register their interest in proceedings by lodging a further submission on original submissions received on Plan Change 8 and 9.

Will the interests of any person who may be directly affected by the extension or waiver be affected?

The applicant has identified that a waiver to grant an extension of time for any of the late submissions is not warranted under the current set of circumstances. However, it is considered that there are sufficient grounds to accept the late submissions from those parties who have identified that they were impacted upon significantly enough by the earthquake that it precluded them from meeting the submission deadline. The extension is less than double the timeframe prescribed in the RMA91 and the registration and continued consideration of these submissions has not resulted in any undue delay to the process or generated additional cost to the applicant.

The late submitters that have not been issued with a waiver of the extension of time are directly affected by the above decision as their submissions cannot be considered in the ongoing assessment of the plan change requests. However, these parties continue to have an ability to register their interest in the proceedings by lodging further submissions.

Will the interests of any community in achieving adequate assessment of the effects of the proposal be affected by the extension or waiver?

This decision is considered appropriate and necessary to recognise the impact the recent earthquake event has had on interested parties, while also ensuring that late submissions do not result in undue delay and added costs to the applicant.

Will unreasonable delay be avoided?

The 19 working days granted to the late submissions received from J & G Burdis (S32), N Sole (S32) and Dryden Trust (S33) is less than the period able to be extended as of right under Section 37 (no more than double the original 20 working day notification period). These late submissions had been received before the summary of submissions had been initiated and did not result in any delay to the process.

The remaining late submissions were received a significant time after the prescribed closing date without sufficient justification as to why they failed to meet the stated deadline.

Recommendation:

That for the above reasons the closing date under Clause 5 (3)(b) for receiving submission on Plan Changes 8 and 9 should be extended by a further 19 working days for the late submissions received from J & G Burdis (S32), N Sole (S32) and Dryden Trust (S33) pursuant to Sections 37 and 37A of the Resource Management Act 1991.

That for the above reasons an extension of time limit for receiving the late submissions under Clause 5 (3)(b) from J Baxter (S34), G & P Poole (S35), G & J Meadows (S36) and P Tilling (S37) should be declined.

**Report and decision
by:**

Craig Friedel – Policy Planner

Date: 11th November 2010

Decision: That the above recommendation be adopted.

Delegated Officer:

Tim Harris, Planning Manager

Date: 11th November 2010

Plan Change 8 'Holmes Block' - Proposed Residential Living 3 Zone

Summary of Decisions Sought

Submitter	Submission No.	Decision No.	Recommendation
Robert Barker	S1	D1	Accept in part
B & S Cunningham	FS04	Support	
Mark Larson	S2	D1	Accept in part
B & S Cunningham	FS04	Support	
D Booth	S3	D1	Accept in part
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
Malvin Griebel	S4	D1	Accept in part
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
Janice Griebel	S5	D1	Accept in part
B & S Cunningham	FS04	Support	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
PM Kennedy Family Trust	S6	D1	Accept in part
B & S Cunningham	FS04	Support	
Kenneth Abrams	S7	D1	Accept in part
B & S Cunningham	FS04	Support	
Poultry Industry Association of NZ Inc. & Tegal Foods Ltd.	S8	D1	Accept in part
	S8	D2	Accept
	S8	D3	Accept in part
Jang McIntosh	FS02	Support in part	
Denwood Trustees	FS03	Support in part	
T Burns (Inner Plains Landowners)	FS05	Support	

P Young (Inner Plains Landowners)	FS06	Support	
R Taylor (Inner Plains Landowners)	FS07	Support	
A Taylor (Inner Plains Landowners)	FS08	Support	
G Mockford (Inner Plains Landowners)	FS09	Support	
R Legg (Inner Plains Landowners)	FS10	Support	
B McCardle (Inner Plains Landowners)	FS11	Support	
T Foulks (Inner Plains Landowners)	FS12	Support	
M Early (Inner Plains Landowners)	FS13	Support	
M Clelland (Inner Plains Landowners)	FS14	Support	
B Miles (Inner Plains Landowners)	FS15	Support	
R Hanse (Inner Plains Landowners)	FS16	Support	
N Garrett (Inner Plains Landowners)	FS17	Support	
B Garters (Inner Plains Landowners)	FS18	Support	
K Thomson (Inner Plains Landowners)	FS19	Support	
G Lapsey (Inner Plains Landowners)	FS20	Support	
P Knight (Inner Plains Landowners)	FS21	Support	
P Quinn (Inner Plains Landowners)	FS22	Support	
J Paton (Inner Plains Landowners)	FS23	Support	
J Morriss (Inner Plains Landowners)	FS24	Support	
A Ward-Smith (Inner Plains Landowners)	FS25	Support	
B Smith (Inner Plains Landowners)	FS26	Support	
S Gunby (Inner Plains Landowners)	FS27	Support	
S Pender (Inner Plains Landowners)	FS28	Support	
J O'Connor (Inner Plains Landowners)	FS29	Support	
J Wigsell (Inner Plains Landowners)	FS30	Support	
M Lower (Inner Plains Landowners)	FS31	Support	
D & K Shadbolt (Inner Plains Landowners)	FS32	Support	
J Butcher (Inner Plains Landowners)	FS33	Support	
G Bake (Inner Plains Landowners)	FS34	Support	
J & R McDurie (Inner Plains Landowners)	FS35	Support	
T Butt (Inner Plains Landowners)	FS36	Support	
R Gardner (Inner Plains Landowners)	FS37	Support	
J Court (Inner Plains Landowners)	FS38	Support	
G Boyle (Inner Plains Landowners)	FS39	Support	
M Smolenski (Inner Plains Landowners)	FS40	Support	
West Melton/Newtons Road Group	FS42	Support in part	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	

BC & MA Coles Family Trust	FS51	Support in part	
L & K Ponsonby	S9	D1	Accept in part
B & S Cunningham	FS04	Support	
L & L Field & Lanlee Ltd	S10	D1	Accept in part
New Zealand Transport Agency	S11	D1	Reject
	S11	D2	Reject
	S11	D3	Accept in part
	S11	D4	Accept
	S11	D5	Accept
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
R & B Salthouse	S12	D1	Accept in part
B & S Cunningham	FS04	Support	
Bob Paton	S13	D1	Accept in part
Debra Hasson	S14	D1	Accept in part
B & S Cunningham	FS04	Support	
Alastair King	S15	D1	Accept in part
Alison Burrowes	S16	D1	Accept in part
B & S Cunningham	FS04	Support	
New Zealand Historic Places Trust	S17	D1	Accept
Canterbury Regional Council	S18	D1	Accept in part
Jang McIntosh	FS02	Support in part	
Denwood Trustees	FS03	Support in part	
B & S Cunningham	FS04	Support	
T Burns (Inner Plains Landowners)	FS05	Support	
P Young (Inner Plains Landowners)	FS06	Support	
R Taylor (Inner Plains Landowners)	FS07	Support	
A Taylor (Inner Plains Landowners)	FS08	Support	
G Mockford (Inner Plains Landowners)	FS09	Support	
R Legg (Inner Plains Landowners)	FS10	Support	
B McCardle (Inner Plains Landowners)	FS11	Support	
T Foulks (Inner Plains Landowners)	FS12	Support	
M Early (Inner Plains Landowners)	FS13	Support	
M Clelland (Inner Plains Landowners)	FS14	Support	
B Miles (Inner Plains Landowners)	FS15	Support	
R Hanse (Inner Plains Landowners)	FS16	Support	
N Garrett (Inner Plains Landowners)	FS17	Support	
B Garters (Inner Plains Landowners)	FS18	Support	
K Thomson (Inner Plains Landowners)	FS19	Support	
G Lapsey (Inner Plains Landowners)	FS20	Support	
P Knight (Inner Plains Landowners)	FS21	Support	
P Quinn (Inner Plains Landowners)	FS22	Support	
J Paton (Inner Plains Landowners)	FS23	Support	
J Morriss (Inner Plains Landowners)	FS24	Support	
A Ward-Smith (Inner Plains Landowners)	FS25	Support	

B Smith (Inner Plains Landowners)	FS26	Support	
S Gunby (Inner Plains Landowners)	FS27	Support	
S Pender (Inner Plains Landowners)	FS28	Support	
J O'Connor (Inner Plains Landowners)	FS29	Support	
J Wigsell (Inner Plains Landowners)	FS30	Support	
M Lower (Inner Plains Landowners)	FS31	Support	
D & K Shadbolt (Inner Plains Landowners)	FS32	Support	
J Butcher (Inner Plains Landowners)	FS33	Support	
G Bake (Inner Plains Landowners)	FS34	Support	
J & R McDurie (Inner Plains Landowners)	FS35	Support	
T Butt (Inner Plains Landowners)	FS36	Support	
R Gardner (Inner Plains Landowners)	FS37	Support	
J Court (Inner Plains Landowners)	FS38	Support	
G Boyle (Inner Plains Landowners)	FS39	Support	
M Smolenski (Inner Plains Landowners)	FS40	Support	
West Melton/Newtons Road Group	FS42	Support in part	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
BC & MA Coles Family Trust	FS51	Support in part	
Sam Carrick	S19	D1	Accept in part
B&A George and S&S Cunningham	S20	D1	Accept in part
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
T Burns (Inner Plains Landowners)	FS05	Support	
P Young (Inner Plains Landowners)	FS06	Support	
R Taylor (Inner Plains Landowners)	FS07	Support	
A Taylor (Inner Plains Landowners)	FS08	Support	
G Mockford (Inner Plains Landowners)	FS09	Support	
R Legg (Inner Plains Landowners)	FS10	Support	
B McCardle (Inner Plains Landowners)	FS11	Support	
T Foulks (Inner Plains Landowners)	FS12	Support	
M Early (Inner Plains Landowners)	FS13	Support	
M Clelland (Inner Plains Landowners)	FS14	Support	
B Miles (Inner Plains Landowners)	FS15	Support	
R Hanse (Inner Plains Landowners)	FS16	Support	
N Garrett (Inner Plains Landowners)	FS17	Support	
B Garters (Inner Plains Landowners)	FS18	Support	
K Thomson (Inner Plains Landowners)	FS19	Support	

G Lapsey (Inner Plains Landowners)	FS20	Support	
P Knight (Inner Plains Landowners)	FS21	Support	
P Quinn (Inner Plains Landowners)	FS22	Support	
J Paton (Inner Plains Landowners)	FS23	Support	
J Morriss (Inner Plains Landowners)	FS24	Support	
A Ward-Smith (Inner Plains Landowners)	FS25	Support	
B Smith (Inner Plains Landowners)	FS26	Support	
S Gunby (Inner Plains Landowners)	FS27	Support	
S Pender (Inner Plains Landowners)	FS28	Support	
J O'Connor (Inner Plains Landowners)	FS29	Support	
J Wigsell (Inner Plains Landowners)	FS30	Support	
M Lower (Inner Plains Landowners)	FS31	Support	
D & K Shadbolt (Inner Plains Landowners)	FS32	Support	
J Butcher (Inner Plains Landowners)	FS33	Support	
G Bake (Inner Plains Landowners)	FS34	Support	
J & R McDurie (Inner Plains Landowners)	FS35	Support	
T Butt (Inner Plains Landowners)	FS36	Support	
R Gardner (Inner Plains Landowners)	FS37	Support	
J Court (Inner Plains Landowners)	FS38	Support	
G Boyle (Inner Plains Landowners)	FS39	Support	
M Smolenski (Inner Plains Landowners)	FS40	Support	
Waimakariri District Council	FS41	Support	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
Ernest Smith	S21	D1	Accept in part
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
Denwood Trustees	S22	D1	Accept in part
The West Melton/ Newtons Road Group	S23	D1	Accept in part
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
K McIntosh, Wha Jung & Se Kyung Lee	S24	D1	Accept in part
BC & MA Coles Family Trust	S25	D1	Accept in part
Ivan & Dorothy Robertson	S26	D1	Accept in part
Susan Chaney	S27	D1	Accept in part
Joe & Glennis Burdis*	S28	D1	Accept in part
Nadia Sole*	S29	D1	Accept in part
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	

Dryden Trust*	S30	D1	Accept in part
Paul Mason	S31	D1	Accept
	S31	D2	Reject
Selwyn District Council	S32	D1	Accept in part
Jang McIntosh	FS02	Support	
Denwood Trustees	FS03	Support	
West Melton/Newtons Road Group	FS42	Support	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
BC & MA Coles Family Trust	FS51	Support	

Plan Change 9 'Skellerup Block' - Proposed Residential Living 3 Zone

Summary of Decisions Sought

Submitter	Submission No.	Decision No.	Recommendation
Robert Barker	S1	D1	Accept
B & S Cunningham	FS04	Support	
Mark Larson	S2	D1	Accept
B & S Cunningham	FS04	Support	
D Booth	S3	D1	Accept
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
Malvin Griebel	S4	D1	Accept
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
Janice Griebel	S5	D1	Accept
B & S Cunningham	FS04	Support	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
PM Kennedy Family Trust	S6	D1	Accept
B & S Cunningham	FS04	Support	
Kenneth Abrams	S7	D1	Accept
B & S Cunningham	FS04	Support	
Poultry Industry Association of NZ Inc. & Tegal Foods Ltd.	S8	D1	Accept
	S8	D2	Accept
	S8	D3	Accept in part
Jang McIntosh	FS02	Support in part	
Denwood Trustees	FS03	Support in part	
T Burns (Inner Plains Landowners)	FS05	Support	

P Young (Inner Plains Landowners)	FS06	Support	
R Taylor (Inner Plains Landowners)	FS07	Support	
A Taylor (Inner Plains Landowners)	FS08	Support	
G Mockford (Inner Plains Landowners)	FS09	Support	
R Legg (Inner Plains Landowners)	FS10	Support	
B McCardle (Inner Plains Landowners)	FS11	Support	
T Foulks (Inner Plains Landowners)	FS12	Support	
M Early (Inner Plains Landowners)	FS13	Support	
M Clelland (Inner Plains Landowners)	FS14	Support	
B Miles (Inner Plains Landowners)	FS15	Support	
R Hanse (Inner Plains Landowners)	FS16	Support	
N Garrett (Inner Plains Landowners)	FS17	Support	
B Garters (Inner Plains Landowners)	FS18	Support	
K Thomson (Inner Plains Landowners)	FS19	Support	
G Lapsey (Inner Plains Landowners)	FS20	Support	
P Knight (Inner Plains Landowners)	FS21	Support	
P Quinn (Inner Plains Landowners)	FS22	Support	
J Paton (Inner Plains Landowners)	FS23	Support	
J Morriss (Inner Plains Landowners)	FS24	Support	
A Ward-Smith (Inner Plains Landowners)	FS25	Support	
B Smith (Inner Plains Landowners)	FS26	Support	
S Gunby (Inner Plains Landowners)	FS27	Support	
S Pender (Inner Plains Landowners)	FS28	Support	
J O'Connor (Inner Plains Landowners)	FS29	Support	
J Wigsell (Inner Plains Landowners)	FS30	Support	
M Lower (Inner Plains Landowners)	FS31	Support	
D & K Shadbolt (Inner Plains Landowners)	FS32	Support	
J Butcher (Inner Plains Landowners)	FS33	Support	
G Bake (Inner Plains Landowners)	FS34	Support	
J & R McDurie (Inner Plains Landowners)	FS35	Support	
T Butt (Inner Plains Landowners)	FS36	Support	
R Gardner (Inner Plains Landowners)	FS37	Support	
J Court (Inner Plains Landowners)	FS38	Support	
G Boyle (Inner Plains Landowners)	FS39	Support	
M Smolenski (Inner Plains Landowners)	FS40	Support	
West Melton/Newtons Road Group	FS42	Support in part	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	

BC & MA Coles Family Trust	FS51	Support in part	
L & K Ponsonby	S9	D1	Accept
B & S Cunningham	FS04	Support	
T Burns (Inner Plains Landowners)	FS05	Support	
P Young (Inner Plains Landowners)	FS06	Support	
R Taylor (Inner Plains Landowners)	FS07	Support	
A Taylor (Inner Plains Landowners)	FS08	Support	
G Mockford (Inner Plains Landowners)	FS09	Support	
R Legg (Inner Plains Landowners)	FS10	Support	
B McCardle (Inner Plains Landowners)	FS11	Support	
T Foulks (Inner Plains Landowners)	FS12	Support	
M Early (Inner Plains Landowners)	FS13	Support	
M Clelland (Inner Plains Landowners)	FS14	Support	
B Miles (Inner Plains Landowners)	FS15	Support	
R Hanse (Inner Plains Landowners)	FS16	Support	
N Garrett (Inner Plains Landowners)	FS17	Support	
B Garters (Inner Plains Landowners)	FS18	Support	
K Thomson (Inner Plains Landowners)	FS19	Support	
G Lapsey (Inner Plains Landowners)	FS20	Support	
P Knight (Inner Plains Landowners)	FS21	Support	
P Quinn (Inner Plains Landowners)	FS22	Support	
J Paton (Inner Plains Landowners)	FS23	Support	
J Morriss (Inner Plains Landowners)	FS24	Support	
A Ward-Smith (Inner Plains Landowners)	FS25	Support	
B Smith (Inner Plains Landowners)	FS26	Support	
S Gunby (Inner Plains Landowners)	FS27	Support	
S Pender (Inner Plains Landowners)	FS28	Support	
J O'Connor (Inner Plains Landowners)	FS29	Support	
J Wigsell (Inner Plains Landowners)	FS30	Support	
M Lower (Inner Plains Landowners)	FS31	Support	
D & K Shadbolt (Inner Plains Landowners)	FS32	Support	
J Butcher (Inner Plains Landowners)	FS33	Support	
G Bake (Inner Plains Landowners)	FS34	Support	
J & R McDurie (Inner Plains Landowners)	FS35	Support	
T Butt (Inner Plains Landowners)	FS36	Support	
R Gardner (Inner Plains Landowners)	FS37	Support	
J Court (Inner Plains Landowners)	FS38	Support	
G Boyle (Inner Plains Landowners)	FS39	Support	
M Smolenski (Inner Plains Landowners)	FS40	Support	
L & L Field & Lanlee Ltd	S10	D1	Accept
New Zealand Transport Agency	S11	D1	Reject
	S11	D2	Reject
	S11	D3	Reject
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	

R & B Salthouse	S12	D1	Accept
B & S Cunningham	FS04	Support	
Bob Paton	S13	D1	Accept
Debra Hasson	S14	D1	Accept
B & S Cunningham	FS04	Support	
Alastair King	S15	D1	Accept
Alison Burrowes	S16	D1	Accept
B & S Cunningham	FS04	Support	
New Zealand Historic Places Trust	S17	D1	Accept
Canterbury Regional Council	S18	D1	Accept
Jang McIntosh	FS02	Support in part	
Denwood Trustees	FS03	Support in part	
B & S Cunningham	FS04	Support	
West Melton/Newtons Road Group	FS42	Support in part	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
BC & MA Coles Family Trust	FS51	Support in part	
Sam Carrick	S19	D1	Accept
B&A George and S&S Cunningham	S20	D1	Accept
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
Waimakariri District Council	FS41	Support	
B Paton	FS43	Support	
J Baxter (Rolleston Landowners)	FS44	Support	
G & P Poole (Rolleston Landowners)	FS45	Support	
G & J Meadows (Rolleston Landowners)	FS46	Support	
RB & BM Geddes (Rolleston Landowners)	FS47	Support	
N Sole (Rolleston Landowners)	FS48	Support	
Dryden Trust (Rolleston Landowners)	FS49	Support	
V Chu (Rolleston Landowners)	FS50	Support	
Ernest Smith	S21	D1	Accept
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
Denwood Trustees	S22	D1	Accept
The West Melton/ Newtons Road Group	S23	D1	Accept
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
B & S Cunningham	FS04	Support	
K McIntosh, Wha Jung & Se Kyung Lee	S24	D1	Accept

T Burns (Inner Plains Landowners)	FS05	Support	
P Young (Inner Plains Landowners)	FS06	Support	
R Taylor (Inner Plains Landowners)	FS07	Support	
A Taylor (Inner Plains Landowners)	FS08	Support	
G Mockford (Inner Plains Landowners)	FS09	Support	
R Legg (Inner Plains Landowners)	FS10	Support	
B McCardle (Inner Plains Landowners)	FS11	Support	
T Foulks (Inner Plains Landowners)	FS12	Support	
M Early (Inner Plains Landowners)	FS13	Support	
M Clelland (Inner Plains Landowners)	FS14	Support	
B Miles (Inner Plains Landowners)	FS15	Support	
R Hanse (Inner Plains Landowners)	FS16	Support	
N Garrett (Inner Plains Landowners)	FS17	Support	
B Garters (Inner Plains Landowners)	FS18	Support	
K Thomson (Inner Plains Landowners)	FS19	Support	
G Lapsey (Inner Plains Landowners)	FS20	Support	
P Knight (Inner Plains Landowners)	FS21	Support	
P Quinn (Inner Plains Landowners)	FS22	Support	
J Paton (Inner Plains Landowners)	FS23	Support	
J Morriss (Inner Plains Landowners)	FS24	Support	
A Ward-Smith (Inner Plains Landowners)	FS25	Support	
B Smith (Inner Plains Landowners)	FS26	Support	
S Gunby (Inner Plains Landowners)	FS27	Support	
S Pender (Inner Plains Landowners)	FS28	Support	
J O'Connor (Inner Plains Landowners)	FS29	Support	
J Wigsell (Inner Plains Landowners)	FS30	Support	
M Lower (Inner Plains Landowners)	FS31	Support	
D & K Shadbolt (Inner Plains Landowners)	FS32	Support	
J Butcher (Inner Plains Landowners)	FS33	Support	
G Bake (Inner Plains Landowners)	FS34	Support	
J & R McDurie (Inner Plains Landowners)	FS35	Support	
T Butt (Inner Plains Landowners)	FS36	Support	
R Gardner (Inner Plains Landowners)	FS37	Support	
J Court (Inner Plains Landowners)	FS38	Support	
G Boyle (Inner Plains Landowners)	FS39	Support	
M Smolenski (Inner Plains Landowners)	FS40	Support	
BC & MA Coles Family Trust	S25	D1	Accept
Ivan & Dorothy Robertson	S26	D1	Accept
Susan Chaney	S27	D1	Accept
Joe & Glennis Burdis*	S28	D1	
Dryden Trust*	S29	D1	Accept
Poultry Industry Assoc. & Tegal Foods Ltd	FS01	Support in part	
Nadia Sole*	S30	D1	Accept
John & Lisa Barclay	S31	D1	Accept

Resource Management Act 1991

Proposed Plan Change 8 & 9 to the Selwyn District Plan

Technical Report on Servicing

To:	Hearings Panel
From:	Hugh Blake-Manson, Selwyn District Council
Date:	17 April 2011

This report has been prepared under Section 42A of the Resource Management Act 1991. The purpose of the report is to assist Selwyn District Council's Hearing Commissioners to evaluate and decide on submissions on provisions in Proposed Plan Change 8&9 to the partially operative Selwyn District Plan by providing expert advice on technical matters. The report does not make recommendations on submissions but the information and conclusions contained within it may be used by planning officers as a basis for making recommendations on submissions. This report should be read in conjunction with the planning officer's report and any other relevant reports identified.

1. Introduction

- 1.1 My name is Hugh Maxwell Blake-Manson. I am the Asset Manager Utilities for Selwyn District Council. I have held this position for approximately 6 years. I have been asked to prepare a report commenting on water servicing-related matters and associated submissions on Proposed Plan Change 8 & 9 (PC8 & 9) to the partially operative District Plan (District Plan).
- 1.2 I have a Bachelor of Engineering (Natural Resources) degree. I am a Chartered Professional Engineer (Civil and Environmental), an affiliate to the APEC Engineers - IntPE(NZ), a member of the Institution of Professional Engineers of New Zealand, a member of the Association of Local Government Engineers (Ingenium) and Board Member of WaterNZ (NZ Water and Waste Association).
- 1.3 I commenced my employment with Selwyn District Council as the Asset Manager Water in 2004 (now Asset Manager Utilities). My current role entails strategic asset management for Council's wastewater, water, water race, land drainage and stormwater assets. I will refer to these collectively as the "5Waters"

2. Background Information

- 2.1 The evidence provided is principally based on:
 - i. Information from the Urban Development Strategy (UDS) and the subsequent Regional Policy Statement (RPS) Change 1 process,
 - ii. Selwyn Community Plan "LTP":, 5Waters strategic goals and 5Waters Activity Management Planning "AcMP",
 - iii. Previous servicing assessments pertaining to the implementation of privately requested plan changes
 - iv. Local knowledge and experience with the utilities network, and

v. Conclusions and recommendations

Urban Development Strategy - Community Growth

- 2.2 Selwyn District Council “the Council” has consistently had the highest population growth rate in New Zealand since 2004.
- 2.3 The Council, along with its partners is part of the UDS. The UDS includes Rolleston. It is predicted that 90% of SDC population will reside in the UDS area, with 40,039 population equivalents “PE” expected to be connected to the reticulated sewerage schemes.
- 2.4 PE is a measure of equivalent people connected. It accounts for industry and dwellings, water and stormwater schemes.
- 2.5 The major current physical constraints to growth from a Utilities perspective are the provision of consented wastewater and stormwater, land and treatment/disposal areas. These matters are discussed in detail later in my evidence.

3. Community Outcomes, Strategic and Activity Management

Selwyn Community Plan - LTP

- 3.1 Council has stated its 5Waters Community Outcomes via the LTP. The 5Waters activity contributes to the Community Outcome “Selwyn people have access to appropriate health, social and community services” via:

“providing water, wastewater and drainage services necessary to support community and public health services”

- 3.2 As stated in the LTP, council intends to ensure wastewater treatment and disposal for all communities proceeds in a manner that does not impede development within the district. This will include:

“Development of a centralised Eastern Selwyn treatment and disposal area at the Pines site, Rolleston, to meet the Greater Christchurch Urban Development agreement”

Strategic and Activity Management

- 3.3 Council is also responsible for the Strategic and Activity Management activities including:
- Strategic planning – 60 year view identified via the adopted 5 Waters Strategy.
 - Sustainable delivery of utilities services in line with the purpose of the Local Government Act 2002 – identified via 5Waters Principles of Sustainability.
 - Delivery of 20 Year Activity Management Plans which cover all scheme

components, including risks, costs, and improvements.

- Confirmation of the level of Asset Management dependant on the 5Waters service requirements e.g. for Lincoln and Rolleston “core plus” Asset Management practices are required given the relatively significant importance to the District of these communities.

3.4 I have undertaken a significant level of community consultation to determine both the priorities of, and appropriate Levels of Service, the 5Waters customers expect. This consultation recognised i) customer desires, ii) environmental constraints and iii) affordability.

3.5 The 5Waters Customers confirmed that they place a high value on a cost effective service which protects their health and property. This directly aligns with efficient an effective provision of 5Waters infrastructure.

5 Waters Strategic Goals

3.6 Council adopted a 5Waters Strategy in August 2009, which includes 7 sustainability principles for the management of water. The 5Waters are wastewater, reticulated water supply, waterraces, stormwater and land drainage.

3.7 There are a number of initiatives within the 5Waters Strategy. The method and manner in which 5Waters infrastructure is managed is directed by this Strategy.

3.8 Council has adopted an Asset Management Policy. This prescribes the standard to which Council will manage, operate, maintain, review, construct and document significant infrastructure.

3.9 In relation to this police the term ‘core plus’ identifies that the asset will be managed etc to the highest level. Rolleston’s’ wastewater, water and stormwater services are required to meet the core plus standards.

Engineering Code of Practice

3.10 In 2010 Council updated and adopted engineering standards. These clearly state that is the responsibility of those constructing infrastructure intended for community use (e.g. water and wastewater pipes) to ensure the materials, installation techniques and commissioning meet prescribed standards.

3.11 Particular attention is now required to investigating the damaging effect of earthquakes, particularly via liquefaction. It will be the PC 8 & 9 developers responsibility to provide sufficient information where they intend the vest utilities to Council at the time of subdivision should the requests be adopted.

3.12 The Geotechnical Requirements include:

- i. Responsibilities of the geotechnical engineer
- ii. Design report
- iii. Geotechnical completion report
- iv. Foundation stability
- v. Local Conditions – Liquefaction

Subdivision Design Guide

3.13 The Design Guide identifies the 5Waters Strategy of the Council and recognises that the ideal time to ensure the opportunities presented by the site are capitalised upon is when planning the subdivision design. In particular, the opportunity should be taken to reduce water wastage through re-use by such means as :

- Holding stormwater collectively in retention ponds or tanks to be used for irrigation of public areas.
- Supplying collective water systems to public areas via a 'third pipe' (recycled water).
- Installing rainwater storage tanks on individual sections.
- Considering the use of wastewater for irrigation. This can be easiest achieved on individual lots where a simple greywater reuse system can be used without the need for treatment.

Rolleston Wastewater

3.14 I will now cover the PC8 & 9 specific attributes relating to the Rolleston wastewater scheme. Note that in time this is expected to form part of the UDS based Eastern Selwyn Sewage Scheme.

3.15 Rolleston is currently serviced by two biological wastewater treatment plants "WWTP" referred to collectively as Pines I. Wastewater from them is disposed of to land. Land disposal is essential for the wastewater system to operate and hence to support maintenance of community health. The first biological plant is known as the "Helpet" plant, and is consented to 4,400 population equivalents "PE". The second plant is located at Burnham School Road, which is referred to as Pines . This has been operational for 4 years, with a consented treatment and disposal capacity of 22,000 PE. The current design treatment capacity is 6,000 PE and 10,400 PE between the two plants.

3.16 Pines I provides sufficient capacity to accommodate only the Rolleston and environs predicted growth. The current environs extend to West Melton, Rolleston Prison and the

Rolleston Industrial Zone land.

3.17 Pines I and Pines II wastewater systems are detailed in Table 1 – below, noting:

- i. Pines II would consist of a new treatment system including major modifications to the Pines I bioreactor on the Burnham School Road site.
- ii. The equivalent of 700 PE in connections are expected from Rural Residential lots up to 2041. Locations for these are expected to be confirmed via the Plan Change 1 (Regional Council) and Plan Change 17 (Selwyn District Council) processes within the next 2 years

3.18 Other UDS communities feed into Pines II and future stages, though the Rolleston only PE estimates are provided for 2041

Table 1 – Rolleston Wastewater

Community	Treatment and Disposal		Population Equivalent PE (Year)	
	Existing	Future	2010	2041
Rolleston	Helpet WWTP - Extended aeration with nitrogen removal with spray irrigation Pines I WWTP- Activated sludge plant with nitrogen removal with spray irrigation	Pines II - Activated sludge plant with nitrogen removal and spray irrigation	8,300	26,224 (includes West Melton)

Consents – Wastewater Discharge and Designation

3.19 In December 2010 and January 2011, Selwyn District Council (Asset Delivery) obtained consent for discharge and Notice of Requirement for an expanded, Rolleston based wastewater treatment operation - the Eastern Selwyn Sewerage Scheme “ESSS”.

3.20 I represented Council in negotiations with the Selwyn Plantation Board regarding spray irrigation of Pines wastewater in the area adjoining the applicants land. Agreement was reached with the applicant on the methods and controls Council would put in place should PC8 and 9 be granted – refer CRC101109.

3.21 Selwyn District Council has purchased the 402 ha required for the ESSS treatment and discharge to occur for the foreseeable future.

4. Proposals

- 4.1 The development is adjacent to and essentially a satellite of the PC7 development area. This is not efficient when considered against the PC7 managed growth, which will include provision of staged utilities infrastructure. The proposals will require a sewage scheme including pump station – refer Connell Wagner Report 26/02/2010.
- 4.2 As these requests seek rural residential zoning, they will be required to connect to wastewater services and to align with the sequencing of residential growth within the metropolitan urban limit. Both proposals will necessitate “orphan” infrastructure that is an incremental increased burden on the existing community. It is more efficient for Council to provide and maintain infrastructure within the PC7 area.
- 4.3 The timing of residential development is important in this regard as rural residential areas will be required to connect to the wastewater infrastructure established in immediately adjoining subdivisions, prior to connecting with the wastewater main to the ESSS. PC8 generally aligns with the residential growth promoted under the Rolleston Structure Plan and PC7, whereas PC9 is likely to have to wait some time for wastewater connections to be available to adjoining subdivisions, which will in turn connect to the community network.

Selwyn District Community Water Schemes - Rolleston

- 4.4 I will now cover the PC 8 and 9 proposals in terms of their ability to connect to the community water network.
- 4.5 The Rolleston water scheme details are shown in Table 2 below:

Table 2 – Rolleston Water Scheme Details

Community	Take and Use		Household Growth (Year)	
	Existing	Future	2007-2020	2021-2041
Rolleston	5 wells with a consented well field up to 300 l/s at lzone (145 l/s current take)	Additional wells and headworks	2,052	3,323

Note: i) Rolleston water supply is designed to provide for industrial use facilities “wet industry” in the Industrial Zone area to the north of State Highway. There maybe significant increases in PE use as a result of wet industries need.

Rolleston Water Network

- 4.6 In 1996 the town water supply reticulation was extended to serve the Change 10 scheme area (designed for 4,200 people). The extension included a total revamp of the low level pumping system with the inclusion of a deep well in Kairangi Apple Orchard, decommissioning of the reservoir at George Street and increasing the network operating pressure to 35m (50psi). The new scheme came into operation in June 1997.
- 4.7 In 2003 a long term plan for servicing the water supply needs of the Rolleston community was approved by Council. The plan included the installation of:
- A major pump station in Izone Drive (installed 2003) that was to be the control centre for water supply in Rolleston; and
 - Wells to be installed as demand increased and a major reservoir (installed 2003).
- 4.8 Following the installation of a well at Izone Drive in early 2004 and installation of the trunk main in late 2005 / early 2006, the Izone Drive pump station became the main control centre for Rolleston water supply.
- 4.9 Peak daily demand is predicted to increase from 9,000 to 30,000m³/d by 2041 based on the projected household growth. In addition to the consented 300 L/s at Izone, a further 300L/s is required to service the estimated demand through a number of new well sites within the ODP growth areas.

Water – Consents and Growth

- 4.10 Consenting of water - the take and use of groundwater water for community drinking water supply purposes is not considered to be a significant issue in the PC 8&9 area. While there are constraints (eg. demand management requirements including conservation of water, effects on neighbouring wells), this type of water use has been recognised by the Canterbury Regional Council – “ECan” as having a high priority in the Canterbury Water Management Strategy. Community water supply consents obtained recently support my opinion that this high priority is reflected in granting of water.
- 4.11 As these proposed Plan Changes seek rural residential densities, they will be required to connect to the community network within the metropolitan urban limits of Rolleston. This network will need to be upgraded to provide for fire flow and pressure to service both PC8 and PC9 areas. At this point in time the metropolitan network does not have sufficient capacity to provide this but is expected to in time as residential development expands to the Dunns Crossing Road boundary.
- 4.12 Councils focus is on providing capital upgrades in the Springston-Rolleston road corridor and Brookside road areas. Timing for this work has not yet been confirmed, but is generally

reflected in the staging for the provision of infrastructure outlined in the Rolleston Structure Plan and PC7.

- 4.13 The area directly north of the Holmes Block is identified for development within the next five years. If PC 8 is approved prior to the Council network having been upgraded, there will be a requirement for onsite storage. Generally, this means each property will have its own tank with a capacity for 30 cubic metres of water.
- 4.14 Water servicing for PC9 is not expected to be available for at least 10 years based on current information. This represents a significant infrastructure constraint as the timing for when the necessary upgrades to the network will be completed to enable the anticipated level of service to be provided to the PC9 land is likely to be some time away.

Rolleston Stormwater

- 4.15 Council's current position regarding stormwater management is that the applicant will, as appropriate, obtain consent from the Canterbury Regional Council for treatment and disposal.
- 4.16 Council will on provision of appropriate evidence consider transfer of any consents to it for management.
- 4.17 Treatment via vegetated swales and first flush dry basins and ground infiltration systems are utilised in Rolleston. This recognises the free draining characteristics of the area. Given the porous ground conditions and relatively large lots proposed in the Plan Changes, I would anticipate that stormwater from individual sites will be disposed of to ground on-site, without the need for a community retention basin and drainage network. Road runoff would likewise be disposed of to ground via properly engineered, vegetated swales immediately adjacent to the formed carriageway. Stormwater management and disposal does not therefore present a constraint on either Plan Change.

5 Conclusions

- 5.1 In conclusion it is my opinion that:
- a) PC 8 & 9 necessitates "orphan" sewer and water services line and wastewater pump stations, which will result in increased costs of operation, maintenance and renewal over the asset life compared with accommodating the same number of households within the MUL. Large rural residential developments do not therefore generally result in an efficient servicing network when compared to the consolidated and coordinated management of residential growth.

- b) Council accepts that temporary pump stations are valid methods for servicing areas, as long as that infrastructure is removed and replaced with a larger scale system catering for all growth. This is not the case in this situation, as the pump stations will be required permanently and ongoing costs to the community will arise as a result. While this is not desirable, my opinion is that this will not result in a separate targeted rate for the ongoing operation of the service as the ongoing maintenance and operational costs will be absorbed into the wider costs of managing the wider community network.
- c) There is expected to be sufficient capacity within the consented and proposed community wastewater treatment plants to accommodate the growth anticipated from both Plan Changes. Design work for the expanded treatment and disposal “Pines II” is well underway. There is also sufficient capacity in the water wells and via consent.
- d) The metropolitan water supply will not have sufficient capacity to meet the demand of predicted growth in the PC7 area adjoining these sites, and will require improvements led by Council. The timing for that work is yet to be decided. It is more likely that PC8 will have access to the community water network as soon as the residential development anticipated under PC7 proceeds (i.e. it is within the first stage of development under Rolleston Structure Plan and PC7), while PC9 is not anticipated to have access within 10+ years.
- e) Should the Plan Changes be approved, Council is required under conditions of the Notice of Requirement to ensure that the effects, if any, of wastewater disposal within the Pines Waste Water Treatment Plant and associated disposal area are minimised at the adjoining boundary, whilst noting the views expressed by Ms Harwood that an additional dwelling setback from the boundary would assist in further minimising the potential for reverse sensitivity issues arising in the future.
- f) Stormwater treatment and disposal is readily available to ground, providing Canterbury Regional Council consent conditions are met.



H M Blake-Manson

ASSET MANAGER UTILITIES

Resource Management Act 1991

Proposed Plan Change 8 and 9 to the Selwyn District Plan

Holmes and Skellerup Block, Rolleston

Technical Report on Transportation

To:	Hearings Panel
From:	Andrew Mazey, Selwyn District Council
Date:	April 2011

This report has been prepared under Section 42A of the Resource Management Act 1991. The purpose of the report is to assist Selwyn District Council's Hearing Commissioners to evaluate and decide on submissions on provisions in Proposed Plan Change 8 and 9 to the partially operative Selwyn District Plan by providing expert advice on technical matters. The report does not make recommendations on submissions but the information and conclusions contained within it may be used by planning officers as a basis for making recommendations on submissions. This report should be read in conjunction with the planning officer's report and any other relevant reports identified.

1. Introduction

1.1. My name is Andrew Mazey. I am Selwyn District Council's Transportation Asset Manager. I have been asked to prepare a report commenting on transport-related matters and associated submissions on Proposed Plan Change 8 and 9 (PC8, PC9) to the partially operative District Plan (District Plan). This is to rezone 92ha and 73ha of Outer Plain sites to a proposed new L3 zone for rural residential use along Dunns Crossing Road at Rolleston. These are known as the Holmes and Skellerup Blocks owned by the Applicant, The Selwyn Plantation Board.

I hold the following qualifications:

- (i) NZCE (Civil)
- (ii) B.E Hons (Civil)

1.2. I have worked for the Selwyn District Council for over 20 years in various positions associated with the provision of roading and transport services and infrastructure, of which I have held the position of Transportation Asset Manager for approximately 5 years and a equivalent position before this.

2. Report Content

2.1. The following Background Information listed below maybe referred to directly in this report, or at least provides supporting information relevant to Councils transportation and related infrastructure activities and aspects associated with the Plan Changes requested.

Background Information

- Selwyn Transportation Activity
- Council Transportation Studies and Strategies
- Draft Plan Change 7 – Growth of Townships

- Draft Plan Change 12 – Integrated Transport Management
- Subdivision Design Guide and Engineering Code of Practice
- Rolleston Structure Plan

Commentary and Assessment of Plan Change Proposals

Conclusions

3. Background Information

- 3.1. This evidence is principally hinged on Councils strategic transport related studies and strategies, the Rolleston Structure Plan, previous roading and transportation related assessments relating to other Council and private plan changes, local knowledge and experience with the roading and transportation network. Where relevant these are explained in more detail as follows.

Selwyn Transportation Activity

- 3.2. The Selwyn Council is responsible for providing land based transport system across the District. Central to this is a 2400km urban and rural local roading network that includes associated bridges, signage and other related infrastructure. The 29 individual townships in the district contain over 130km of footpaths and cycleways, and comprehensive street light and road drainage systems. Council also provides bus facilities and bus capable roading networks in support of the public transport services provided by Environment Canterbury (ECan) in the district.
- 3.3. Further information relating to the activity is detailed in the Selwyn Community Plan 2009-2019 (Volume 1, Page 58) including the activities contribution to Councils Community Outcomes, legislative frameworks, asset management practises, capital projects, service targets, and financial forecasts. This is derived from a much more detailed analysis and comprehensive representation of all the facets of the activity contained in Councils 2009 Land Transport Activity Management Plan.

Council Transportation Studies and Strategies

- 3.4. The Council is a major partner to the Christchurch, Rolleston and Environs

Transportation Study (CRETS) along with New Zealand Transport Agency (NZTA), Christchurch City Council, Environment Canterbury (ECan) and the Christchurch International Airport Ltd. This study forms the basis of the strategic transport response to deal with the increase in traffic and trips generated by the growth expected over the Greater Christchurch area, including those within Selwyn, to 2021 and beyond. The final report detailing the strategy was adopted by Council in November 2007.

- 3.5. The report details a transport strategy that is robust and flexible so it can accommodate a number of future urban and rural residential growth possibilities over the Greater Christchurch study area. This includes the townships of Prebbleton, Lincoln, Rolleston and West Melton within Selwyn District and provides an overall transport response that considers all modes of land transport that will contribute to an integrated, safe, responsive sustainable and affordable land transport system in the future as required by the Land Transport Management Act 2003¹.
- 3.6. In addition to this, further strategies such as the Councils 2009 Walking and Cycling Strategy, the 2009 Greater Christchurch Travel Demand Management (TDM) Strategy, and the 2010 Metro Strategy provides an integrated transport response that can cater for the increase in demand for transport services across all transport modes.
- 3.7. Specific land transport details associated with Rolleston can be found in the 2009 Rolleston Township Structure Plan. This includes details on how localised networks of walking and cycling routes and public transport services are planned to integrate with emerging land use patterns and existing urban areas and how travel demands can be accommodated and managed.

Subdivision Design Guide and Engineering Code of Practice

- 3.8. The Design Guide for Residential Subdivision in the Urban Living Zones outlines ways to design attractive subdivisions which make the best use of their surroundings and context. It provides guidance for developers on how the Council will use its discretion in the assessment of planning applications and approval of subdivision designs. The Engineering Code of Practice is a

¹ CRETS Final Report – Executive Study (page 4)

technical document that translates the higher objectives detailed in the District Plan and Design guides to more specific engineering details that need to be part of the design process over all transport modes.

Draft Plan Change 7 - Growth of Townships, Urban Development and Rezoning of Land for Urban Purposes

- 3.9. PC 7 rezones land identified in Proposed Change 1 (PC1) to the Canterbury Regional Policy Statement (RPS) and the Lincoln and Rolleston Structure Plans to provide for the future urban growth of both townships in accordance with the Greater Christchurch Urban Development Strategy (UDS). This includes the putting in place rules, policies and objectives to achieve the consolidation of townships through higher densities while achieving good urban design outcomes, including the rezoning of approximately 600 ha of land in Lincoln and Rolleston. The spatial planning of new developments utilize Outline Development Plans (ODPs) as part of plan change process, and if adopted are included into the District Plan to guide development in the agreed manner depicted.
- 3.10. ODPs are critical to ensure that the necessary transportation routes and connections are provided in a logical and seamless way with certainty over time. They can also show how they integrate with existing township networks and the wider district arterial network. The ODPs generally depict the “major” and “secondary” roads over the area and adjoining connections, with the finer grained tertiary networks shown at the time of subdivision consent. Walking and cycling linkages are sometimes shown separately to avoid confusion.

Draft Plan Change 12 – Integrated Transport Management

PC12 aims to encourage a more sustainable approach to providing transport systems and networks within improved urban forms that can cater for future growth demands. Transport standards have a strong influence on the urban environment and PC12 enables a variety of different living environments to be created through changes to the transport related policies, rules and standards. This will be achieved in accordance with the concepts, standards and specifications established by Council’s Subdivision Design Guide and Engineering Code of Practice. PC12 also introduces changes to roading

standards and the districts road hierarchy.

Rolleston Structure Plan

- 3.11. The Rolleston Structure Plan (RSP) shows how the township will grow and develop in a staged and controlled manner. Rolleston is predicted to be the largest township in the District with a population of over 20,000 by 2041. The RSP enables both Developers and Council to plan and provide key infrastructure in a progressive and effective manner. This then avoids “pocket” or isolated urban areas from occurring that are not contiguous both in form and function with the other more established township urban areas.
- 3.12. Due to the location of State Highway 1 (SH1) and the main railway line alongside, core development principles for Rolleston continue to support the fundamental planning objective that residential areas will be located to the south of these constraints, and industrial areas to the north. From a transport perspective at least, this serves to reduce or mitigate issues with traffic from a mixture of vehicle types needing to continually cross the state highway and railway lines and also reduces the need for heavy vehicles to navigate through higher amenity urban areas. A large amount of cross traffic can be a safety issue, while also interfering with the efficient operation of the state highway.
- 3.13. A clear distinction on the respective roles of the local roading networks north and south of SH1 allows roading and intersection improvements to be planned and undertaken in the most effective manner to cater for the specific use intended.
- 3.14. The main or primary roading network shown by RSP consists of a series of arterial and collector routes in the existing and planned urban development areas south of SH1. The predominate features of the existing network in this area are an established radial pattern around the existing town centre, with strong linearity outwards that links to the adjoining residential areas. This pattern is sought to be expanded and replicated as growth occurs.
- 3.15. However the linear and rural nature of the adjoining road network can create issues where “pocket” or isolated urban development doesn’t coexist

comfortably in these rural and correspondingly higher vehicle speed environments. Because of these types of issues it is more effective that growth is planned or staged to progressively radiate out from established urban centres to enable the necessary rural to urban transitions to be more safely and effectively managed.

- 3.16. CRETS identifies the expansion of a ring road pattern for Rolleston, to reduce through traffic volumes in the town centre, and maintain efficient access routes around and throughout the township as it grows. There are several levels at which this will operate. To facilitate the use of these routes, intersection improvements will be required, in particular the utilisation of roundabout or priority controls. These have been identified in Councils 2009 Land Transport Activity Management Plan, together with other improvements to roads and streets to provide the roading network necessary to support the growth planned.
- 3.17. A series of collector ring road routes is planned to radiate southeast from the existing town centre to service the new greenfield urban areas of Rolleston. An inner ring road is already in place through the town centre utilising Rolleston Drive with direct connections to SH1 north and south of the town centre. Moving outwards, a route using Weedons, Levis, Lowes and Dunns Crossing Road will form another ring route. Such is the importance of this route, it is will be classified as an arterial route in conjunction with a corresponding one to north (as discussed below) providing access to the Izone Industrial Park.
- 3.18. Based on the development growth patterns expected at Rolleston, CRETS identified that a further collector road (referred to loosely as the “CRETS Road”) was necessary that connected between Weedons and Dunns Crossing Road. Generally positioned parallel to, and midway between Lowes and Selwyn Road, it is expected that this urban collector road will progressively eventuate through urban development as it occurs in the area. Its final alignment will be determined through the more specific needs of the proposed development it will service, for example coinciding with the location of existing intersections, proposed neighbourhood centres whilst avoiding existing houses and structures.

- 3.19. In addition to the series of ring routes extending southeast as described above, using the existing intersections with the SH1 at Weedons and Dunns Crossing Roads, a northern arterial ring road will extend northwards off these creating a route comprising of Walkers Road, Two Chain Road, Jones Road and Weedons Ross Road (as referenced above). This route will provide the main northern and southern access from SH1 to the Izone Industrial Park in the future. Combined with the arterial ring road route to the south along Lowes Road as described above, this will create a central arterial ring road route connecting the main residential and industrial areas of Rolleston to SH1. The main arterial and collector routes around Rolleston are shown in Appendix A as it relates to the Councils roading hierarchy.
- 3.20. Arterial roads operate at an enhanced level of service compared to collector roads in the networks hierarchy in terms of design and function. This ensures that they are safe and efficient and that their performance is not unduly compromised by the adjoining development. Like collector roads, urban arterials include the provision for bus services and walking and cycling facilities.
- 3.21. Finally an outer perimeter ring road route will essentially follow the Urban Limit boundary established for Rolleston using Weedons, Selwyn, and Dunns Crossing Roads. This will then encapsulate the southern urban growth areas of Rolleston whilst providing direct arterial connections to Lincoln and Christchurch via Springston Rolleston Road and Shands Road respectively.
- 3.22. The continued development of a well connected urban road network is well catered for by the interaction of existing roads like Lincoln Rolleston, Springston Rolleston, Goulds and East Maddisons Road that radiate out from the existing town centre. However there will be challenges to manage the new and existing intersections that will occur together with the progressive development of the ring road routes.
- 3.23. CRETS has recommended intersection upgrades across the study area. Typically roundabouts and signed priority controls are envisaged in urban areas, and intersections will need to be upgraded or constructed as the township grows or safety issues become of concern. The current speed environment of 100km/hr on the rural network will require careful

management, particularly at urban and rural interfaces.

- 3.24. The management of access to the main roading network is important for safety and efficiency reasons. The number of access points onto the outer perimeter ring route (namely, Dunns Crossing, Selwyn and Weedons Roads) needs to be managed to enhance mobility relative to their wider district functions as arterial and collector roads, while still being safe, efficient and sympathetic to the amenity values of the adjoining rural areas.
- 3.25. The future growth and development of Rolleston will be well served by proposed improvements to the main state highway system in and around Christchurch as part of the Roads of National Significance (RoNs) initiative by the NZTA. More specifically for Selwyn District this includes improving the capacity, safety and alignment of the Christchurch Southern Corridor. This will improve access to the central Christchurch, Lyttelton Port, and the Airport. This will benefit Selwyn residents, businesses and industries now and in the future.
- 3.26. The NZTA is planning to upgrade the Christchurch Southern Corridor in three stages. The first of these is the Christchurch Southern Motorway Extension (CSME) Stage 1 that will provide a 4 lane motorway from SH73 at Brougham Street to north of Prebbleton. This will then link to SH1 in the short term using Halswell Junction Road. This is currently under construction with completion due in 2013.
- 3.27. Stage 2 of the CSME will extend the motorway from north of Prebbleton to SH1 south of Templeton. From here SH1 will be widened and upgraded to a 4 lane highway to Rolleston as part of the Main South Road Four Laning (MSRFL) project stage of the Christchurch Southern Corridor upgrade. It is expected that the construction of these projects will not commence before 2015 and will be subject to planning approvals and funding confirmation.
- 3.28. CRETS also identified the need to integrate these strategic state highway improvements with the local roading network. For Rolleston this will mean a rationalisation of existing intersections with the SH1. A key component of the MSRFL project will be the establishment of a motorway interchange positioned at the SH1/Weedons/Weedons Ross Road intersection. This will

become the principal connection between SH1 and Rolleston. This will be achieved by its connection to the core Rolleston arterial ring road route discussed above comprising (in a clockwise direction) of Weedons, Levi, Lowes, Dunns Crossing, Walkers, Two Chain, Jones, and Weedons Ross Roads. The interchange will efficiently separate and distribute residential traffic south to the urban areas of Rolleston, and industrial traffic north to the Izone Industrial Park.

- 3.29. The consolidation of the interchange as the primary access point to Rolleston will require either the removal or rationalisation of the existing intersections of Hoskyns Road, Rolleston Drive, Tennyson Street and Brookside Road, as number of these will have safety and performance issues as the traffic volumes grow on the state highway, and local demands from the growth of Rolleston.
- 3.30. Council and the NZTA are working through what this may involve based on options identified by CRETS, but needless to say there are likely to be comprehensive changes to how connections to the state highway will be made that will need to be accommodated by both road controlling authorities. This will be with the express intent to ensure that safe and efficient access to the state highway can be maintained well into the future as Rolleston and SH1 traffic volumes grow.
- 3.31. Public Transport options will capitalise on the new “Selwyn Star” Metro Service while the RSP identifies the intention for a “Park N Ride” facility to be established as explained in Section 4.33.
- 3.32. The RSP details a comprehensive network of linked walking and cycling facilities throughout Rolleston. This Includes off road pathways that will connect Rolleston to Lincoln and also to Templeton, an off road pathway along Lowes Road with connections to adjoining schools and recreational areas, and linkages between the Izone Industrial Park to the north and residential areas to the south across SH1 and the railway line.

4. Commentary and Assessment of Plan Change Proposals

- 4.1. For the purposes of this report, PC8 and PC9 will be discussed together. This is because they are very similar in nature, in the same general location and have been lodged by the same Applicant. The background information presented in Section 3 above is directly relevant to both the proposed plan changes.

Dunns Crossing Road Access

- 4.2. Both of the proposed developments have frontage and roading access to Dunns Crossing Road, while the more northern of these the Holmes Block also utilises Burnham School Road. Both these roads can be currently described as lower volume rural roads. Traffic counts undertaken between 2010 and 2011 show that the highest volume of 604 ADT (Annual Daily Traffic) on Dunns Crossing Road occurred between Brookside and Lowes Road, while on Burnham School Road 317 ADT was recorded in the section nearest to Dunns Crossing Road. The Traffic volumes in the TAR are out of date, but still generally represent the general quantum of what currently exists on the surrounding network.
- 4.3. As detailed in Section 3.18, Dunns Crossing Road is planned to be part of a series main ring road routes to serve the future growth of Rolleston under PC7. The first section that is required to cater for this role is between Lowes Road and SH1. Under Proposed PC12 this set to be classified as an arterial road, and as such would be expected to have a carriageway width of 13-14m, footpaths on both sides and a higher standard of street lighting. The intersection of Brookside and Dunns Crossing Road would be required to be upgraded to enable the priority controls to be reversed so that Dunns Crossing Road would have priority over Brookside Road to reinforce the arterial route sought to be created.
- 4.4. In the Applicants April 2009 Final Transport Assessment Reports (TARs), it detailed that lots adjoining Dunns Crossing Road for both developments would have direct access to Dunns Crossing Road. In letters dated 2 March 2010 the Applicant provided updated ODPs that showed that individual lots

would not have direct access from Dunns Crossing Road. Instead lots would be internally accessed and that a “countryside area” strip would be created to supposedly improve issues associated with the visual integration of the proposed development into the adjoining rural area.

- 4.5. I have no specific issue with this however this will likely also be a significant factor in determining the appropriate standard of the upgrade of Dunns Crossing Road to support the level of development proposed, and the likely speed limits able to be justified along Dunns Crossing Road in conjunction with this.
- 4.6. It will be a requirement that the Applicant contribute to the upgrade of Dunns Crossing Road through Councils Development Contribution Policy under any subsequent resource consent(s) if the Plan Changes are successful. As no lots will have direct access to Dunns Crossing Road, and a more rural character is sought to be encouraged, then carriageway widths could be reduced from the arterial standard detailed above. In addition the need to provide kerb and channel could be dispensed with so that road stormwater runoff could be directly dealt within the “countryside area” strip. The strip could also provide a route for a walking and cycling pathways.
- 4.7. However I do consider it a disadvantage that the respective development areas are not joined, or ever likely to be, so road corridor upgrades and the provision of infrastructure may not be contiguous along the western side of Dunns Crossing Road leading to disjointed standards. The Applicant would also be expected to contribute to the upgrade of Dunns Crossing Road relating to widening and the provision of related transport infrastructure on the east side of Dunns Crossing Road. This is because it serves as the interface between the proposed development areas and the higher density urban areas and facilities envisaged by PC7 within Rolleston’s proposed urban limits.
- 4.8. Any upgrading would also include sealing the 1.1km long unsealed section of Dunns Crossing Road over the frontage of the Skellerup Block and its extension to Selwyn Road, because as correctly stated by the TAR, this proposed development area will generate trips that will utilise this route to connect to Lincoln and Christchurch and beyond using the nearby district arterial routes as explained in Section 3.18.

- 4.9. There would also be the requirement to provide localised improvements on both Dunns Crossing Road and Burnham School Road to cater for the new road intersections from the proposed development areas. These would be undertaken by the developer through details approved by Council at subdivision consent stage associated with the construction of new and upgraded roading infrastructure.
- 4.10. The Applicant has identified an issue regarding the positioning of the future CRETS Road (described in Section 3.19) and how its intersection on the eastern side of Dunns Crossing Road will relate to the new road intersections from the Skellerup Block on the west side. Options for this interaction can range from creating a cross roads or staggering the intersections. The degree of stagger, or separation of the intersections, is determined by the classification of the roads and the speed limit.
- 4.11. PC12 has introduced changes to intersection spacing requirements in the District Plan. Table E13.9 of the Township Volume specifies that the minimum intersection spacing along an arterial route for a 50km/hr posted speed limit is 160m, this would increase to 400m for 80km/hr. Recent discussions relating to PC7 and the development of ODPs in the general area have confirmed that the general alignment of the CRETS Road would be essentially parallel to Lowes Road and Selwyn Road between Dunns Crossing Road and Weedons Road, intersecting with the existing East Maddisons Road and Goulds Road intersection.
- 4.12. This is depicted in Appendix B together with the proposed roading layout of the Skellerup Block. This shows that the southern road entrance to the Block is difficult place to meet the 160m separation distance from the CRETS Road under a 50km/hr speed limit, and essentially impossible under the 400m and 80km/hr set of parameters. I would conclude that significant changes could be likely to the placement of either intersection to comply with the proposed changes under Table E13.9, and correspondingly this would be reflected in the Blocks overall internal roading design.
- 4.13. As the CRETS Road is more important to the safe and efficient development of the local roading network than any proposal associated with the Skellerup Block, this highlights that there is likely to be significant issues in being able to

provide a southern road entrance to the Block in an appropriate way to comply with the necessary standards in relation to the more important CRETS Collector Road.

- 4.14. Furthermore it cannot be predetermined that a 50km/hr speed limit can be justified along this section of Dunns Crossing Road, as the criteria associated with this is largely dependent on higher levels of side property access and development densities. As no direct lot access is proposed along the west side of Dunns Crossing Road then this may play a significant part in not achieving substantially lower speed limits that can achieve closer intersection spacing's.
- 4.15. I have similar concerns relating to the Holmes Block and the adjoining "Stonebrook" Development Area proposed to be rezoned to Living 1 type densities under PC7 and depicted on the ODP attached as Appendix C. Superimposing the Holmes Block main road and intersection on the ODP layout as shown, it becomes apparent that the estimated separation distance between the two proposed roads is only 120m which does not comply with the 160m distance for a 50km/hr speed limit.

SH1/Dunns Crossing/Walkers Road Intersection

- 4.16. The SH1/Dunns Crossing/Walkers Road Intersection is part of the state highway network that is managed by the New Zealand Transport Agency (NZTA). As such any discussion that follows is predicated on the basis the operation, form and function of the intersection is the responsibility of the Agency. The NZTA has recently expressed concerns with the row of pine trees along SH1 on the south east quadrant on the intersection that is partially obscuring the view of SH1 traffic to those on the Dunns Crossing Approach.
- 4.17. The TAR for the Holmes Block includes an assessment of the level of service (LOS) of the intersection. It is of some concern that the results show for the Dunns Crossing approach in 2026 that the LOS reduces from E to F in the PM period as a result of the proposed developments. A LOS of F is categorised to represent "heavily congested conditions" as described in the TAR, while a LOS no less than C is seen as desirable. The LOS also decreases in the AM peak, and also on the Walkers Road approach, to a LOS

of D. However this is considered less of a concern.

- 4.18. While an obvious LOS issue has been identified in the TAR any specific safety issues, for example those associated with the increase in the number of right hand turns from Dunns Crossing Road onto SH1, has not been canvassed. As experienced at similar intersections along SH1 where traffic from the residential areas of Rolleston attempt to access the highway in the most direct way possible, increasing numbers of right hand turns from local roads onto SH1 in these situations can be a safety issue that can lead to crashes. This occurs at the intersection of Tennyson St and SH1, and until recently at Rolleston Dr until the traffic signals were installed.
- 4.19. Due to the proximity of the development to the SH1 intersection, the Applicant is correct to assume that there will be a greater demand to utilise it compared to the local roads. However if the LOS reduces to the extent indicated, then traffic may more than likely find alternative routes using the adjoining local roading network such as Brookside Road to avoid the intersection.
- 4.20. Equally the development of the adjoining “Stonebrook” Plan Change area discussed previously will provide roading connections that could be utilised. However the acceptability of generating additional “through” traffic from the development area beyond what was envisaged associated with this Plan change area is questioned. Issues with intersection proximity and alignment onto Dunns Crossing Road between the two areas have been highlighted above.
- 4.21. However this should not be viewed as a way to avoid mitigating issues with the existing SH1 intersection. It is noted that the Applicant has been in discussions with NZTA regarding the intersection that could include limiting some movements (e.g. right hand turns) in the future. Also included are other improvements on the state highway approaches such as providing separated left hand turning lanes, which appear to be necessary “within the near future”, as stated by the TAR.
- 4.22. It is further stated in TAR that the NZTA have no funds available to accommodate any upgrading work in their current forecasts up to 2017. CRETS did not specifically identify any significant issues to warrant an

upgrade either. This may be due to the fact that the proposed development areas were not part of any traffic modelling scenario as they were outside what was considered to be Rolleston's urban limit.

- 4.23. I consider it is the responsibility of the Applicant to mitigate any specific adverse traffic effects generated by the activity, and on this basis the Applicant would be responsible for funding any necessary upgrades so both NZTA and Council have the confidence that this will occur at the appropriate time to cater for the demands expected. Any upgrading needs to reflect the safe and efficient operation of the intersection to accommodate both state highway traffic and that associated with the wider arterial ring road route sought to be established by Council. The upgrading necessary will require the prior approval of the NZTA relating to the state highway, and Council associated with its interaction with the local roading network.

Internal Roding

- 4.24. The TARs describe the standard of the roading to be provided, and this is shown on cross sectional and other details shown on each of the Blocks respective ODPs (as updated by the Applicant in March 2010). Carriageway widths range between 6-7m within a 19–20m wide road reserve. Also shown is a footpath along one side which is I believe is appropriate to support walking and cycling and wider connections opportunities to residential areas of Rolleston to the east.
- 4.25. The TARs reference the necessity to make specific changes to District Plan Rules to accommodate the proposed developments, in particular Table E13.9 and Roding Standards by introducing a Living 3 Zone set of standards. I don't believe this is appropriate or necessary as PC12 has included revised standards for Living 2 zones, of which this development equates to, that encapsulates the standards sought by the Applicant within the bounds considered appropriate by Council for this type of development rural residential development.

Extract Table E13.9, Plan Change 12

Type of Road	Legal Width (m)		Formed Width (m)		Traffic lanes	Parking lanes	Specific provision for cycles (on road or off road)	Pedestrian Provision
	Min	Max	Min	Max	Min. No. of	Min No. Of		Minimum
Local – Living 2 zone only	18	20	6	6.5	2		NA	Optional but no more than one side
<u>Cycle/Pedestrian Accessway</u>	<u>6</u>	<u>10</u>	<u>2.5</u>	<u>3.0</u>	<u>NA</u>	<u>NA</u>	<u>Yes</u>	<u>Yes</u>

- 4.26. It is appreciated that there is an advantage to widen further the more immediate sections of main road directly off Dunns Crossing Road up to 8m where condensed traffic volumes occur near to Dunns Crossing Road. This is generally accepted, and the departure to the standards above can be accommodated with specific subdivision consent conditions rather than a further change to standards proposed under PC12.
- 4.27. I have no particular concerns with the proposed internal roading layouts shown on the proposed ODPs however how these may be influenced by a changes to the positioning of the intersections with Dunns Crossing Road as discussed in Sections 4.10 to 4.15. However as this remains an unknown variable at this stage my opinion on the suitability of the internal network could change.
- 4.28. I do question the rationale in providing two public walkways from the Holmes Block to Dunns Crossing Road compared to none for the Skellerup Block. It would be my opinion that these are unnecessary based on the central location of the main access roads and the opportunity to use the “countryside” areas both internally and externally to locate pathways within to gain access to Dunns Crossing Road.

State Highway Setback

- 4.29. Attention is drawn to Appendix 5D – Reverse Sensitivity, Transit (aka NZTA) Planning Policy Manual Version 1 relating to noise performance standards

along state highways. This is in coordination with Submission No.11 by the New Zealand Transport Agency.

Public Transport

4.30. The TARs reference the old public transport bus system that served Rolleston. In late 2010 a new service was introduced. Branded the “Selwyn Star”, this is the principle metro bus service that will be utilised in the district for the foreseeable future. Currently the Selwyn Star includes three routes centred on Lincoln and Rolleston:

- An improved 81 Lincoln service.
- A new 88 Rolleston service will travel all the way to the city.
- A new 820 Burnham to Lincoln service that connects Burnham, Rolleston, Springston and Lincoln.

- 4.31. Currently the main routes that are closest to the proposed developments are along Lowes and East Maddisons Road. The distances from the nearest intersection into the respective development areas on Dunns Crossing Road to the nearest bus route are 950m for the Holmes Block, and 1200m for the Skellerup Block. This is well outside the usual range of 400-500m for properties to be within walking distance to a public transport service to both encourage and enable its use.
- 4.32. There may be a time in the future when bus routes would extend further north, but this would only occur if substantial urban development occurred that justified this, for example in the “Stonebrook” Development Area. It would be my opinion that rural residential developments of the nature proposed and positioned, are not ideally suited to utilise more sustainable transport modes like public transport as an alternative to private motor vehicle use.
- 4.33. A “Park N Ride” site at the north end of Rolleston Dr has been identified to facilitate public transport use by Rolleston Residents, and the wider local area, in the future. The timing of when this may occur is becoming more uncertain based on how this will integrate with wider regional initiatives to develop an integrated series of sites as part of a Greater Christchurch Travel Demand Management Response.

CRETS and Strategic Transport Works

- 4.34. The TARs make numerous references to roading and other works expected to occur through initiatives such as the Christchurch, Rolleston and Environs Transport Study (CRETS) that is relied upon to accommodate the additional traffic growth from developments such as this. It seems, as written in the TARs, that this is a foregone conclusion and on the basis that these are also referenced in the Canterbury Transportation Regional Implementation Programme (CTRIP). While Council has an ongoing commitment to cater for traffic growth in a safe and efficient manner, this also has to be affordable. For this to occur works that can be funded through the National Land Transport Programme (NLTP) and/or through Development contributions will in most part take precedence.
- 4.35. Therefore it needs to be made clear that new developments must contribute

to the development of transport systems and networks that they will utilise. More localised examples relating to these proposed Plan Changes include the upgrading of the SH1/Dunns Crossing/Walkers Road Intersection and the upgrade of Dunns Crossing Road and related intersections. Wider network works will be funded through developments contributions or through the NLTP if achievable.

- 4.36. The effects of the 22nd February Earthquake has created major issues and effects on all of Greater Christchurch's transport systems, ranging from shorter term operational problems to the impact on longer term strategic planning. As such the reliability of previous transport programmes and strategic planning assumptions is questionable; including the ongoing role of central government transport and other funding that may need to support recovery initiatives.

5. Conclusions

- 5.1. The developments proposed by the Applicant, to create two rural residential type developments of 73 and 102 lots on the west side of Dunns Crossing Road, have not been specifically included in any previous transportation modelling or strategic assessments relating to the wider Rolleston network. This is because no development west of Dunns Crossing Road had been envisaged as it was outside what has been established as Rolleston's Urban Limit.
- 5.2. Under Draft Plan Change 12, Dunns Crossing Road is set to become part of an arterial ring road route around Rolleston. It will become important how any new developments access and interact with Dunns Crossing Road to ensure this wider function can be achieved in a safe and efficient manner. I have concerns that the intended placement of intersections from the two developments will adversely impact on currently identified and accepted intersections and new roads from developments planned on the east side of Dunns Crossing Road. In particular that related to Plan Change 7 ODP1 "Stonebrook" Development area to the north, and those relating to the future provision of CRETS Collector Road to the south. Changes to the intersection locations and roading connections from the proposed development areas may cause changes to the internal roading layouts that cannot be determined at this time or its acceptability.
- 5.3. Dunns Crossing Road will be required to be upgraded to accommodate any residential type of activity alongside, and in a manner to serve its intended wider arterial function. While the proposed developments have no direct lot access to Dunns Crossing Road, the level of traffic generated will require works to accommodate the traffic generated, estimated to be approx 2,000 vehicles per day. This would include carriageway sealing, widening, footpaths, street lighting and intersection upgrades (e.g. Brookside Road and Dunns Crossing Road) to enable the necessary interaction between the proposed development areas and those within the adjoining urban limits to occur in an effective way.
- 5.4. The primary area of concern is the SH1/Dunns Crossing/Walkers Road

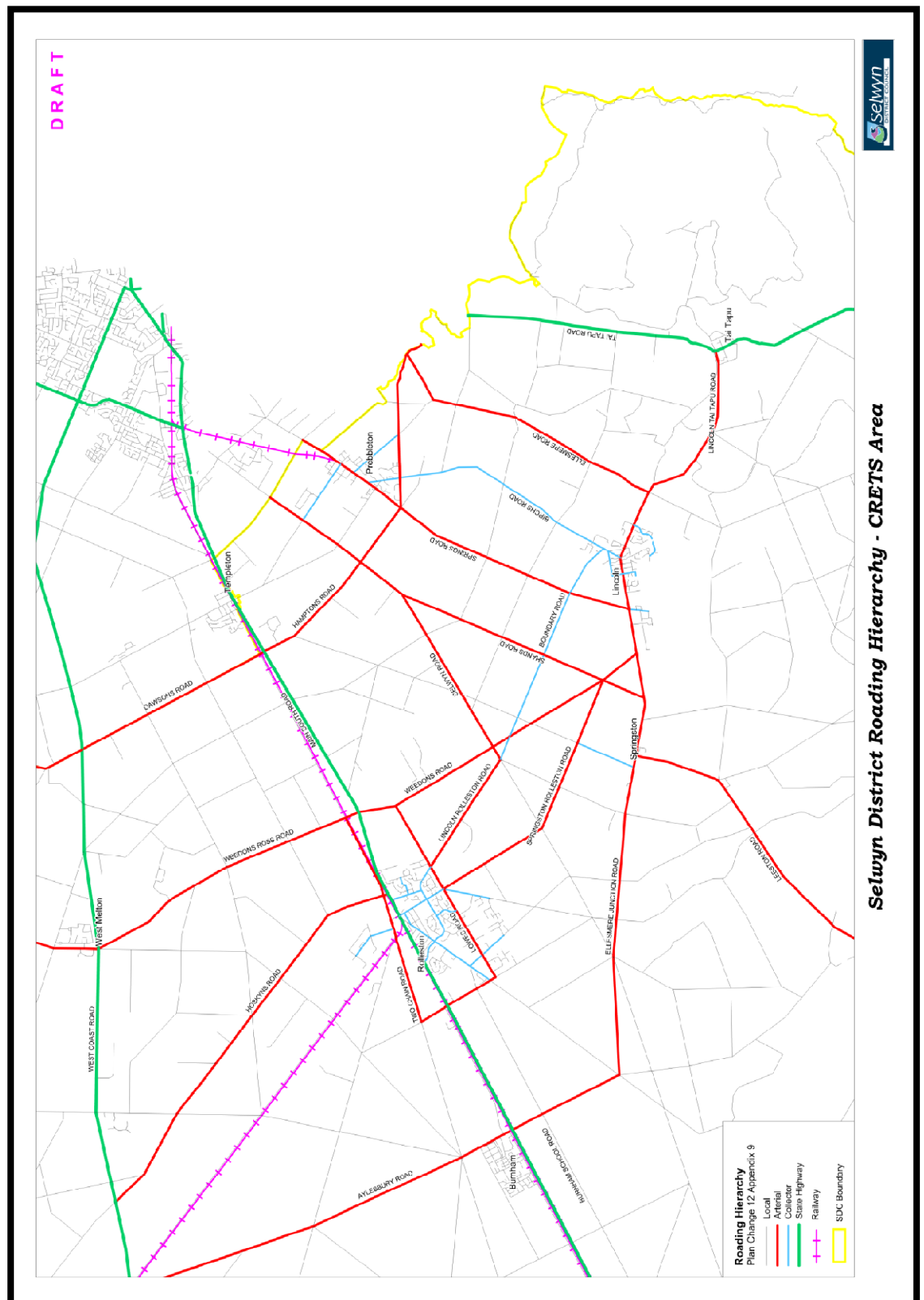
Intersection where it has shown that by 2026 (with the developments in place) that the Level of Service on the Dunns Crossing Road leg will decrease to an unacceptable level. The Applicant is suggesting that improvement works need to occur “within the near future”. It is my opinion that this is a significant issue, in particular relating to the Holmes Block, which will require the Applicant to mitigate any adverse effects at its cost to the satisfaction of both the NZ Transport Agency and Council.

- 5.5. The Applicant is advocating that specific rules or changes in the District Plan are necessary to accommodate the standard and configuration of the roads being proposed. I do not believe this is necessary based on what is currently included in Draft Plan Change 12. I think further recognition and appreciation of PC12 is necessary by the Applicant to inform the plan change process beyond some of the details provided - that appear to be out of date in comparison.
- 5.6. The provision for walking and cycling are adequate although further consideration needs to be given to connectivity to, and across, Dunns Crossing Road in relation to intersection placement from the roads within the development. The distance of the proposed developments from existing bus routes means in the foreseeable future that it is unlikely use would be made of these to enable sustainable transport choices to be made.
- 5.7. Finally I caution on the aspect of the Applicant seemingly relying on more strategic network improvement works occurring to justify or mitigate the effects of developments proposed as this is dependent on funding and wider influences beyond Council control.
- 5.8. I consider that the level of traffic generated by the developments is within reasonable expectations of overall growth, but will introduce localised effects that will require a response and mitigation measures to be provided by the Applicant to address. This will need to be cognisant of planned growth and arterial roading intentions for the area already in play through current Council planning processes.



Andrew. McD. Mazey

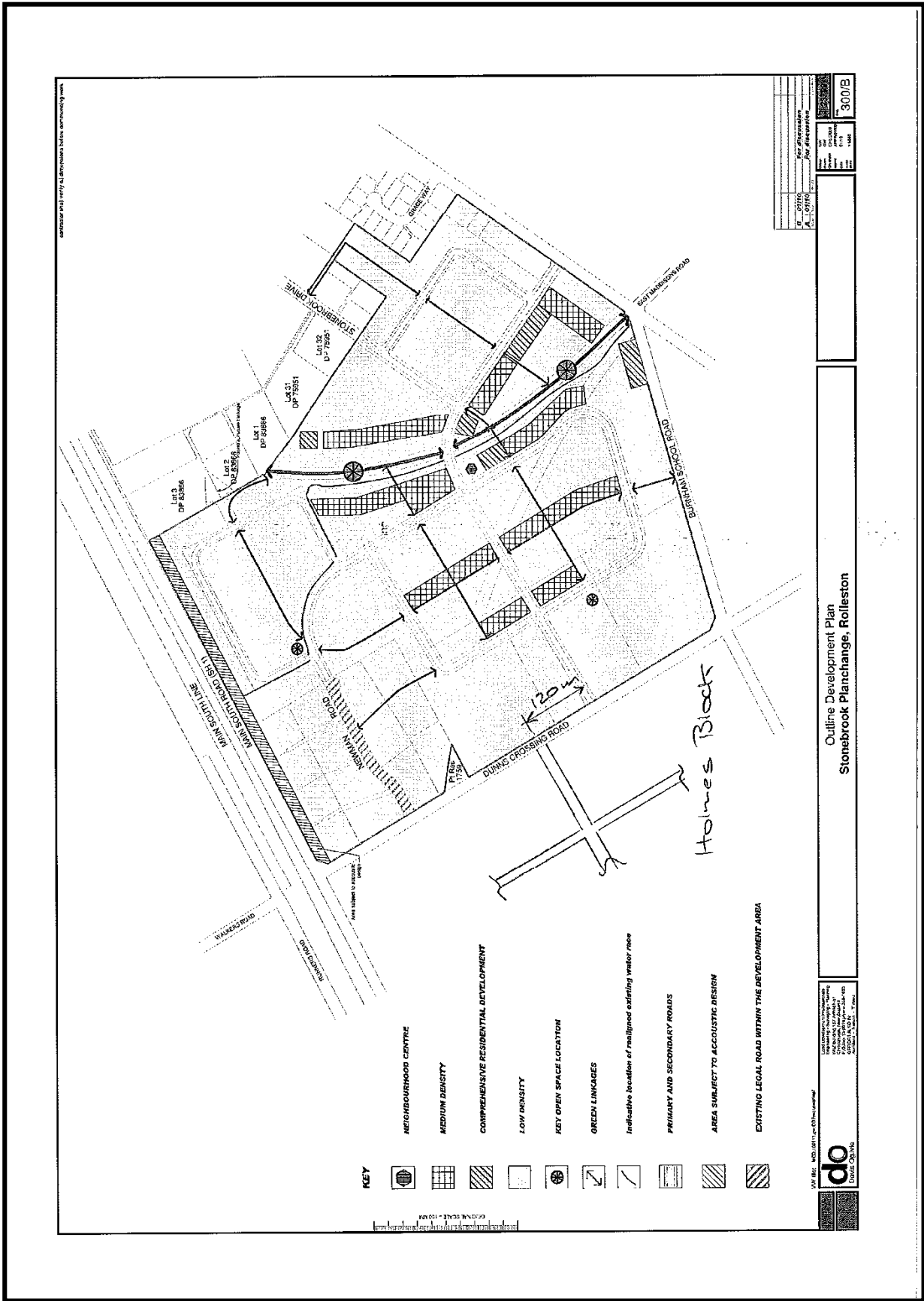
ASSET MANAGER TRANSPORTATION



Appendix A



Appendix B



Appendix C

Queensland Separation Distance Calculation

The Queensland separation distance formula is

$$\text{Separation distance} = N^{0.6} \times S1 \times S2 \times S3 \times S4$$

Where N	is the number of birds divided by 1000	= 16 (16000/1000) ¹
S1	farm design and management factor	= 1 (for broiler farms) ²
S2	land use sensitivity factor	= 26 (for rural residential areas)
S3	surface roughness factor	= 1.2 (for long grass/few trees) ³
S4	terrain weighting factor	= 1.5 (for down slope) ⁴

$$\text{Separation distance} = 247$$

Notes

¹ The effects of the sheds are not cumulative on the site. The two sheds close together at the southwestern corner of the Tegel property represent the worst case. Hence 2 sheds at 8,000 birds each was used for the number of birds in the equation.

² A S1 factor for breeder farms was not available. The only other S1 factor given was 0.6 for layers. Laying sheds have different designs to both broiler and breeder sheds. As both breeders and broilers are housed uncaged in sheds as opposed to being caged, the S1 factor for breeders is likely to be most similar to the S1 factor for broilers.

³ The review of the Queensland separation distances recommended a multiplier of 1.2 for long grass/few trees. This is the most conservative surface roughness factor.¹

⁴ The review of Queensland separation distances recommend that the factor for "Sloping terrain-down slope" of 1.5 is used wherever receptors are on the same or lower elevation to the source².

¹ Australian Government Rural Industries Research and Development Corporation "Separation Distances for Broiler Farms – Verifying methods and investigating the effects of thermal buoyancy" RIRDC Publication No. 10/073, June 2010.

² Ibid at 1.

Specific Conditions for the Pines WWTP to discharge contaminants to land and air under CRC101109 in respect of proposed Plan Change 8 Land

Private Plan Change 8 to the Selwyn District Plan seeks to re-zone the land shown on Plan CRC101109C ('the Plan Change land') from Outer Plains zone to Residential Living 3 zone for rural residential development. Conditions 35 to 42 are contingent on rural residential re-zoning of the Plan Change land becoming operative, and in which case the following additional conditions shall apply:

- 35) When discharging wastewater to land adjacent to the Plan Change land, the consent holder shall ensure that:
 - (a) The discharge shall be in an aerobic state.
 - (b) The dissolved oxygen concentration shall not be less than a trigger level of 0.5 grams per cubic metre.
 - (c) The dissolved oxygen concentration in the discharge shall be continuously monitored and an alarm fitted that activates in the event that the dissolved oxygen concentration is less than the trigger level in clause (b) of this condition.
 - (d) The dissolved oxygen monitoring device shall be calibrated and serviced annually.
- 36) The requirements of conditions 35(c) and 35(d) shall be undertaken by the consent holder for a minimum of at least two years from the date of commencement of spray irrigation of wastewater to land in accordance with this consent.
- 37) The requirements of conditions 35(c) and 35(d) shall no longer apply upon provision of a certificate signed by the person responsible for designing the wastewater irrigation system, or by a chartered Professional Engineer (CPEng), to the Canterbury Regional Council, Attn: RMA Compliance and Enforcement Manager, certifying that:
 - (i) dissolved oxygen in the discharge has been continuously monitored for at least two years; and
 - (ii) the minimum level of dissolved oxygen concentration specified in condition 35(b) has been continuously met or exceeded during that two year period.
- 38) If the minimum level of dissolved oxygen concentration specified in condition 35(b) is breached, or the UV requirements specified in condition 4 are not achieved, then the following provisions shall apply:
 - (i) Any discharge of treated wastewater to land adjacent to the Plan Change land shall be setback no less than 200 metres from the common boundary as shown on Plan CRC101109C when the winds of any strength are from 170oN to 310oN; provided that
 - (ii) When the winds are not from 170oN to 310oN any discharge of treated wastewater shall comply with the setback distances prescribed by condition 39.
- 39) In respect of shelter belt planting:
 - (a) The consent holder shall establish a shelter belt comprising three rows of closely planted evergreen trees along the common boundary defined under condition 38(i).
 - (b) No discharge of treated wastewater to land shall occur within 150 metres of that common boundary until;
 - (i) the trees referred to in condition 39(a) have reached a consistent minimum height of 3 metres and have developed into a dense continuous shelter belt without gaps; and
 - (ii) the consent holder has demonstrated to the satisfaction of the Canterbury Regional Council, Attn: RMA Compliance and Enforcement Manager, that the boundary plantings comply with condition 39(b)(i).

- (c) Following confirmation pursuant to condition 39(b)(ii), discharge of treated wastewater to land may occur up to 25 metre from the common boundary defined under Condition 38(i).
- 40) In the event of cessation of irrigation from the wastewater spray irrigation system for more than 24 hours on land adjacent to the Plan Change land, the consent holder shall not start up irrigation from the spray irrigation system within 200 metres of the common boundary defined under Condition 38(i).
- 41) There shall be no end guns associated with the wastewater spray irrigation system located on Pt Lot 1 DP61557 or Pt RS 33357, being that part of the land subject to this consent located north of Burnham School Road.
- 42) No discharge of treated wastewater to land from a spray irrigation system shall occur within 150 metres of the common boundary defined under Condition 38(i) unless:
- (a) The spray irrigation nozzles are no more than 2 metres above ground level.
 - (b) The spray irrigation nozzles produce large consistent droplets such as produced by the Nelson R3000 brand or similar product.
 - (c) The operating pressure at the spray irrigation nozzles does not exceed 103 kilopascals (kPA).

Report

SDC Plan Changes 8 and 9 - Odour Review

Prepared for Selwyn District Council

By Beca Infrastructure Ltd (Beca)

12 April 2011

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Revision History

Revision Nº	Prepared By	Description	Date
A	Prue Harwood	Final	12 April 2011

Document Acceptance

Action	Name	Signed	Date
Prepared by	Prue Harwood		12/4/11
Reviewed by	Tracy Freeman		
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1 Introduction

1.1 Background

Selwyn District Council (SDC) has received private plan change requests for Plan Change 8 and Plan Change 9 from Selwyn Plantation Board Ltd (SPBL). Both plan change requests wish to change the zoning of an area of land from rural (Outer Plains) to a new Living 3 zone which will have a higher average housing density. Both properties are located on the outskirts of Rolleston in the vicinity of the Pines Wastewater Treatment Plant (Pines WWTP), the Pines Resource Recovery Park (Pines RRP) and a Tegel intensive poultry farm.

SDC has commissioned Beca to review the odour assessments included in the plan change requests and the methods promulgated to avoid, remedy or mitigate any potentially adverse reverse sensitivity and nuisance effects of odour.

Since the plan change requests were lodged SDC has applied for and been granted resource consents from SDC (as regulatory authority) and Environment Canterbury (ECan) to enable an extension of the Pines WWTP. This is to allow for the projected increase in population in the area from 6000 persons to a forecast of 28000 by 2017 and 48000 by 2041. The applications include the following:

- a new consent to authorise the discharge to air from the spray irrigation of 25,614m³ per day of treated wastewater;
- a variation to consent CRC040100 to authorise the discharge of contaminants to air resulting from the treatment and storage of wastewater and biosolids; and
- a Notice of Requirement (NOR) for the new disposal areas for treated wastewater and the increased footprint of the WWTP and the new sludge drying facilities.

The resource consent applications and the NOR application were granted on 17 December 2010, subject to conditions. The decisions and conditions included in the consents and NOR are relevant to this discussion. The conditions of the consents and NOR are discussed in section 4.

1.2 Reference Documents

In order to undertake the review of the odour aspects of the applications to discharge to air and to use land, Beca has reviewed the following documents provided by SDC:

- "Private Plan Change Request to the Selwyn District Plan – Proposed Rural Residential Living 3 Zone - PC090009 Skellerup Block – Dunns Crossing Road, Rolleston" 5/8/2010 prepared by Aurecon Ltd for Selwyn Plantation Board Ltd.
- "Private Plan Change Request to the Selwyn District Plan – Proposed Rural Residential Living 3 Zone - PC090008 Holmes Block – Intersection of Dunns Crossing Road and Main South Road, Rolleston" 5/8/2010 prepared by Aurecon Ltd for Selwyn Plantation Board Ltd.
- The original submissions and further submissions lodged on the plan change requests.
- The Council decision on the NOR for the Pines RRP.
- Consent CRC041489 for the discharge of contaminants to air from the Pines RRP.
- The decisions on applications CRC10119, CRC101111 and CRC040100.1 and a NOR by SDC for the Pines WWTP released on 17 December 2010.

- The Notice of Requirement to designate the land for the Pines Resource Recovery Park
- Resource consent CRC041489 to discharge to contaminants to air from the Pines Resource Recovery Park.
- Schedule of Proposed Amendments to Plan Changes 8&9 dated 29 March 2011.

2 Description of Plan Changes

2.1 Plan Change 8 Holmes Block

As notified Plan Change 8 proposed to rezone approximately 92ha of existing rural zoned land (Outer Plains) known as the “Holmes Block” to a new Living 3 zone for 125 rural residential parcels with an average density of one household per 5349m². In response to issues raised by submitters the applicant has reduced the number of properties to 97 rural residential parcels plus five, four hectare lots. The property is located on the western outskirts of Rolleston west of the PC1 Urban Limit and directly adjacent to the State Highway. The western edge of the Holmes Block is adjacent to the NOR boundary for the Pines WWTP. Figure 2.1 shows a map of the location of the Holmes Block.

2.2 Plan Change 9 Skellerup Block

As notified Plan Change 9 proposed to rezone approximately 72ha of existing rural zoned land (Outer Plains) known as the “Skellerup Block” to a new Living 3 zone for 100 rural residential parcels with an average density of one household per 5113m². In response to issues raised by submitters the applicant has reduced the number of properties to 68 rural residential properties plus five four hectare lots. The property is located on the southern outskirts of Rolleston to the south of the PC1 urban limit. Figure 2.1 also shows the location of the Skellerup Block.

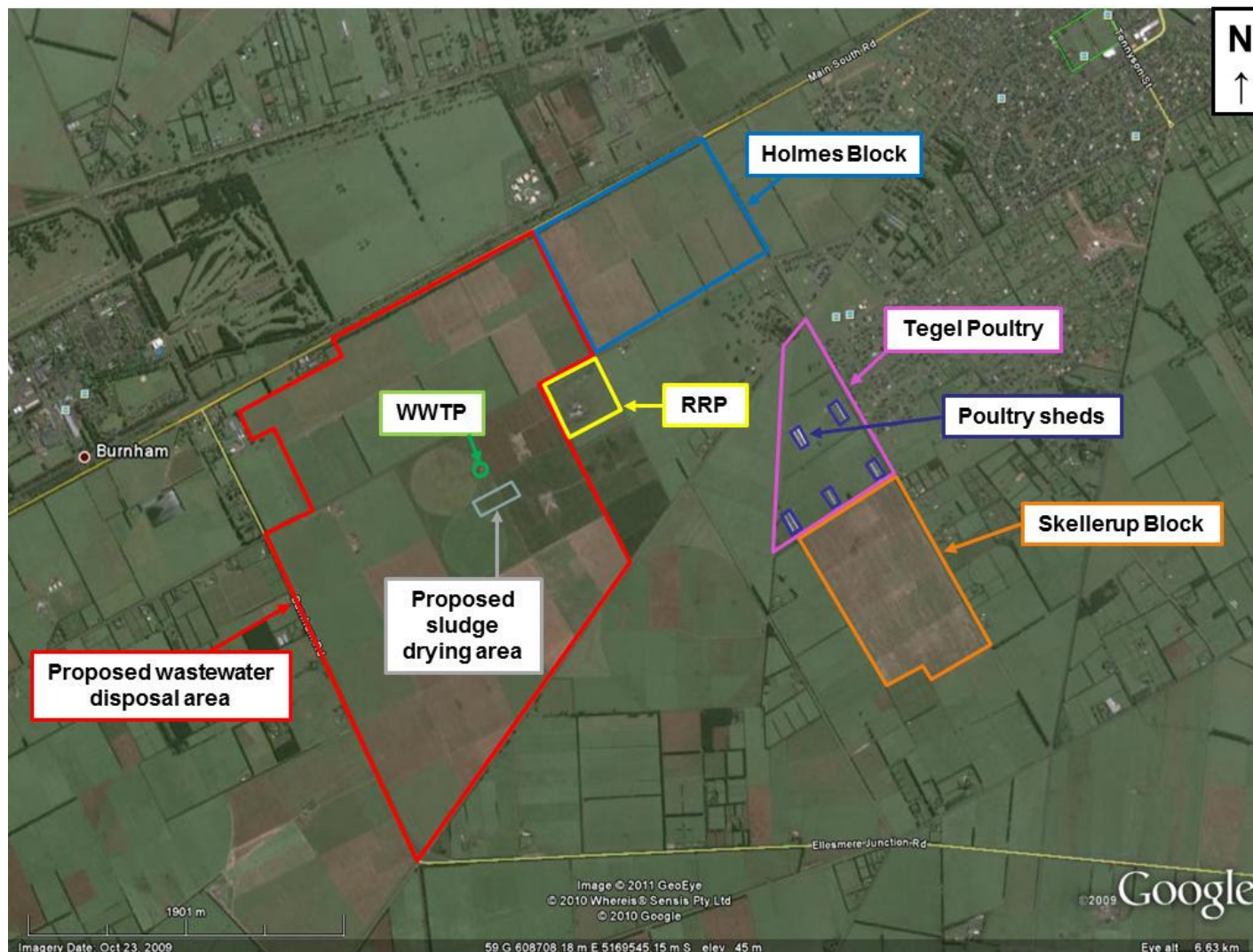


Figure 2.1 Map Showing Location of Holmes and Skellerup Blocks plus the Pines WWTP and RRP and the Tegel poultry farm.

3 Locality Description

3.1 Area Characteristics

The Holmes and Skellerup Blocks are located to the southwest of the township of Rolleston. The Pines WWTP and RRP are located to the southwest of the Holmes Block and to the northwest of the Skellerup Block. The proposed wastewater disposal area for the Pines WWTP adjoins the western boundary of the Holmes Block. A Tegel poultry farm is located immediately to the north of the Skellerup Block and to the south of the Holmes Block. These activities are all shown on Figure 2.1.

The majority of the land in the vicinity of the Holmes and Skellerup Blocks is rural land that is used for pastoral farming and cropping. There are some existing dispersed rural dwellings and some pockets of rural-residential type development.

The Pines WWTP and RRP and the Tegel poultry farm are all existing odour sources that have the potential to discharge odours beyond the boundaries of their respective properties. The poultry farm is a “breeder” poultry farm. Breeder farms produce fertile eggs that will be hatched in a hatchery to supply chickens for either meat or egg production. The breeder hens are kept on sheds on raised litter floors similar to sheds used for broiler or meat chickens. Breeder hens are fed less than broiler chickens and are kept in the shed for their life cycle of approximately one year.¹ Broiler hens have a much shorter life cycle of approximately 60 days.²

The recently consented changes to the Pines WWTP will increase the area of land over which treated wastewater may be irrigated and add outdoor biosolids drying to the processes undertaken on-site. These changes will alter the odour generation potential of the WWTP site. The proposed changes to the Pines WWTP are discussed in section 4.

3.2 Topography and Meteorology

The Holmes and Skellerup Blocks are located on the Canterbury Plains and the surrounding topography is generally flat with no significant hills. Radiation temperature inversions will be common during periods of limited cloud cover and low overnight wind speeds. Inversion conditions and low wind speeds limit the dispersion of contaminants that are emitted from sources at low elevations, such as those from the Pines WWTP and RRP and the Tegel poultry farm, and are the conditions of most concern with regard to odour effects.

The nearest meteorological station to Rolleston is located at Lincoln, approximately 12km to the southeast of the site. Figure 3.1 presents a windrose for Lincoln for the period January 2004 to December 2005 using data obtained from the National Climate Database operated by NIWA. The Lincoln data may show slight differences from Rolleston due to the local influence of Banks Peninsula on the Lincoln site. For example, northeasterly winds at Lincoln may be slightly more orientated from the east (ie east-northeasterlies or easterly winds), and northwest winds may be slightly more westerly in origin (ie west-northwesterlies or westerly winds). However, with these limitations in mind and given that the Lincoln meteorological station and the Rolleston area are on

¹ <http://www.pianz.org.nz/farming/breeding/parents>

² http://www.poultryhub.org/index.php/Meat_chicken_farm_sequence

relatively flat terrain without significant hill/valley systems between them, the Lincoln data will give a reasonable representation of the general wind directions in the Rolleston area.

The Lincoln windrose indicates that the prevalent winds are from the northeasterly and southwesterly quarters. Winds in the area, as indicated by the Lincoln data, are generally light with an average wind speed of 4m/s.

Winds from the northeast will blow any odours produced by the Pines WWTP and RRP and the Tegel poultry farm towards the southwest and away from the Holmes Block. Winds from the southwest will blow any odours produced at the Pines WWTP and RRP directly towards the Holmes Block. The Skellerup Block should not be downwind of the local odour sources during southwesterly winds.

Southeasterly and northwesterly winds are uncommon. Local knowledge will suggest that the northwesterly is a common wind direction. However, the intensity of the wind rather than the frequency of wind from this direction is likely to give this perception. Winds from the southeast will blow odours from the Tegel poultry farm towards the Holmes Block and northwesterly winds will blow odours from the Pines WWTP, RRP and the Tegel poultry farm towards the Skellerup Block.

During calm conditions there are likely to be katabatic winds which will flow down across the Canterbury Plains from the northwesterly quarter. These winds may not show on the windrose due to the wind speeds being below the stall speed of the anemometer. Under very light katabatic wind conditions odours can carry long distances. Northwestern drainage flows would carry odours from the Tegel poultry farm towards the Skellerup Block.

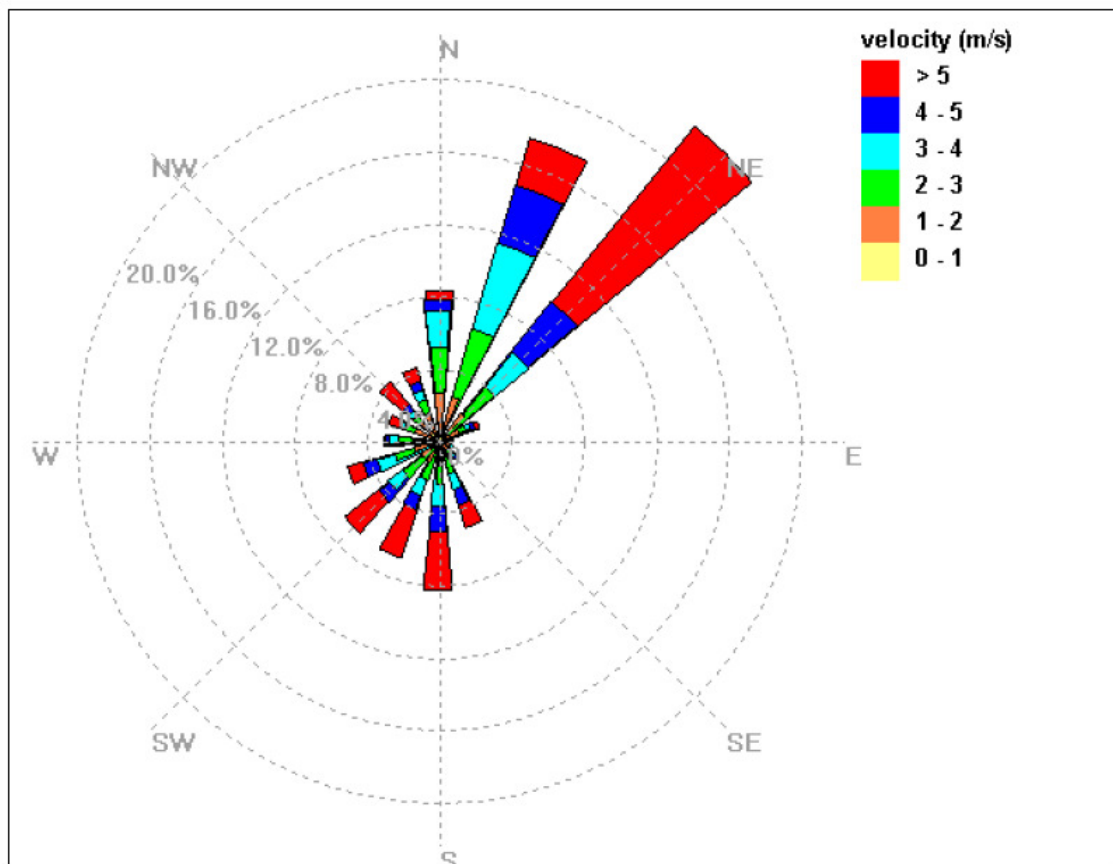


Figure 3.1 Lincoln Windrose, 2004-2005

4 Conditions Included in New WWTP Consents and NOR

The resource consent conditions included in the new consent for the Pines WWTP for wastewater disposal will have implications for the potential effects of odours and aerosols generated by the Pines WWTP on the Holmes and Skellerup Blocks. The controls on wastewater irrigation included in the conditions of consent CRC101109 that are most relevant to the control of odours and aerosols that may affect the Holmes and Skellerup Blocks include the following:

- The wastewater must be treated with ultra-violet disinfection prior to irrigation;
- The treated wastewater must not exceed limits for water quality parameters, including EColi Faecal coliforms and BOD;
- When irrigating wastewater adjacent to the Holmes Block the wastewater must be aerobic and have a minimum dissolved oxygen concentration which is continuously monitored and alarmed;
- The boundaries of the wastewater irrigation areas must be planted with shelter planting and on the common boundary between the irrigation area and the Holmes Block a triple row of closely plant evergreen trees must be planted;
- Irrigation of wastewater must not commence within 150 m of the boundary of the irrigation area until the shelter planting has reached a minimum of 3 m in height;
- When shelter planting is at least 3 m in height irrigation of wastewater must not be undertaken within 15 m of any site boundary, except on the boundary between the irrigation area and the Holmes block the setback distance must be at least 25 m;
- If wastewater being irrigated adjacent to the Holmes Block does not meet the minimum dissolved oxygen concentrations or has not had ultra-violet disinfection the wastewater must not discharged within 200 m of the common boundary when winds are blowing between 170° and 310°;
- The odours, aerosols and spray drift resulting from the irrigation of wastewater must not cause offensive or objectionable effects beyond the boundary of the discharge area;
- No end guns are permitted to be used on the wastewater irrigation system used on the land north of Burnham School Road (which includes the land adjacent to the Holmes Block);
- The wastewater irrigation systems used within 150 m of the common boundary between the Holmes Block and the irrigation area must have the following:
 - Irrigation nozzles that are no more than 2 m above ground level
 - Nozzles which produce large consistent droplets
 - Nozzles which have an operating pressure of no more than 103kPa.
- The wastewater treatment and sludge drying operations shall not cause any odour or dust particles that are offensive or objectionable beyond the property boundary of the consent holder.

Similarly, the conditions of consents CRC040100.1 and CRC101111 will have an impact on the control of odours generated from the Pines WWTP and the drying of biosolids. The controls of most relevance to this discussion are:

- The wastewater treatment and sludge drying shall not cause any odour or dust particles that are offensive or objectionable beyond the property boundary of the consent holder;
- The inlet works and screens at the WWTP must be fully enclosed and ventilated to emission control equipment;
- Sludges must be aerobically digested prior to air drying. No anaerobic drying of sludges or biosolids is to take place;
- Drying of sludges and biosolids must be restricted to air drying processes only.
- The size of the air drying beds are limited to a maximum area of 2.5 ha
- Wastewater disposal is prohibited on the parcel of land Pt Lot 2 DP 82068, which abuts the southern boundary of the Pines RRP and extends to Brookside Road.

5 Plan Change Applications

5.1 Applicant's Approach

Golder Associates (Golder) have prepared an assessment of the potential for odour discharges from the Pines WWTP and RRP and the Tegel poultry farm to affect any residential properties that may be developed on the Holmes and Skellerup Blocks. The overall assessment approach used by Golder and the buffer distances recommended by Golder are considered to be appropriate in general with some reservations:

- Golder has used buffer distances that are recommended by various Australian states and which are widely adopted in New Zealand. Some modifications to the locations of the buffer distances are recommended to take into account the proposed expansion of the Pines WWTP. Golder has assumed that the operations undertaken at the RRP can occur only on the southwest corner of the site that is presently used. However the NOR and resource consent for air discharges for the site do not restrict where operations such as composting may occur on the site. Hence the buffer distance recommended by Golder should in our opinion apply to the boundary of the entire RRP site rather than just the existing operations area.
- The dispersion modelling undertaken for assessing the effects of the Tegel poultry farm is not considered reliable and is discussed in paragraph 5.3.1.

The potential effects of each of the nearby odour sources on the Holmes and Skellerup Blocks are discussed separately below.

5.2 Plan Change 8 Holmes Block

5.2.1 Tegel Poultry Farm

It is considered that the existing buffer distance between the Tegel poultry chicken sheds and the Holmes Block of approximately 900m is sufficient and that the Holmes Block should not be adversely affected by odours from the Tegel poultry farm.

5.2.2 Pines RRP

Golder has presented a range of buffer distances for waste transfer stations and composting plants in their report based on various guidance documents prepared by several Australian states. The buffer distance recommended by Golder of 300m from the waste transfer and composting operations to the Holmes Block is considered to be appropriate. The NOR for the Pines RRP does not restrict where activities such as composting and waste processing must take place on site. At present these activities take place in the southwest corner of the site. In future it may be necessary to relocate these activities within the site and use other areas of the site for activities, such as composting, which fall within the scope of the existing NOR and discharge consent. Consequently the 300m buffer distance should apply from the boundary of the entire site in order to prevent odour issues arising on the Holmes Block in the future.

A 300m buffer distance extending from the boundary of the RRP site will encroach into the Holmes Block at the southern corner of the block by 300m (see Figure 5.1)

5.2.3 Pines WWTP

The extended Pines WWTP plant will be designed for a population equivalent of 48,000, an eight-fold increase from the present capacity of 6,000 persons. The area consented for wastewater disposal will increase from 80ha to 375ha and the consent allows for aerobic digestion of sludge

and outdoor drying of sludge on a 2.5ha area located immediately to the south of the treatment plant.

Golder's assessment was based on the effects from a WWTP serving a population of 50,000 which is consistent with the capacity of the extended plant. The buffer distance of 500m recommended by Golder is considered to be appropriate. This buffer distance does not impact on the Holmes Block as the distance between the nearest boundary of the Holmes Block and the WWTP is approximately 900m (see Figure 5.1).

The aerobic treatment of sludge has a high potential to discharge odours. The consent for the extended plant does not allow for composting of sludge. The application for the extended plant did not allow for any extraction or odour treatment system for the sludge stabilisation process and the proposed conditions of consent do not specifically require this. There is a risk that the sludge stabilisation system will be a source of odours at the plant especially if the aeration system is not successful or malfunctions occur. Golder recommended a buffer distance of 1000m surrounding the sludge digestion facilities based on the level of uncertainty regarding the potential treatment method to be used and the fact that the WWTP is located downwind of the Holmes Block during southwesterly winds. This buffer distance is considered to be appropriate. A buffer distance of 1000m impacts on the southwesterly corner of the Holmes Block by approximately 100m (see Figure 5.1).

The proposed changes to the Pines WWTP include air drying of aerobically digested sludge in outdoor drying beds to be located to the south of the WWTP. Golder recommended a buffer distance of 500m between the drying beds and sensitive locations and this is considered to be appropriate. This buffer distance should not impact on the Holmes Block as the distance between the planned location of the sludge drying beds and the nearest boundary of the Holmes Block is approximately 900m (see Figure 5.1).

Golder recommended a buffer distance of 200m for the disposal of treated wastewater to land which is considered appropriate. However, the area of land consented to be used for the disposal of wastewater has been increased and includes land immediately to the west and bordering the Holmes Block. The conditions of consent for the extensions to the Pines WWTP include a number of setback distances from the Holmes Block for the disposal of treated wastewater. The shortest setback distance is 25m. To ensure a minimum separation distance between future residences and wastewater disposal of 200m as recommended by Golder, it is recommended that a restriction be placed on the building of houses on the Holmes Block within 175m of the westerly boundary of the land.

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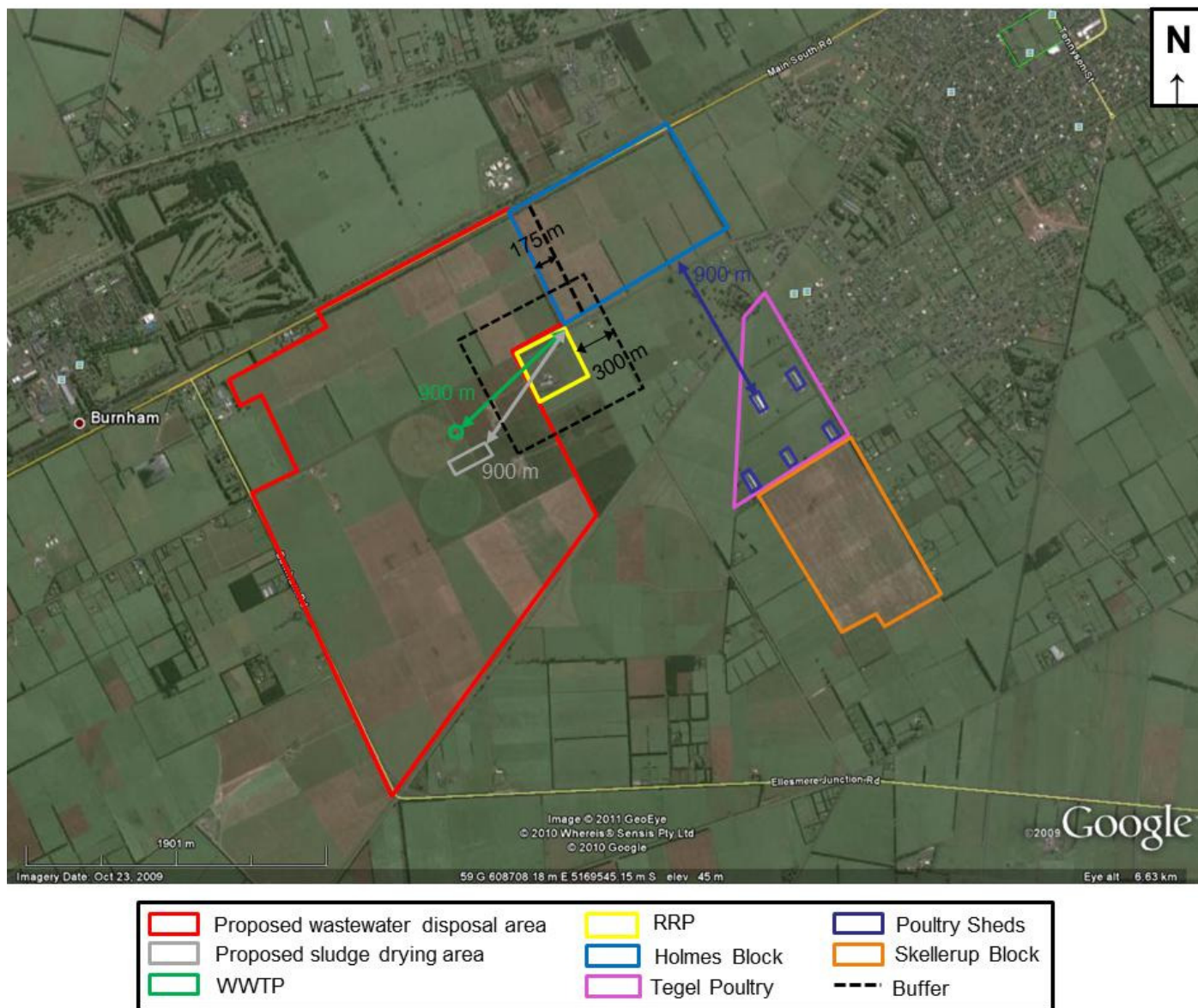


Figure 5.1 Diagram Showing Recommended Separation Distances between the Pines WWTP, RRP and Tegel Poultry Farm and the Holmes Block

5.2.4 Post Notification Changes to Plan Change 8

Since Plan Change 8 was notified the applicant has proposed a number of amendments in response to concerns raised by submitters. These amendments include adding a rule to the District Plan (rule 4.9.28) which states

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall not be located within the “Odour Constrained Area” as shown in Appendix 37 (Holmes Block).

The map included in Appendix 37 is shown in Figure 5.2.

The “Odour Constrained Area” restricts building within the southwest corner of the Holmes Block but does not extend along the entire length of the southwestern boundary of the block. In my opinion it will not provide a sufficient setback between future residences and the wastewater disposal area or between future residences and the Pines RRP.



Figure 5.2 Appendix 37 Holmes Block Odour Constrained Area

5.2.5 Summary

The assessment method used by Golder to determine buffer distances is supported. The buffer distances recommended between the WWTP and the sludge disposal areas and residences do not impact on the Holmes Block. The buffer distances recommended for the RRP, aerobic digestion of sludge and the disposal of wastewater to land encroach into the Holmes Block. In order to maintain all of the recommended buffer distances, the building of houses on an area of land along the western and southern boundaries of the Holmes Block needs to be restricted. The “Odour Constrained Area” proposed by the applicant after the notification of the plan changes is in my opinion insufficient.

5.3 Plan Change 9 Skellerup Block

Golder has undertaken a similar odour assessment of the potential effects of odours from the Pines WWTP, RRP and the Tegel poultry farm on the proposed Skellerup Block. Golder has used buffer distances recommended by Australian environmental authorities for the basis of the assessments for the Pines WWTP and RRP which is supported. However, they have also used results of dispersion modelling to estimate a buffer distance for the Tegel poultry farm and this is considered to have some limitations.

5.3.1 Tegel Poultry Farm

For the assessment of the likely effects of odours from the Tegel poultry farm on the Skellerup Block, Golder has made reference to buffer distances published by various Australian states and also undertaken dispersion modelling. The buffer distances referred to by Golder range between 300m and 1000m. Golder recommend in their report that due to the size and nature of the poultry operation at Rolleston that a buffer distance at the low end of the range is sufficient. It is agreed that a buffer distance of 300m should be sufficient to adequately mitigate the effects of odour from the poultry farm on the Skellerup Block given the relatively low density of birds at the Tegel farm. Also of note is the requirement in the Selwyn District Plan for any new sensitive activity to be set back at least 300m from any existing lawfully established intensive farming activity. The setback distance is measured from the edge of any permanent building or yard in which the intensive farming activity occurs. In this case the farming activity occurs within the poultry sheds. Establishing a new “sensitive activity” within 300m of an existing intensive farming activity is a restricted discretionary activity.

Golder has also presented a modelling assessment of the effects of odours from the Tegel farm and concludes that a buffer distance of 150m should be sufficient to prevent odour nuisance for the Skellerup Block. The modelling method followed procedures that were established in 2001 for another Canterbury poultry farm, however the odour modelling guidelines were established for a broiler farm rather than a breeder farm where the pattern of odour discharge is different.

In addition, studies carried out on poultry farm modelling methods over the past five years or so have highlighted that this modelling method using a steady state model (AUSPLUME) and non-buoyant odour sources does not adequately simulate the nature of dispersion of odours from poultry farming. This has culminated in a report published in Australia in 2010 about chicken farm dispersion modelling and separation distances³. This paper discusses the efficacy of dispersion modelling, using an advanced model known as CALPUFF which has better handling of low wind

³ Australian Government Rural Industries Research and Development Corporation “Separation Distances for Broiler Farms – Verifying methods and investigating the effects of thermal buoyance” RIRDC Publication No. 10/073 June 2010.

speeds than AUSPLUME, for estimating separation distances for broiler farms. The paper discusses the separation distances estimated using CALPUFF with various separation distance formulas used by a number of Australian states.

The paper recommends that a proposed formula developed by the Queensland Chicken Growers Association (QCGA) be used in preference to CALPUFF in most situations. The paper noted that the proposed QCGA separation distance formula calculated greater and more conservative separation distances than the dispersion model for the majority of situations. However, the formula substantially under predicted separation requirements in some cases. The separation distance formula tended to underestimate separation distances (compared to CALPUFF) when low wind speeds, low surface roughness and complex terrain combined. At Rolleston low wind speeds will be common although the Tegel farm will not be upwind of the Skellerup Block frequently. The surface roughness is low, but the terrain is not complex. Hence it is expected that the QCGA formula will provide a conservative estimate of the separation distance. Applying the QCGA formula to the Tegel site for 16000 birds (two sheds together, the worst case cumulative impact for the Skellerup Block) produces a recommended separation distance of 250m (see Appendix A for separation distance calculations). The calculations are based on conditions applying to broiler farms which are not exactly the same as breeder farms. The QCGA does not unfortunately provide factors for breeder farms. Hence there is an element of uncertainty regarding the appropriateness of the recommended separation distance.

Dr Terry Brady, an independent air quality consultant, provided a report in support of the submission by Tegel Foods on the Skellerup Block application. Dr Brady raises concerns with the dispersion modelling carried out by Golder in the areas of choice of model, modelling in general, and intermittent discharges. Beca concurs with Dr Brady in these matters.

Given the uncertainties in the inputs to the model and the limitations of the type of model used it is considered that the modelling results should be used with caution. It is therefore recommended that the separation distance between the Tegel poultry farm sheds and the Skellerup block be based on buffer distances and that a minimum of 300m between the poultry farm sheds and residences should be maintained in accordance with the rules in the SDC district plan.

5.3.2 Pines RRP

The Skellerup Block is located more than 1000m from the boundary of the Pines RRP site (see Figure 5.2). Golder's finding that the Pines RRP is located beyond the distance at which odours are likely to cause adverse effects on the Skellerup Block is supported.

5.3.3 Pines WWTP

The nearest boundary of the Skellerup Block is located approximately 1000m from the area proposed for wastewater disposal and at least 1700m from the WWTP and the area proposed to be used for biosolids drying (see Figure 5.2). The Skellerup Block is therefore unlikely to be adversely affected by odours from the Pines WWTP and the disposal of wastewater to land which is consistent with Golder's conclusions.

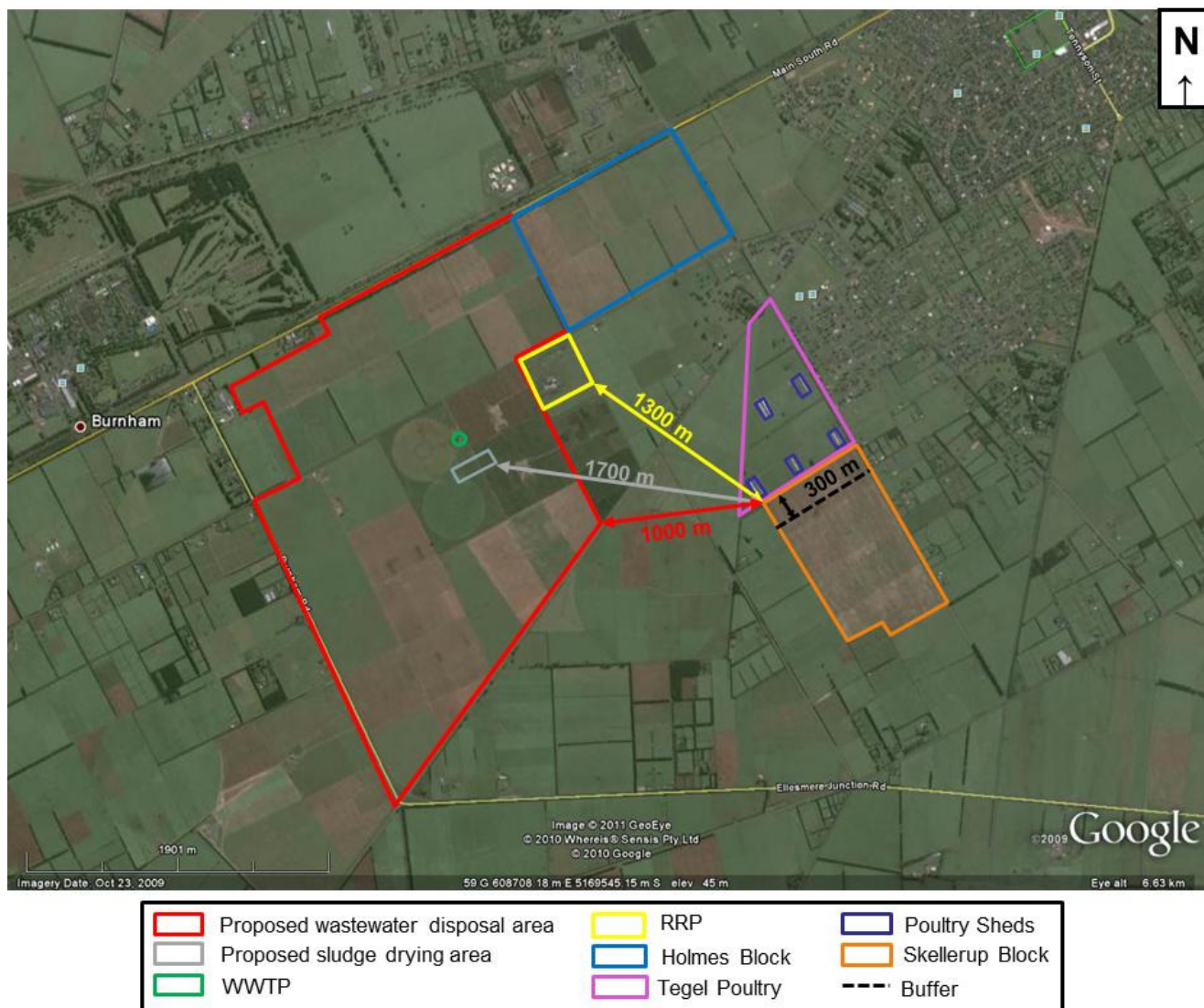


Figure 5.2 Diagram Showing Separation Distances between the Pines WWTP, RRP and Tegel Poultry Farm and the Holmes Block

5.3.4 Post Notification Changes to Plan Change 9

Since Plan Change 9 was notified the applicant has proposed a number of amendments in response to concerns raised by submitters. These amendments include adding a rule to the District Plan (rule 4.9.27) which states

Any sensitive activity in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 38) shall be setback at least 200m from the northern boundary shared with Lot 3 DP20007 containing a poultry breeder farm, provided that this rule shall cease to have effect upon the cessation of intensive farming operations on Lot 3 DP20007.

The map included in Appendix 38 is shown in Figure 5.3



Figure 5.3 Appendix 38 Skellerup Block

From aerial photos of the site it appears that the nearest poultry farm shed is approximately 40m from the boundary with the Skellerup Block. Hence combined with the setback distance proposed in Rule 4.9.27 a buffer distance of 240m would be achieved between the poultry sheds and any

future residences. In my opinion this is not sufficient and the setback distance in Rule 4.9.27 should be increased to at least 250m.

5.3.5 Summary

The emission of odour from the Pines RRP and WWTP are considered unlikely to cause adverse effects on the Skellerup Block. It is recommended that the modelling results presented by Golder be treated with caution and that a buffer distance of at least 300m be maintained between the Tegel poultry farm sheds and future residences on the Skellerup Block. In my opinion the setback distance proposed in Rule 4.9.27 is not sufficient and should be increased to a minimum of 250m.

6 Potential Reverse Sensitivity Effects

If Plan Change 8 and 9 are implemented and insufficient buffer distances are required there is the potential for new residences in the Holmes Block and the Skellerup Block to be adversely affected by odours from the Pines WWTP, RRP and the Tegel poultry farm. If this eventuates odour complaints may occur and the regulatory authorities may be forced to require changes at the odour producing facilities in order to reduce effects. This may result in the following outcomes, all of which would have negative financial and operational implications for the existing activities:

- Additional odour control methods may be required;
- Production levels may be reduced or prevented from growing;
- The type and scale of activities on the sites may be restricted;
- Possibility for legal action; and
- Difficulty in renewing resource consents in the future.

7 Conclusion

The rezoning of land from rural to rural residential at the Holmes and Skellerup Blocks may result in reverse sensitivity issues for the Pines WWTP, RRP and the Tegel poultry farm at Rolleston. Golder has recommended buffer distances between the existing odour sources and the two areas proposed for rezoning. Since the applications were made for Plan Changes 8 and 9, consents have been granted which increase the scale of the Pines WWTP and the area over which treated wastewater will be irrigated.

The buffer distances proposed by Golder are supported in the main but with some alterations. The recommended alterations are:

- Building of residences within 175 m of the common boundary between the Holmes Block and the wastewater treatment area should be restricted to accommodate the planned increase in area over which treated wastewater may be irrigated;
- Building of residences within 300m of the boundary of the site designated for the RRP and the Holmes Block should be restricted; and
- Building of residences within 300m of the sheds housing poultry on the Tegel poultry farm should be restricted on the Skellerup Block.

Since the plan changes were notified the applicant has proposed some new rules which restrict the areas where sensitive areas may be built on for both the Holmes and Skellerup Blocks. In my opinion the proposed "Odour Constrained Area" proposed for Plan Change 8 in proposed rule 4.9.28 is insufficient as is the setback distance proposed for Plan Change 9 in proposed rule 4.9.27.

Provided the recommended buffer distances are adopted the potential for reverse sensitivity effects on the Pines WWTP and RRP and the Tegel poultry farm should be low. However if sufficient buffer distances are not adopted there is the potential for adverse reverse sensitivity effects to occur which may have negative financial and operational impacts on the existing activities.

Appendix A

QCGA Separation Distance Calculation

3680
11 April 2011

Selwyn District Council
PO Box 90
Rolleston 7614



Attention: Craig Friedel

Dear Sir,

**PC8 – Holmes Block
PC9 – Skellerup Block
Geotechnical assessment**

1 Introduction

My name is Ian Ferrier McCahon. I hold a degree of Bachelor of engineering (Hons) from the University of Canterbury and am a Chartered professional Engineer. I have more than 35 years of experience in civil engineering with 20 years specialising in geotechnical and hazard identification and mitigation work. I have investigated many sites in Christchurch and elsewhere for liquefaction potential and mapped the liquefaction zones for the Christchurch Engineering Lifelines Study and for the Canterbury Region. Since the 2010 Canterbury earthquake I have been advising Selwyn district Council on the liquefaction hazard in the district and how best to approach the issue in both planning and building consent processes.

The Selwyn District Council has asked for a brief statement on the geotechnical aspects of these two private plan change requests seeking rezoning of rural land to rural residential densities. Both sites are on Dunns Crossing Road, on the western periphery of Rolleston.

A geotechnical investigation has been carried out on the sites by Connell Wagner – Geotechnical Investigation report, proposed plan change at Rolleston, Selwyn Plantation Board Ltd, 25 September 2008.

This assessment is based on the contents of the CW report, information on the fault rupture and liquefaction from the 2010 Canterbury earthquake, and the application of personal experience and knowledge of the area. No specific site inspection has been made

2 Sites

PC8 Holmes block is an area of 92 ha, adjoining SH1 on the north side. PC9 Skellerup Block is 73 ha, 1.5 km to the south of Holmes block. Both sites are flat.

The shallow test pits reported by Connell Wagner confirm that the sites are underlain with predominantly gravel alluvium of the Canterbury plains, virtually to the surface with only 0.1 – 0.2m of topsoil over the gravel. The water table is likely to be 10 – 15m depth.

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3 Recent Earthquakes

The sites were strongly shaken by the M7.1 Canterbury earthquake of 4 September 2010. The Holmes Block is about 15km south east of the earthquake epicenter, and the Skellerup Block 17km. Distances from the surface trace of the Greendale fault are about 3 and 5km respectively. Peak ground accelerations recorded at Rolleston were 0.39g; an acceleration with return period of about 1,500 years.

I am not aware of any reports of ground damage in this area, beyond the ground rupture and deformation along and immediately adjacent to the Greendale fault. The closest confirmed liquefaction is over 11km away beyond Lincoln. With the low water table in the area, any lenses of liquefiable sand that may exist are at considerable depth and effects at the ground surface would be minimal. There is a very low risk of liquefaction.

There was little reported structural damage to buildings in Rolleston, despite the strong shaking. Provided that new houses on the sites are built to current codes, there is no reason why they would not also perform satisfactorily in future earthquakes.

The large aftershock of 22 February 2011 (Christchurch earthquake) caused extensive ground and building damage in east and central Christchurch, because of the proximity of these areas to the epicenter and the particular geology underlying the city. The distance of these sites from the earthquake and the much firmer gravel soils under the sites meant that the shaking was much lower at Rolleston than in Christchurch, and for the September 2010 event. Peak ground accelerations recorded at Templeton and Lincoln in February 2011 were 0.16g compared with 0.9g in September 2010. There are no reports of any ground damage in the Rolleston area from the February earthquake.

Seismologists are suggesting that the Canterbury area is probably entering a period of enhanced seismic risk because of the recent earthquakes and the resulting strain redistribution in the bedrock. Geologists are also conducting research on other fault lines buried under the Canterbury Plains and have already identified two possible fault lines in the Christchurch – Lincoln area. This research does not materially affect the overall likelihood of earthquakes in the region, as a background seismicity was built into the previous seismic hazard model; it is just identifying in more detail where the earthquakes could occur. Because of the denser soils under Rolleston, the locality remains less susceptible to ground damage than much of the urban area of Christchurch.

4 Conclusion

The sites are underlain with shallow gravel soils which provide good foundation conditions for residential buildings. The Greendale is far enough away not to be any direct hazard. There is a very low risk of any liquefaction.

- The near surface soils have suitable bearing capacity for houses
- Seismic liquefaction is extremely unlikely
- There are no known faults passing through the site
- The site is geotechnically suitable for residential development

Yours faithfully

Geotech Consulting Limited



Ian McCahon

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References

These papers are all recently published in the Bulletin of the NZ Society for Earthquake Engineering, Vol 43, No. 4, December 2010:

Gledhill et al:	<i>The Darfield Earthquake of September 2010: Preliminary Seismological Report</i>
Cousins & McVerry	<i>Overview of Strong Motion Data from the Darfield Earthquake</i>
Beavan et al	<i>The Darfield Earthquake: Geodetic Observations and Preliminary Source Model</i>
Quigley et al:	<i>Surface Rupture of the Greendale Fault during the Darfield earthquake: initial findings</i>
Allen et al	<i>Geotechnical Reconnaissance of the 2010 Darfield earthquake</i>



- Countryside Area
- Community Focal Point / Reserve
- Regular Lot
- Balance Lot
- Street Tree Planting
- Public Walkway
- Rural Buffer Planting
- Shelterbelt

Scale: 1:7500@A4



Gross Area: 72.7ha
Net Area: 55.07ha (75.7%)

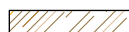
SUBDIVISION AND LANDSCAPE CONCEPT PLAN

Skellerup Block - Option 3
4 February 2011

Selwyn Plantation Board Limited
Land at Dunns Crossing Road, Rolleston

HG Ref: 1021-127337-Subdivision and Landscape Concepts-Holmes and Skellerup-v1.1.a

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Odour constrained area

NOTE: Waste water pump required

Recommended ammendment to Skellerup Block ODP

Plan prepared by Andrew Craig - April 2011

APPENDIX 1



- Countryside Area
- Community Focal Point / Reserve
- Regular Lot
- Balance Lot
- Street Tree Planting
- Public Walkway
- State Highway Buffer Planting
- Shelterbelt

Scale: 1:7500@A4



Gross Area: 92.0ha
Net Area: 68.7ha (74.6%)

SUBDIVISION AND LANDSCAPE CONCEPT PLAN

Holmes Block - Option 3
4 February 2011

Selwyn Plantation Board Limited
Land at Dunns Crossing Road, Rolleston

HG Ref: 1021-127337-Subdivision and Landscape Concepts-Holmes and Skellerup-v1.1.ai

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- Recommended additional 'Countryside Area'
- 5000m² lots preferred
- Odour constrained area

NOTE: Waste water pump required

Recommended amendment to Holmes Block ODP

Plan prepared by Andrew Craig - April 2011

APPENDIX 1

Appendix 10. Recommended text amendments

Amendment 11: Amend Policy B4.1.7 for Residential Density (Page B4-007) as follows:

Maintain the area of sites covered with buildings in Living 2 Zones, at the lesser of 20% or 500m² and in the Living 3 Zone at the lesser of 10% or 400m² ~~500m²~~, unless any adverse effects on the spacious character of the area will be minor.

Amendment 21 Insert new Rules 4.2.2, 4.2.3 & 4.2.4 for Buildings and Landscaping (Page C4-001 & 002) as follows:

For the Living 3 Zone at Rolleston identified on the Outline Development Plan in Appendix 37 the following shall apply:

Any principal building shall be a permitted activity if:

- i) That apart from one vehicle crossing and access not exceeding 5 metres in width all land within 15 metres of a road frontage, excepting State Highway 1, will be devoted to landscaping; including the provision of one specimen tree capable of growing to at least 8 metres high being planted for every ten metres of frontage and to be spaced at no less than 5 metres and no greater than 15 metres.
 - ii) ~~The area between all road boundaries (other than with State Highway 1) and a line parallel to and 15m back from the road boundary is landscaped with shrubs and specimen trees covering as a minimum the lesser of 30% of the area or 250m²; and~~
 - iii) ~~The number of specimen trees in this area is not less than 1 per 10m of road frontage or part thereof; and~~
 - iv) ~~The trees are selected from the list below planted at a grade of not less than Pb95; and~~
 - v) ~~Shrubs are planted at 'aa' grade of not less than Pb3 and a spacing of not less than 1 per square metre, typically located within a garden area dressed with bark chips or similar material; and~~
 - vi) ~~Any paved surface area within the area does not exceed 100m² in area.~~
 - vii) ~~The list of suitable specimen trees for the purpose of this rule is: Maple, Silk Tree, Alder, Birch, River She Oak, Leyland Cypress, Monterey Cypress, Lacebark, American sweet gum, Magnolia, Pohutukawa, weeping Kowhai, Common Olive, Pine, Lemonwood, Kohuhu, Ribbonwood, Plane, Totara, Poplar, Oak, Elm, Michelia~~
 - viii) ~~The Council will require a planting plan to be submitted at building consent stage, prepared by a suitably qualified landscape professional, identifying compliance with the above control.~~
- ii) The landscaping shall be maintained and if dead, diseased or damaged, shall be removed and replaced.

Note: Rule 4.2.2 shall not apply to allotments of 4ha or greater in the Rural Inner Plains Zone ~~Living 3 Zone~~ identified on the Outline Development Plan in Appendix 37.

Amendment 24 Amend 'Table C4.1 Site Coverage Allowances' (Page C4-005 & 006) as follows:

Zone Coverage

Living 3 Lesser of 10% or 400m² ~~500m²~~

Amendment 27: Insert new Rule 4.9.26 for Buildings and Building Position (Page C4-011):

Any building in the Living 3 Zone at Rolleston (as shown on the Outline Development Plan in Appendix 37) shall be set back at least:

i) ~~15~~ 20 metres from any road boundary except that on corner lots a minimum setback of 10m applies to one road boundary

ii) 15 metres from any other boundary

Amendment 28 (Rule 4.9.27):

Any ~~dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes~~ sensitive activity in the living 3 Zone or Rural Inner Plains Zone at Rolleston (as shown on the Outline Development in Appendix 38) shall be setback at least ~~150m~~ 250m from the northern boundary shared with lot 3 DP20007 containing ~~a poultry breeder farm, an Intensive Farming Activity~~, provided that this rule shall cease to have effect upon the cessation of the intensive farming operations on Lot 3 DP20007.

Amendment 29: Rule 4.9.28:

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone or Rural Inner Plains Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall not be located within the 'Odour Constrained Area' as shown in Appendix 37 (Holmes Block).

Amendment 28 & 31: Replace proposed rule 4.9.27 and associated assessment matter as follows:

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone or Rural Inner Plains Zone at Rolleston (as shown on the Outline Development in Appendix 37) shall be located no closer than 40m from the edge of the sealed carriageway of State Highways with a posted speed limit of 70 Km/hr or greater.

Any dwelling, family flat, and any rooms within accessory buildings used for sleeping or living purposes in the Living 3 Zone at Rolleston (as shown on the Outline Development in Appendix 37) within 100m from the edge of the sealed carriageway of State Highways with a posted speed limit of 70 Km/hr or greater shall have internal noise levels from road traffic that do not exceed the limits set out below with all windows and doors closed.

24 hours

<u>Within Bedrooms</u>	<u>35 dBA (Leq 24 hour)</u>
<u>Within Living Area Rooms</u>	<u>40 dBA (Leq 24 hour)</u>

Living Area rooms means any room in a dwelling other than a room used principally as a bedroom, laundry, bathroom, or toilet.

Amendment 34 (Reasons for rules – Building Position):

In regard to the ~~Poultry~~ **Intensive Farming Activity located identified** on Lot 3 DP 20007 at Rolleston a **200 250m** setback has been imposed in relation to the northern boundary of the Skellerup Block (as shown on the Outline Development Plan in Appendix 38). Building within this area is a discretionary activity as reverse sensitivity issues may arise if this setback area is not applied.

Amendment 36: Insert new final paragraph within 'Reasons for Rules – Building Position' (Page C4-024) as follows:

In the case of Rolleston Sewage Treatment Plant and **Resource Recovery Park** an "Odour Control Setback Area" has been imposed. Building within this area is a Discretionary activity as reverse sensitivity issues may arise if this setback area is not applied.

Amendment 44: Insert new Rule 12.1.3.38 for Subdivision General Standard (Page C12-007) as follows:

Rolleston

Any subdivision of land within **the Living 3 Zone and Rural Inner Plains Zone** area shown in Appendix 37 (~~Living 3 Zone~~ at Rolleston) complies with:

- i) the Countryside Area layout of the Outline Development Plan at Appendix 37;
- ii) the location of the **Rural Inner Plains lots** ~~Lower Density Area~~ as shown on the Outline Development Plan at Appendix 37;
- iii) the roading layout of the Outline Development Plan at Appendix 37; and
- iv) where any conflict occurs with Rule E13.3.1 the cross sections in Appendix 37 shall take precedence;
- v) **The provision of public access within the Countryside Area(s) adjacent to Dunns Crossing Road;**
- vi) **Street lighting is limited to road intersections only;**
- vii) **The minimisation of individual lots smaller than 5,000m² within the central areas shown on the Outline Development Plan in Appendix 37;**
- viii) **Full public access is maintained to internal roads so that the area shown on the Outline Development Plan in Appendix 37 does not become a gated community.**

Amendment 45: Insert new Rule 12.1.3.39 for Subdivision General Standard (Page C12-007) as follows:

In respect of the land identified at Appendix 37, no more than ~~102~~ **80 Living 3 zone rural residential** allotments and **5 Rural Inner Plains allotments** may be created ~~by subdivision prior to 31 December 2016.~~

Amendment 47: Amend 'Table C12.1 – Allotment Sizes' (Page C12-012) as follows:

Township	Zone	Average allotment size not less than
Rolleston	Living 3 (Appendix 37)	<p>At least 20ha of the land within the area defined by the Outline Development Plan at Appendix 37 shall be developed as a <u>Rural Inner Plains Zone Lower Density Area</u> in the location shown on the Outline Development Plan with a minimum and an average allotment size of no less than 4ha.</p> <p>The balance of the land on the Outline Development Plan at Appendix 37 outside the above area shall be developed with an average allotment size of no less than 5000m² with a minimum allotment size of 4000m².</p> <p>The maximum number of allotments within the area defined by the Outline Development Plan at Appendix 37 shall be <u>80, in addition to any Rural Inner Plains lots 102.</u></p>

Amendment 48: Insert new matter over which Council has restricted the exercise of its discretion at Clause 12.1.4.77 (Page C12-023) as follows:

In relation to the Living 3 Zone **and Rural Inner Plains Zone (Holmes)** at Rolleston as shown in Appendix 37:

- (a) Whether the pattern of development and subdivision is consistent with the Outline Development Plan in Appendix 37;
- (b) Whether local roading, and trees and planting on roads and lots, are proposed in general accordance with the Outline Development Plan, road cross section(s) and associated planting schedules and requirements shown in Appendix 37, **including a landscaped gateway feature adjacent to the intersection of Dunns Crossing Road and Burnham School Road;**
- (c) Whether the roading and lot pattern follow a rectilinear pattern with orientations generally established by the surrounding road network, consistent with the typical subdivision patterns of the Rolleston rural area;
- (d) Whether the roading pattern and proposed hard and soft landscape treatments in the road reserve will create a rural character to the development and distinguish it from conventional suburban development;
- (e) Whether suburban road patterns and details such as cul de sac, arbitrary curves, **street lighting apart from at intersections,** and kerb and channels are avoided;
- (f) The extent to which the maximum of **102 80 Living 3 Zone and 5 Rural Inner Plains** lots within the area defined by the Outline Development Plan in Appendix 37 is met.

- (g) Whether the creation of open space in rural production areas is consistent with the Countryside Areas identified on the Outline Development Plan in Appendix 37.
- (h) Whether the provision of public walkways are consistent with the public walkways identified on the Outline Development Plan in Appendix 37.
- (i) Whether there is a need for the western public walkway taking into account the ability to connect to future public walkways to the west.
- (j) Whether at least 20ha of land is developed in accordance with **the Rural Inner Plains Zone provisions as a Lower Density Area with larger allotments** (4ha or more) in general accordance with the location identified on the Outline Development Plan at Appendix 37.
- (k) In the event that it is developed first, whether the development of **the Rural Inner Plains a Lower Density** Area in advance of other development avoids frustrating the intentions of the Outline Development Plan or the ability to achieve integrated development over the Outline Development Plan area.

Amendment 49: Insert new matter over which Council has restricted the exercise of its discretion at Clause 12.1.4.78 (Page C12-023) as follows:

In relation to the Countryside Area Management Plan required for the Living 3 Zone west of Dunns Crossing Road, Rolleston as shown in Appendix 37:

- (a) The adequacy of the management plan to achieve open space and/or rural character across the Countryside Area(s) in a manner that is compatible with the surrounding rural residential environment;
- (b) The adequacy of proposed mechanisms to maintain and manage the Countryside Area(s) long term in a consistent manner;
- (c) Whether rural landscape, visual and amenity value characteristics of the Countryside Areas are **able to be** maintained;
- (d) The extent to which potential adverse nuisance effects on occupiers of adjacent rural residential allotments will be internalised within the Countryside Areas;
- (e) The extent to which adverse effects of plant pests and fire hazard risks will be avoided or remedied; and
- (f) The suitability of proposed access within the Countryside Area(s) along Dunns Crossing Road.

Changes to Maps and Appendix 37 and 38

PC8 Amendment 1: Amend Planning Maps 13, 102 and 105 (Sheets 1 and 2) to identify the zoning of the site as Living 3, **and the proposed 4 hectare lots as Rural Inner Plains.**

PC9 Amendment 1 (in the event that this Plan Change is accepted): Amend Planning Maps 13 and 108 (Sheets 1 and 2) to identify the zoning of the site as Living 3, **and the proposed 4 hectare lots as Rural Inner Plains.**

Appendix 37:

Insert amended ODP

Appendix 38: (in the event that this Plan Change is accepted):

Insert amended ODP