APPENDIX 4A and 4B:

Landscape and Visual Assessment and Graphic Attachment

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Assessment of Environmental Effects Landscape

Prepared with regard to a plan change request concerning the Fonterra Dairy Plant at Darfield

Prepared for

Fonterra Limited

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1 INTRODUCTION

The purpose of this report is to assess the effects of development on the landscape arising from the proposed plan change. Essentially the aim is to determine whether there is any landscape or visual amenity matters that impede implementation of the plan change. If there are any, then ways of managing these will be explored.

In any event management techniques are proposed via the Outline Development Plan (ODP) and existing and proposed District Plan provisions as part of the plan change whose purpose is to guarantee the best possible amenity outcomes while enabling further development of the site. These are in place to ensure further development does not result in more than minor adverse effects on amenity, particularly for those living nearby or travelling past the site.

Determination of what constitutes adverse effects rests on the character and amenity of the existing environment and what is anticipated to occur there through implementation of the District Plan provisions. Or to put it another way, the environmental and statutory context of the plan change site informs what landscape and visual effects[1] are acceptable.

While it is understood that the Plan Change will put in place a permitted baseline envelope, development beyond this cannot be ruled out. Should this arise, the potential effects on landscape character and amenity will be assessed on its merits with regard to the relevant sections of the Resource Management Act.

In this landscape assessment the following matters are addressed:

- The proposed plan change.
- The character and amenity of the existing environment
- The statutory landscape
- The potential landscape and visual effects arising from the plan change.
- Identification of those whose amenity might be affected by implementation of the plan change.
- Alternative uses and their effects
- Proposed statutory provisions affecting landscape and amenity outcomes

2 EXECUTIVE SUMMARY

1 The landscape character of the existing environment in which the site is located is informed by the presence of the existing plant.

2 There are no landscape features within the site that would constrain implementation of the proposed plan change.

[1] Landscape effects are those caused by changes to the landscape irrespective of whether they are visible or not. Visual effects are those which are visible to affected parties.

3 In terms of its visual character, future development arising from the plan change will be the same as the existing plant – or to put it colloquially ‘more of the same’.

4 The proposed plan change and effects on landscape character and amenity arising from it align with the outcomes promoted by the Selwyn District Plan.

5 The location and extent of dairy plant will remain much the same as it is currently and because of this landscape and amenity effects will be more or less contained to much the same degree.

6 That for the foregoing reason, there is no need to provide landscaping additional to that already implemented as a condition of consent for the existing dairy plant.

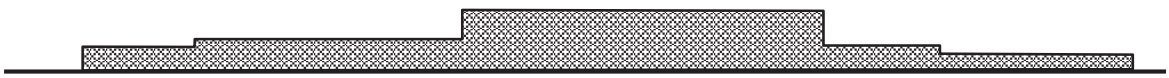
3 THE PROPOSED PLAN CHANGE

The proposed plan change is described in more detail by others.

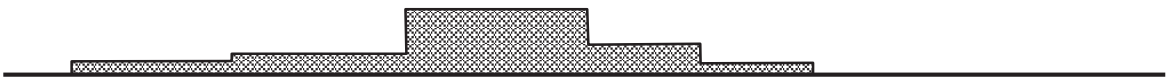
In summary it is understood that on becoming operative the plan change will enable further development and alterations within the application site. This will be subject to the parameters set out in the Outline Development Plan (ODP) and relevant existing and proposed District Plan provisions. Some of these affect landscape amenity. They will be discussed in more detail later.

Implementation of the plan change will essentially permit an increase of what currently exists; or to put it colloquially - ‘more of the same’. Alterations to existing development may result in visible changes due to upgrades or maintenance. Otherwise changes may be more substantial involving the addition of buildings and associated structures. The potential landscape and visual effects of these will be discussed shortly.

Regarding potential landscape and visual effects a key component of the plan change is the ODP. This defines the location and extent of buildings and accessory structures. Within prescribed areas it further identifies maximum heights of these. The height limits are generally pyramidal in form where the tallest buildings and structures are centrally located. Thereafter they descend toward the site periphery. This effect is shown in the **Figure 1** elevations.



South elevation



West elevation

Figure 1 *South and West elevations of the ODP envelope. The north and east elevations will be the same, but reversed.*

4 THE LANDSCAPE OF THE EXISTING ENVIRONMENT

The reason for describing the landscape of the existing environment is twofold.

Firstly, the existing character informs peoples' expectations of what might acceptably occur in the landscape. The central question here is; would people be surprised to see such a feature in the landscape of its setting? In landscape terms these are referred to as associative effects.

Secondly, the degree of derogation or change occurring in the landscape resulting from implementation of the proposal - in this case a potentially expanded dairy plant - is able to be determined. These are landscape effects that may or may not be visible from surrounding vantage points.

Since its construction the existing dairy plant is now part and parcel of the environment in which it is located – see **Graphic Attachment photograph 1.** Or to put it another way, its presence is one of a number of elements that contribute to the landscape character of the existing environment.

Within the area encompassing the extent of visual effects the dairy plant is clearly the largest physical element present. Consequently it is quite prominent. This however is diminished to quite a significant degree due to its setback from the nearby roads, particularly SH73, and the presence of intervening trees. Many of the trees were planted as a condition of consent and are now reaching a size where screening of the dairy plant is starting to become effective – see **Graphic Attachment photograph 2 1**. As they mature this screening will become increasingly effective. As a result prominence of the dairy plant will lessen over time.

Other significant physical elements include State Highway 73 (SH73), the rail way, transmission lines and in due course the CPW[2] irrigation canal. Less significant physical features include farm dwellings and accessory buildings. Their presence is relatively sparse typifying the kind of building density found in the rural outer plains[3].

Despite the presence of these physical features, the landscape of the setting is unmistakeably rural. This is due to the very high proportion of vegetated open space in proportion to built form. The existing dairy plant itself is entirely surrounded by rural activity – **Graphic Attachment photograph 3**. In contrast and by definition an urban environment is one where buildings surround space where rural is the opposite – space surrounds buildings. With regard to the dairy plant this is very much the case presently.

Overall, the existing environment is entirely modified for the most part by farming practises. Consequently land cover or vegetation is almost fully exotic comprising mostly pasture, shelter belts and tree copses. Patterning as defined by boundaries is largely geometric and formal – see **Graphic Attachment aerial photograph 4**. As a result the landscape is modified to a reasonably significant extent. The most natural component of it is landform and vegetation, even though the latter is mostly exotic.

As the entire environment is devoted to rural activity, there are no pristine natural landscape features in the vicinity of the dairy plant. The nearest significant natural

[2] CPW – Central Plains Water
[3] The Selwyn District Plan sets the dwelling density at 1 per 20ha for the Rural Outer Plains zone.

features however, are the Hawkins and comparatively much larger Waimakariri Rivers. The presence of these features is not appreciable from the dairy plant, or to put it another way, they are not experienced as part of the same environment.

There are no important recreational destinations within the existing environment. Running through it however is SH73 linking Canterbury and the West Coast. This road and nearby railway is considered a premier scenic route. These routes pass through the Canterbury Plains that for the most part are the same as or resemble that described above. This includes the presence in rural Canterbury of similar dairy plants as that existing at Darfield – Synlait at Dunsandel, and in south Canterbury Clandeboye, Oceania and Studholme.

Land use is largely devoted to pastoral activity with cropping – both activities being interchanged seasonally. Some woodlots and forestry is present, but is not extensive. Activity allied to land use – pivot irrigation, accessory buildings, fencing, shelterbelts and such like are common features also.

In summary, the existing environment exhibits the following:

- Characteristically rural
- Modified to a moderately high degree
- Geometrically patterned
- Land use is mostly devoted to pastoral and cropping activity
- Devoid of significant natural features within appreciable range of the dairy plant
- Arising from the above listed characteristics the environment is clearly a 'working' or productive one
- The environment has an important scenic road and rail passing through it.

4.1 Landscape constraints – are there any?

One of the foremost questions concerning plan changes is whether any landscape features are present that might constrain anticipated use of the subject site. These would be features or characteristics of the landscape that are significant in any way.

Within the 'Dairy Processing Management Area' (DPMA), the location and extent of which is shown on the ODP, there are no significant landscape features that would impede development. If they existed, such features might include:

- Significant indigenous vegetation
- Salient geological features such as rock outcrops, cliffs and terraces
- Water bodies or courses
- Ecological sites

- Heritage items including buildings and structures (the nearest being the 'Oaks' historic homestead – a property owned by the applicant)
- Archaeological sites
- Significant or protected trees
- Important landforms
- Scenically significant sites

As none of the above features exist within the site there is no impediment to re-zoning and the development this enables.

As alluded however, some of these features exist in proximity to the site; the aforementioned 'Oaks' being a recognised heritage feature for example – see **Graphic Attachment Map 1**. Also nearby are the natural features of the Waimakariri and Hawkins Rivers. Neither will be affected by the proposed plan change. The same will apply to other heritage features in the area such as 'Racecourse Hill' and the 'Railway Long-drop'. As is evident from the existing activity, the plan change will have no effect on these features or appreciation of them.

As shown in the **Graphic Attachment photograph 5** views to the Southern Alps from SH73 will not be affected. From other nearby roads essentially there is just one vantage point from which views to the Alps are intruded – that being opposite 'The Gums' dwelling on Loes Road - **Graphic Attachment photograph 6**. Loes Road is little used other than by local land holders and cannot be regarded as an important scenic route.

Further afield it is evident that the existing plant has an insignificant impact on views toward the Alps. As **Graphic Attachment photograph 7** demonstrates, prominence of the dairy plant diminishes with distance. Correspondingly, view intrusion also diminishes. As a counterpoint, the open expansiveness of the rural landscape and its constituent elements – the plains and Alps - increasingly overwhelms the dairy plant as one moves further from it.

The only other potential constraint concerns the potential loss of rural open space whose presence contributes to rural amenity. As the ODP indicates, most future building activity will be confined to an area that is currently developed as a consequence of existing activity. **Graphic Attachment photograph 4** indicates the full extent of existing and future building development. It is apparent from this that the extent of rural land lost to future buildings is small relative to those existing. Further, the extent of future buildings will be constrained by the CPW canal and DPMA boundary. Consequently all buildings will be concentrated and centred on the existing ones. As a result collective site coverage and subsequent loss of rural open space is confined to the one area within the site rather than dispersed across it.

In summary, it is evident that there are no landscape features or characteristics of the plan change site that would constrain or preclude the kind of activity envisaged. While there are some nearby features of significance, it is apparent that appreciation of these will not be adversely affected by consequent activity arising from the plan change.

5 EFFECTS OF THE PLAN CHANGE ON THE LANDSCAPE

Under this heading the landscape and visual effects arising from the proposed plan change are discussed. Landscape effects are those caused by enduring changes to the environment, irrespective of whether they are visible or not. Generally these effects are understood to exist, even though they may not be visible. Visual effects are those able to be seen from key vantage points such as nearby roads and dwellings.

5.1 What are the potential adverse landscape and visual amenity effects?

Currently amenity – or that which makes the setting pleasant - is largely derived from high levels of open space dominated by vegetation. Other contributing factors include the scenic backdrop of the Southern Alps and foothills.

The Selwyn District Plan (SDP) identifies rural amenity[4] as that derived from the following rural character attributes:

- *Predominance of vegetation cover.*
- *Dominant land uses (but not all land uses) are associated with primary production: agriculture, horticulture, forestry, pastoralism.*
- *Views of mountains, basins and river valleys which are not modified by structures.*
- *Being able to see, hear and smell animals and birds.*

In this regard, the SDP also observes:

> *People who live in the rural area as an alternative to living in a town may value a sense of open space, panoramic views and their perception of a rural outlook.*

The SDP goes on to note that [people] … *perceive the rural area as a business area and expect to be able to carry out existing activities.* Dairy processing is one such activity that the SDP specifically identifies as one expected to occur in the rural outer plains, where it states:

> *In addition, the policies and rules acknowledge sites established for dairy processing activities and provides for the continued development of these sites in the Rural Outer Plains for the processing, testing, storage, handling and packaging and distribution of milk and dairy products, related by-products and ancillary activities.*

Such activity is therefore clearly anticipated to occur in the environment in which the existing plant operates and by extension further like activity arising from the plan change. Or to put it another way, the presence of a dairy processing plant within the

[4] Selwyn District Plan: Rural Volume: Part B: B3.4 Introduction

rural environment is an expected landscape element. The effects arising from such an element must also be expected, although the District Plan does seek to mitigate those which are adverse to a more than minor degree.

Further expectation or 'associative landscape effect' is informed by what is occurring in the existing environment. In this case the existing environment includes the dairy processing plant located in a farm setting.

Allied to associative effects are those arising from matters addressed in the Cultural Impact Assessment presented by Te Taumutu Runanga and Te Ngai Tuahuriri[5]. Of relevance to landscape is a request to provide indigenous vegetation within the Dairy Processing Management Area and other land in the vicinity owned by Fonterra[6]. It is understood the CIA does not rule out potential expansion of the dairy processing plant, but prefers that in so doing indigenous vegetation is provided for. This will facilitate the establishment of a vegetation regime that provides for the restoration of taonga species and habitat and linkages for mahinga kai. Implicit in this outcome is reinforced connection of the dairy processing plant with the landscape of its setting.

As the plan change will enable the expansion and / or alteration of the dairy plant there will be effects on the landscape of its setting. These effects will principally arise from an increase in overall building bulk and are therefore cumulative. Possible effects will be:

- Increased visual dominance arising from the presence of additional buildings
- Diminished naturalness of the rural environment through the introduction of physical elements
- View intrusion – of significant landscape features such as the Southern Alps
- Diminished view quality affecting outlook, especially that of nearby residents
- Increased incidental effects such as that from lighting and reflected glare
- Reduced rural open space and greenery
- General change in site character

As intimated, most of the above effects currently exist, or to put it another way, there will be more of the same effects. So essentially the current landscape and visual amenity effects will be much the same as they are now, except the magnitude or scale of them may be greater.

5.2 What are the actual landscape and visual amenity effects?

Given that the plan change will enable potential expansion of the existing dairy plant, the actual effects will remain centred on it, as demonstrated by the ODP. What this means is that the existing effects will closely reflect those arising from

[5] Prepared by Tipa & Associates October 2015
[6] CIA paragraph 5.3 page 44

implementation of the plan change. We can therefore rely on the existing effects to give a reasonably good indication of those which may occur in the future.

These effects are apparent in the foregoing discussion concerning the landscape character of the existing environment. The graphic attachment photographs illustrate current effects also. To reiterate in summary, these effects include:

- From SH73 there is no view intrusion of the Southern Alps, although there is intrusion as viewed from Loes Road.
- For the most part the existing dairy plant is either screened or on the verge of being screened by vegetation.
- The setback from surrounding roads and especially SH73 is generous resulting in diminished building domination.
- The dairy plant does not shade adjoining roads or nearest residential dwellings.
- No significant landscape features are affected.
- As viewed from surrounding roads and properties the dairy plant is foregrounded by rural activity.
- For travellers views of the dairy plant are glimpsed via occasional openings in foreground vegetation and are therefore largely transient.
- While prominent from many vantage points, the dairy plant is not dominant in that appreciation of all other features in the surrounding landscape is not excluded.
- It appears there may be partial views of the dairy plant from nearby dwellings or from vantage points in their immediate vicinity – see **Graphic Attachment Photograph 8.**
- There are no vantage points from which the dairy plant can be appreciated in its entirety – all views are interrupted to some extent at least by intervening vegetation.

Implementation of the plan change will result in much the same effects as those summarised above. This will certainly be the case with regard to the location and extent of effects because future activity will be more or less confined to the existing site. The advantages of this are:

- Activity and consequent effects will be concentrated in and around the existing dairy plant.
- Existing screen planting implemented as a consent condition will continue to be effective regarding future activity.
- Existing setbacks are more or less maintained.

- As shown on the ODP, there exists a hierarchy of building height culminating at an apex central to the site in a pyramid like form – see again **Figure 1** elevations.

- The areal extent of the plan change site is little more than the existing activity.

- Future building height as indicated on the ODP will not exceed that of existing buildings.

- As all activity is concentrated to the one area it will appear as a contiguous and visually coherent whole rather than be dispersed across the site as disparate unrelated elements.

- Stylistically future development is likely to be similar or the same as existing activity.

- Because the dairy plant is contained within a defined envelope, it will maintain a high level of contrast with surrounding rural activity – see again **Graphic Attachment Photograph 3.**

- There is certainty regarding future landscape and visual effects.

- No discernible landscape effect will occur as landscape character of the site is already informed by the existing dairy plant.

While the above advantages are favourable to future growth there will be effects greater than those existing. Chief among them is that buildings and allied structures will become comparatively more prominent due to an overall increase in visual bulk.

There are however, conditions that help to counteract these effects. Future buildings will be to some extent be visually absorbed by existing ones; an effect which is evident in **Graphic Attachment photograph 5** where the two dryers appear as one. That is, the change will appear incremental rather than one that is abrupt, as was the case when the existing dairy plant was constructed. When this occurred the site transformed from a flat featureless paddock to one accommodating a very large structure. Now that this has happened, further change will be far less radical. This is particularly so for the taller buildings as the shorter ones are less appreciable due to their low height in combination with effective screen vegetation and earth bunding.

The actual effects will include those brought about shelterbelt type planting implemented as a condition of consent for the current dairy plant. As **Graphic Attachment photograph 2** shows this planting is reaching a height where it is starting to effectively screen the dairy plant. Screening will become increasingly effective as this vegetation matures. Because of this, screening will be in place in the event that further development occurs within the plan change site. So while such development has the potential to increase prominence; what in fact will happen from the point of view of onlookers is that screening vegetation will become more dominant over time. Or to put it another way, it will become the dominating feature irrespective of future development within the dairy plant.

Finally, it is nonetheless considered that views of the dairy plant, where they occur, are not necessarily adverse. Aesthetically the dairy plant is not unpleasant to look at. It is evidently clean in appearance. It is static with no kinetic parts that catch the eye.

And the plant is compositionally well balanced with regard to the proportions between vertical and horizontal elements. Further, as the various aforementioned photographs show, the plant is for the most part framed by foreground vegetation. That is, in aesthetic terms the plant sits quite comfortably within its landscape setting.

5.3 Whose landscape amenity will potentially be affected?

Potentially affected parties will be road users and nearby residents. **Graphic Attachment aerial photograph 8** shows the location of nearest dwellings and roads.

Residents

Five dwellings are within 1 kilometre of the height control area within the site – see proposed ODP and **Graphic Attachment photograph 8.** The reason for identifying the height control area is that it relates to the buildings from which visual effects emanate. As photograph 8 shows, three dwellings are located just beyond the 1 kilometre boundary.

One of the dwellings within the 1 kilometre envelope is 'The Oaks', which is owned by the applicant. Consequently the effects on that dwelling are discounted.

Representative views from the other dwellings are shown on **Graphic Attachment photographs 9, 10, 11, 12**, **13** & **14**. From observation it is clear that all nearby dwellings are surrounded by vegetation – typically in the form of ornamental amenity plantings and shelter belts. Consequently it would appear that views of the existing dairy plant are screened at least to some extent by this and other intervening vegetation.

For most residents current visual amenity effects are negligible. Those most affected, relative to other residents, are the dwellings on Loes Road. Even from these properties garden vegetation largely screens the plant from view.

Road users

As shown on **Graphic Attachment aerial photograph 8** the site is encircled by four roads – Auchenflower, Homebush, Loes Roads and SH73. As mentioned, the latter is by far the most significant being the premier tourist route linking the west and east coasts. The other roads are mostly used by local people who live and work in the area.

The plant is glimpsed from the Old West Coast Road, but is not especially prominent from this vantage point.

All roads have a maximum speed of 100km/h, although in reality such speeds are unlikely on the unsealed side roads. Still, what this means is that road users will be by passing the dairy plant at speed. Given that and the presence of intervening vegetation, views to the dairy plant are sporadic or glimpsed – and as a result are very short term – usually encountered over a matter of seconds.

As mentioned the most significant road in terms of numbers of users and type is SH73. As **Graphic Attachment photographs 2,3,5,9** & **10** show and as just indicated, views from the highway are glimpsed via gaps in the shelter belt vegetation surrounding the site. In time most of these gaps will close as vegetation matures and becomes increasingly dominant.

Other parties

The dairy plant is visible from certain vantage points further afield. Among them are the Mt Hutt and Porter Heights ski fields where in certain light conditions reflected off the plant will render it visible in the distance – see **Graphic Attachment photograph 15**. Visibility of the plant from this vantage point is not expected to diminish ski field amenity in any way or scenic appreciation of the Canterbury Plains.

The plant is not visible from Porters Pass. Nor is visible from the bed of the Waimakariri River and so will not affect users of this resource.

The plant is visible from certain points in Darfield Township – namely the Landsborough Subdivision located on the northern outskirts. As **Graphic Attachment photograph 16** shows, the plant at some 3km distant appears quite diminutive within the broader expanse of its landscape setting. Apart from this subdivision the plant is not visible from other parts of Darfield.

As mentioned, Te Taumutu Runanga and Tuahuriri Runanga identify matters relevant to the cultural landscape – namely concerning the introduction of indigenous vegetation. This will be discussed in more detail shortly.

Summary

Parties most affected in any enduring way are residents closest to the plant that has views toward it. As mentioned all have some form of vegetation associated with their dwelling that appears to, at the very least, partially screen the plant. Line of sight observation however, indicates that for most dwellings screening is entire or very close to it.

6 LANDSCAPE TREATMENT

The following discussion focusses on methods for achieving and maintaining desired landscape outcomes. Fundamentally this is achieved in two ways; one being landscaping and the other the control of building bulk and location.

In large part, landscaping for the dairy plant has already been implemented as a condition of the original land use consent. This landscaping is considered sufficient for future development arising from the plan change. Consequently further landscaping is not required. It will however need to be maintained.

As further landscaping is not considered necessary, the focus is on building bulk and location. The details of this are described shortly.

6.1 What are the desired landscape amenity outcomes?

Regarding landscape amenity the overall aim is to ensure the dairy plant sits harmoniously within its setting. What this means is:

- Large trees will be dominant.
- Rural character will be maintained through the provision of open space and ample greenery, including pasture.

- The full extent of the dairy plant is not appreciable from any one vantage point.

- Although prominent, the dairy plant will not appear to dominate its setting.

- The dairy plant design appears coherent and free of any visually discordant elements, including colours.

- The dairy plant is compact where activity is confined to that area shown on the ODP and not otherwise dispersed into the surrounding environment.

While screening with vegetation is extensive, it is not considered necessary to fully screen the dairy plant from all vantage points. As mentioned, its appearance is not considered aesthetically adverse for the reasons identified earlier. The critical adverse effect to be avoided, remedied or mitigated is building domination.

How the desired outcomes just listed are achieved is described next.

6.2 How will landscape and amenity outcomes be achieved?

Vegetative dominance

As mentioned, landscaping has already been carried out for the existing dairy plant and it is not considered necessary to add to this. This landscaping comprises pine shelter belt type planting around the perimeter of the then application site, the location and extent of which is shown on the Landscape Plans that now form a condition of consent for the existing dairy plant. Being pines, the trees are evergreen and densely foliaged. Further, they are planted in a double row. As a result they will effectively and fully screen the dairy plant from those vantage points located alongside or within line of sight of the pines – see again **Graphic Attachment photographs 2** & **17**.

Broadleaf deciduous trees were also planted in copses in the vicinity of the dairy plant entry and at certain points alongside SH73 – namely opposite 'The Oaks'. These trees are English oaks (*Quercus robur*). One reason for planting these is to reflect existing planting regimes in the vicinity of the site where English Oak is quite common. A second reason is that these trees are capable of reaching considerable size. Being planted in groups or copses means eventually these trees will appear collectively as a very significant plantation. Given also that they are located between the highway and dairy plant, the mass plantings will appear to dominate views.

Existing trees – namely pines – have also been retained as a condition of consent – see again **Graphic Attachment photographs 3** & **5** where the pines are shown left of the dairy plant. These photographs show the pines appearing to match the height the dryers resulting from their location between the buildings and highway. Because of their extent the visual bulk of these pines exceed that of the dairy plant by some considerable degree.

Although not planted as part of the existing dairy plant development, there is scope to include native vegetation at various locations in and around the site. This could occur in areas not otherwise compromised by operations, including surrounding farming activity. Potentially suitable sites would be in the vicinity of the CPW canal,

particularly where its route results in un-usable land. The same could apply to other areas, such as around roading, the administration offices and associated car park.

The type of native plants used would be those that would have grown on the Canterbury plains naturally prior to the arrival of Europeans[7]. These would include species such as totara, kowhai, kanuka and cabbage tree. The overall aim with native planting is to provide simple, bold outcomes using potentially large trees. Such planting would help maintain visual coherence and a scale that is similar to surrounding exotic vegetation. Further, larger trees help counteract potential visual dominance of buildings and vehicle manoeuvring areas. Potentially they would also provide habitat for native birds and the invertebrate fauna they feed on.

If native planting were to be implemented it would be done in accordance with a landscape management plan developed in conjunction with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri rather than via District Plan provisions. The process for this is outlined in the Cultural Impact Assessment[8] and Fonterra's response[9]

In summary, as they mature trees will increasingly dominate the dairy plant environment – in fact much more so than what they do now. As a result the visual bulk of the dairy plant will appear diminished where it will become increasingly subservient to its setting. And because most of the trees are located alongside vantage points – namely next to roads – they will not only appear as the dominant feature but will also effectively screen the dairy plant where they occur.

Rural character

Essentially rural character results from a high proportion of open space to built form. Put simply, in rural areas space surrounds buildings and in urban areas buildings surround space. Vegetation is also a dominant feature of rural environments.

While the dairy plant comprises very large buildings and associated structures it is very compact. That is, the entire complex is confined and concentrated within a relatively small area rather than dispersed widely over a large area. Consequently the dairy plant is entirely surrounded by rural open space as is evident in **Graphic Attachment photograph 1**. It presence therefore maintains rural character and the green open space amenity that is derived from it.

Arising from this compactness is a high level of contrast between the open pasture land and the built complexity of the dairy plant. This too is evident in **Graphic Attachment photograph 1**.

The generous setback from surrounding roads also contributes to the appearance of rural character. This is because onlookers will appreciate the presence of intervening pasture land between them and the dairy plant as is apparent in **Graphic Attachment photographs 3** & **7**.

This will continue where:

- Future development will be contained within the confines of the development envelope shown on the ODP.

[7] Listed in *'Native plant communities of the Canterbury Plains'* ; Department of Conservation (2005)
[8] Dated October 2015
[9] In a letter addressed to Te Taumutu Rūnanga and Te Ngāi Tūāhuriri; Dated 2 February 2016

- The current setbacks will be maintained.

- Rural land use will continue on land surrounding the dairy plant within land owned by the applicant.

Avoiding full extent appreciation

From no one vantage point can the full extent of the dairy plant be appreciated. This happens for the following reasons:

- Relative to the dairy plant the flat and low elevation of vantage points which means that it is not possible to overlook it.

- The presence of intervening vegetation.

- Structures and buildings within the dairy plant complex obscure each other.

- Variation in the height of buildings and structures.

- Significant setbacks from surrounding vantage points.

- The presence of earth bunds

Of the above characteristics, setbacks, intervening vegetation and earth bunding will be maintained. Building height variation and visual obstruction will occur in any event, and will continue to do so resulting from future development arising from the plan change.

Dominance avoidance

For much the same reasons listed above, particularly regarding setbacks and intervening vegetation, visual dominance arising from the presence of the dairy plant is avoided. It is nonetheless visually prominent resulting from its size, form and reflective colours. Visual dominance occurs where views of an object are such that appreciation of surrounding environment is negated or peripheral. This can apply to any object - a tree or group of trees, a lake, a building, pylons, hills, mountains and so on. Visual prominence is where an object is clearly visible due to it contrasting with the surrounding environment. The dairy plant does this.

The aim of the plan change and its provisions is to avoid dominance. As indicated, controls on setbacks, building height and the provision of large scale vegetation will all contribute to the avoidance of dominance.

Coherent appearance

This arises from stylistic consistency, proportions and compactness. As is evident from the various photographs the existing dairy plant is visually coherent. The buildings and allied structures are all similar or evidently related in appearance. The vertical to horizontal proportions are well balanced – see again **Figure 1 diagram**. Regarding compactness the tallest buildings (the dryers) are clustered, although the equally tall boiler stack is somewhat remote from them. This however is countered by its very narrow proportions and low visual bulk.

Future coherence will be achieved and maintained via the hierarchy of building heights and sizes reflected in the ODP. The **Figure 1 diagram** also illustrates this effect. Essentially the overall form of the dairy plant is a shallow pyramid, which visually appears very stable and grounded.

It is also anticipated that future design will be the same as or similar to that existing. This is entirely determined by the dairy plant's function – a classic example of 'form following function'. In these generic terms, it is not expected that there will be much variation between what currently exists and future development. As a result it is expected that the dairy plant will appear stylistically consistent and therefore visually coherent into the future.

7 STATUTORY LANDSCAPE MATTERS

As mentioned, one of the activities the District Plan (the Plan) anticipates occurring in the rural environment is dairy processing. Recently incorporated into the Plan is a policy that is specific to dairy processing plants located in the rural environment. Potentially such activity can result in adverse effects on rural character and amenity. As identified, chief among them is building dominance. In this regard one policy is concerned with the effects of building height; but also goes on to exempt dairy processing plants. This will be discussed in more detail shortly. Widely dispersed activity impinging on open space can also diminish rural character. Other potential adverse effects include view intrusion, diminished view quality, over-shadowing of neighbouring residences, and allied to that loss of privacy. Peripheral adverse effects can also arise from signage, lighting and reflectivity. All of these matters are addressed in the following discussion regarding the relevant objectives and policies; all of which are derived from the Plan's Rural Volume, Part B concerning '*people's Health, Safety and Values their economic, social and cultural wellbeing'.*

> ***Objective B3.4.1*** *The District's rural area is a pleasant place to live and work in.*
>
> ***Objective B3.4.2*** *A variety of activities are provided for in the rural area, while maintaining rural character and avoiding reverse sensitivity effects.*

The explanation and reasons to the above objectives suggest that a balance is to be struck between ensuring the rural environment is pleasant while enabling rural business activity, which includes dairy processing. The aim, the explanation and reasons state, is to ensure '*The policies and rules allow for day to day farming and other activities which have effects typical of a rural area, but manage activities that have potentially stronger effects.'* With this in mind it recognises the rural zone as being '… *principally as a business area rather than a residential area.'* Concerning landscape outcomes this means that the rural zone, in this case the Outer Plains, will appear to be devoted to rural based business activity. This includes dairy processing plants which the Plan identifies as being appropriate within the rural zone.

Consequently, the Plan is instilling an expectation that such activity will exist in the Outer Plains rural landscape. In landscape terms these are termed 'associative effects'. Because of the existing dairy plant and the Plan's recognition they can exist, then it follows that there are no adverse associative effects. Or to put it another way, people would not be surprised to find a dairy plant in the setting in which it is located.

> ***Policy B3.4.1*** *Recognise the Rural zone as an area where a variety of activities occur and maintain environmental standards that allows for primary production and other business activities to operate.*

This rural character policy essentially enables rural business to operate while ensuring that the environment is pleasant for those living in the rural zones. To this end the explanation and reasons state; '*The Plan provisions, coupled with the distance between houses and activities in the Rural zone, should combine to maintain a pleasant living environment.'* Regarding the provision of landscape amenity the focus of these provisions is on building bulk and location – that is, controls on height, set back, site density, recession planes and site coverage. All of these matters are manifest on the proposed ODP.

> ***Policy B3.4.3*** *Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area**.***

Importantly the explanation and reasons to this policy recognise that the rural areas '*…can be sought after locations for activities that need large sites and to be separated from people.'*

They then go on to say that;

> *Some of these activities can make* [rural] *areas less pleasant – they can affect their amenity values. Policy B3.4.3 requires adverse effects from activities on the amenity values of rural areas generally be mitigated. This may be achieved through compliance with rules, conditions on resource consents or through an ODP controlling further development on established sites such as those applied to the existing sites of milk processing. Where an activity will detract from the amenity values of an area, Policy B3.4.3 requires those effects be mitigated.*

As is evident, the explanation and reasons specifically recognise the presence of dairy processing in the rural environment, whose potential adverse effects on amenity are controlled via ODPs and other relevant Plan rules. As discussed, the chief mechanism as expressed on the ODP involves controls on building bulk, extent and location. Landscaping, including the presence of earth bunding is another important means of ensuring any adverse effects on amenity are avoided and mitigated.

> ***Policy B3.4.5*** *Enable the continued and enhanced operation, innovation and development of established dairy plant sites for the purposes of administration, processing, testing, storage, handling, packaging and distribution of milk and dairy products, related by-products and ancillary activities within specifically identified Dairy Processing Management Areas within the Rural (Outer Plains) Zone, whilst ensuring the integrated management of effects on the environment at the boundary of the Management Areas through ODPs. The establishment of non-dairy processing related industrial activities shall be avoided.*

Firstly the explanation and reasons to this policy recognise the large size of buildings and structures associated with dairy processing plants. It further observes that these exceed what might otherwise be expected to occur on working farms. They then note that the policy only applies to established dairy processing plants, whose existence informs the landscape character of the subject site. This suggests there is little opportunity for cumulative effects arising from the establishment of new dairy

processing plants. Consequently integrity of rural character and amenity is maintained with no likelihood of it being eroded through the establishment of new dairy plants.

This outcome is reinforced by the observation in the explanation and reasons that the policy provides '…*for a concentration of buildings'.* To this end the policy seeks to confine dairy processing to within Dairy Processing Management Area (DPMA) whose location and extent is shown on the ODP.

So overall, the policy recognises that the effects on landscape amenity resulting from the presence of a dairy processing plant exist and that they are to be contained within the confines of the DPMA. What is proposed, as discussed, is that future buildings and structures will continue to be concentrated, and so too are the effects where they will maintain current rural character and amenity.

> ***Policy B3.4.6*** *Maintain low levels of building density in the Rural zone and the predominance of vegetation cover.*

While the existing buildings are very large compared to most in the rural area, building density is, as mentioned, concentrated rather than dispersed. To reiterate, the important landscape consideration is to ensure space surrounds buildings irrespective of their size. So with buildings concentrated, this means that their collective bulk or mass appears as one related cluster entirely surrounded by open space – which is apparent in the various graphic attachment photographs showing the existing dairy plant. Additionally, the explanation and reasons note that rules governing site coverage do '…*not apply to buildings in the Dairy Processing Management Areas which provide for a concentration of large buildings for processing, packaging and distribution of milk and dairy products only.* That is, the absence of such a rule enables building concentration. As a result, the open space integrity of the surrounding rural landscape is maintained. This further enables the dominance of vegetation to be maintained which the explanation and reasons state as being *'…characteristic of rural areas.'*

> ***Policy B3.4.7*** *Avoid high rise buildings or highly reflective utility structures.*

The intent of this policy is clear and is perhaps the least achievable concerning dairy processing plants on account of the building heights involved – up to around 50 metres. Permitted height in the rural zones is 8m for dwellings, 12m for other buildings and for grain silos 25m[10]. Dairy processing plants are exempt however, where in the explanation and reasons it states;

> *An exemption is also made for buildings essential for the processing, packaging and distribution of milk and dairy products, related by-products and waste materials. The scale of dairy production requires large facilities and a Dairy Processing Management Area has been created to recognise sites already established as dairy factories and to enable efficiencies in the dairy industry to be achieved.*

From this it is evident that an exception has to be made for dairy processing plants so their purpose can be fulfilled. The Plan then anticipates the effects arising from tall buildings and structures, but in combination with the other policies does not expect

[10] SDP; Rural Volume; Part C; Rural Rules; rule 3.12.1.1 (a) (b)

these to be cumulative regarding the establishment of new dairy plants. Consequently dairy plants might be considered rare and as a result the effects arising from their height on rural character and amenity is constrained and localised.

A further effect is that, by de fault, they become landmarks of which building height is chief contributor. Regarding the plant at Darfield, the landmark function is diminished somewhat due to its significant setback from adjoining roads and the presence of screening vegetation – see again the Graphic Attachment photographs. As discussed, height is in any event largely countered by the presence of this vegetation.

> ***Policy B3.4.10*** *Ensure signs and noticeboards are designed and positioned to avoid:*
>
> *– Restricting people's visibility along roads;*
>
> *– Impeding access to or past sites;*
>
> *– Nuisance effects from sound effects, moving parts, glare or reflectivity;*
>
> *– Large structures protruding above rooftops.*

Currently there is one modest sized sign located on SH73 opposite the main entrance to the dairy plant. Another is located alongside the entry road beyond the railway track. There is no signage on the building that is visible from publically accessible vantage points.

Although it is unlikely any significant signage will be installed, if in the event it is and it complies with the Plan standards, it follows that the outcomes anticipated by the above policy will be achieved.

> ***Policy B3.4.17*** *Ensure buildings and trees do not excessively shade adjoining properties.*

Regarding the above policy, the explanation and reasons appear to be most concerned with the effects of shading on private dwellings and associated outdoor living areas. The nearest dwellings to the DPMA are more than 700m distant – well outside the recession plane boundaries and therefore beyond any adverse shading effects caused by either buildings or vegetation. The **Figure 2** diagram below shows the tallest buildings – the dryers – are well within the recession plane at the closest boundary; south of the plant.

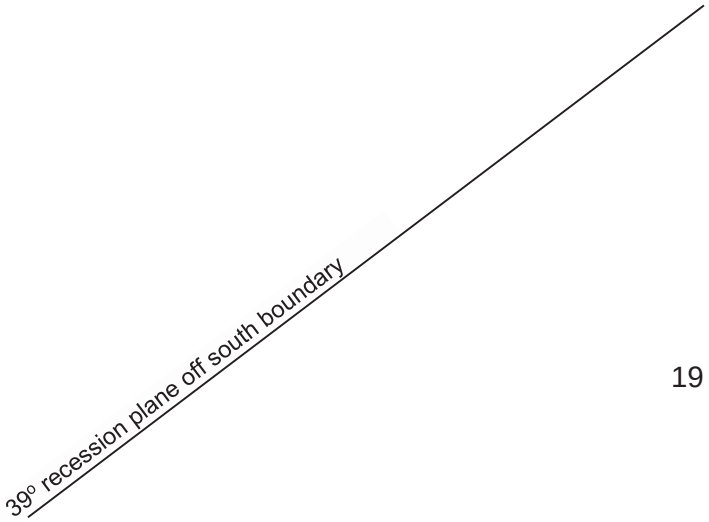


Figure 2 *Showing the recession plane off the southern boundary closest to the potentially tallest buildings – the dryers. This demonstrates that there is no prospect that the dryers will shade neighbouring properties beyond what is anticipated by the District Plan.*

Policy B3.4.18 *Ensure buildings are setback a sufficient distance from property boundaries to:*

(a) Enable boundary trees and hedges to be maintained;

(b) Maintain privacy and outlook for houses on small allotments; and

(c) Encourage a sense of distance between buildings and between buildings and road boundaries where practical.

At its closest point to nearest roads the building envelope is 340m from SH73, 345m from Auchenflower Road and 415m from Loes Road – see **Graphic Attachment photograph 18**. And as show on **Graphic Attachment photograph 8** dwellings (excluding 'The Oaks'[11]) are significantly further. The permitted setback for any building in the rural zone is 30m from all boundaries including arterial / strategic and other roads[12]. Consequently all of the outcomes listed in the above policy are achievable. The setbacks determined by the building envelope also achieve those outcomes listed in the 'explanation and reasons' to the policy which include a '…*sense of open space between buildings and the unrestricted views from roadsides.'*

8 RECOMMENDATIONS

Virtually all of the desired landscape character and amenity outcomes will be achieved via implementation of the ODP. In this regard there are two fundamental outcomes the ODP sets out to achieve, which are, to reiterate:

- The maintenance of rural character by clustering or spatially concentrating buildings, structures and activities.

- The management of building bulk and location – setbacks, height and site coverage – so as to avoid building domination

[11] Owned by the applicant
[12] Selwyn District Plan Rural Volume Part C Rural Rules Buildings Rule 3.13.1

Allied to building effects is colour, which was also subject to a condition of consent (Condition 25). Controlling colour not only assists in reducing apparent building dominance, it also contributes to overall stylistic consistency and coherence.

A further outcome concerns landscaping, or more precisely, planting and its management. This was required as a condition of consent for the existing dairy plant. All of the planting required as a condition has been implemented.

It is not considered necessary to provide additional planting. The reason is that it is considered the existing planting will be sufficient to achieve its purpose regarding any future development arising from implementation of the ODP. The purpose of this planting is:

- To screen the dairy plant to a large extent, but not necessarily fully.
- To provide and maintain vegetative dominance.
- To reflect existing planting patterns in the area and so maintain specific character.
- To contribute general amenity.
- To counterbalance visual bulk of the dairy plant with vegetation.
- To facilitate harmonisation of the dairy plant with its rural setting.
- To maintain visual coherence achieved via simple planting patterns and limited species.

Recommendations

1 That the existing planting shown on the landscape plans required as a condition of consent (referred to as L1 and L2 in landscape conditions 23 – 24[13]) be adopted as part of the plan change and incorporated into the Selwyn District Plan.

2 That the wording or intent of Conditions 23 – 24 referred to above are incorporated into the Selwyn District Plan.

[13] Condition:

(23) The consent holder shall undertake shelter belt planting and landscaping within the first available planting season after commencement of this consent. All shelter belts and landscaping shall be planted and maintained in accordance with Landscape Plans L1 to L2; and

(24) All landscaping required for this consent shall:

(a) Be maintained, with any dead, diseased, or dying landscaping and being replaced within the next available growing season with plants of a similar species and at the minimum height at time of planting as specified on Landscape Plans L1 to L2; and

(b) For any shelter belt adjacent to SH73, the maximum height shall be 6 metres to avoid any shading on SH73 during the period of 10am -2pm on the shortest day of the year.

3 That the colour of exterior building surfaces of the dairy processing plant be limited to *Grey Friars* (Resene N35 -004-253) and *Titania* (Resene G84 – 012-095).

9 CONCLUSION

It is clearly apparent from the provisions in the District Plan that it regards dairy processing plants as somewhat exceptional but necessarily rural based due to their unique operational requirements. Consequently they will feature in the rural landscape and where this occurs they inform character and amenity. They are not common however and so they will by virtue of their rarity, size, colour and location appear as landmarks. They are among the largest physical structures to be found in rural settings.

As a result dairy processing plants cannot be easily absorbed into the landscape. Their presence however can be subdued via various measures, all of which were described earlier. The aim of these measures – essentially controlling bulk and location in addition to landscaping – is not necessarily to conceal the dairy plant; but to ensure it avoids domination of its setting. This is particularly so where it potentially affects the public or nearby residents.

A further aim is to ensure dairy plants appear coherent, and sit harmoniously in the landscape in which they are located. To achieve this they need to reflect existing rural patterns and adopt prevailing motifs – for example the layout and species of tree planting. To this end they need to further reflect the bold simplicity of rural landscapes.

With such outcomes in mind, the ODP and accompanying District Plan provisions also need to avoid the fussiness or complexity of activity that is usually associated with urban or more diverse settings. So in these more generic terms – namely pragmatic bold simplicity – dairy processing plants are not out of keeping with these same qualities that prevail throughout the rural outer plains.

As mentioned at the outset, implementation of the ODP and plan provisions will result in ‘more of the same’, albeit potentially to a greater extent compared to what currently exists. Stylistically the dairy plant will maintain a similar appearance, notwithstanding that it may well be larger. The ODP will however ensure that exacerbation of adverse effects – namely building dominance – will be more or less contained to the extent of current effects. Further, these will be adequately managed with existing levels of landscaping in addition to the parameters set out in the ODP and existing and proposed District Plan provisions.

The presence of the dairy plant is not contrary to peoples’ expectations and nor will it be following further development. Further, the plan change will provide certainty regarding the location and extent of effects, which to some degree are currently appreciable.

With existing and proposed measures in place the effects on landscape character and amenity of the rural outer plains will be appropriate and acceptable.

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February 2016

Graphic Attachment

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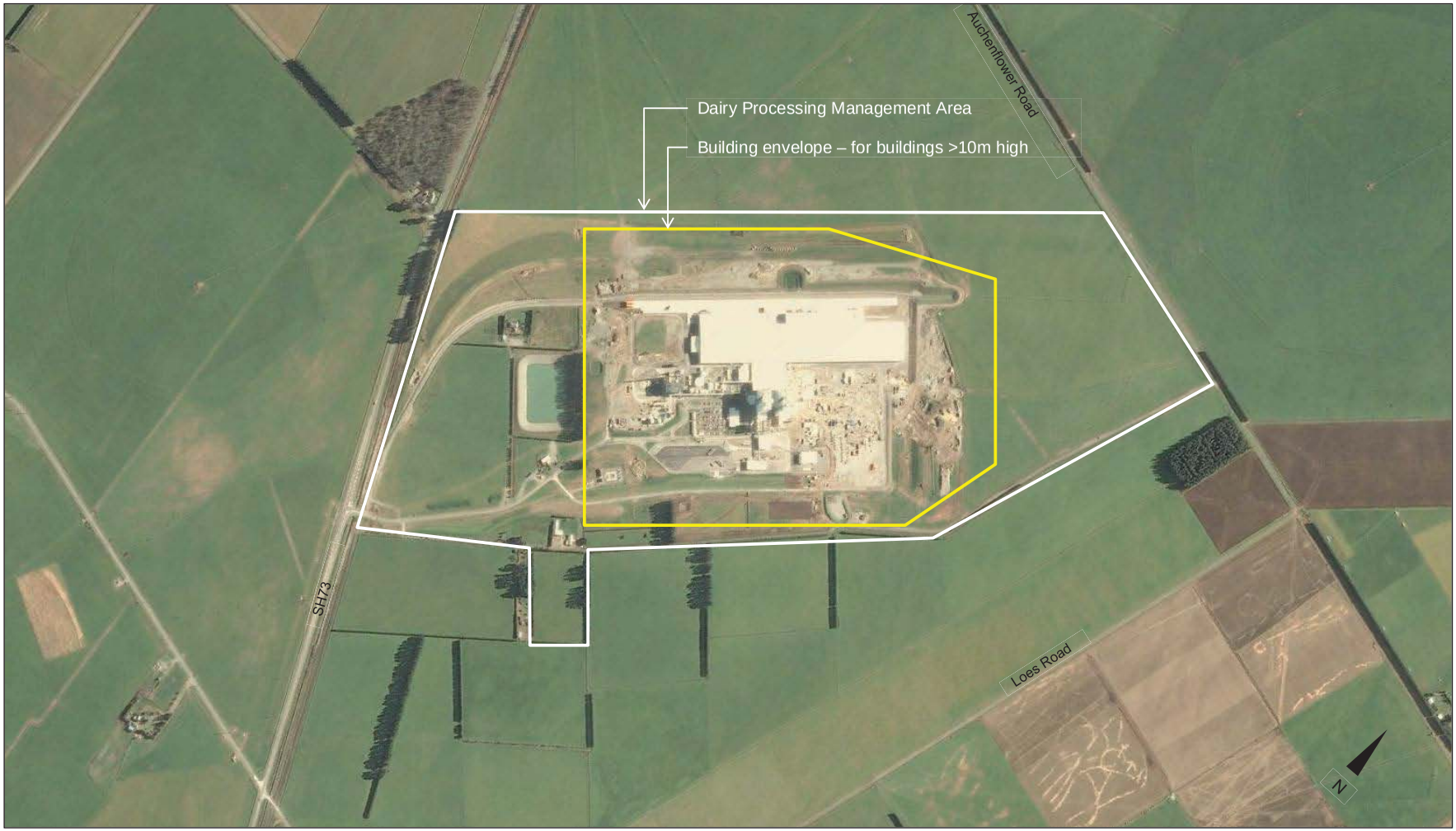
PROPOSED PLAN CHANGE DARFIELD DAIRY PLANT

Photograph taken: 6.7.2015

Photograph 1 *Looking east the existing dairy plant at Darfield showing the open expanse of its rural setting*

Photograph 2 *As seen in this photograph, pines planted as a condition of consent are now reaching a height where they are starting to screen the existing plant - view from SH73. Note the presence of earth bunding in the middle distance and screening effect it has of the lower portions of the dairy plant.*

Photograph 3 *Rural activity prevails around the dairy plant, as does abundant open space and greenery. Note the screening effect of the pine trees in the middle distance.*



Photograph 4 *Showing the existing plant and character of the surrounding rural environment*

Photograph 5 *As viewed from SH73 the existing dairy plant does not interrupt views of the Southern Alps. Distance to the dryers is around 1km.*

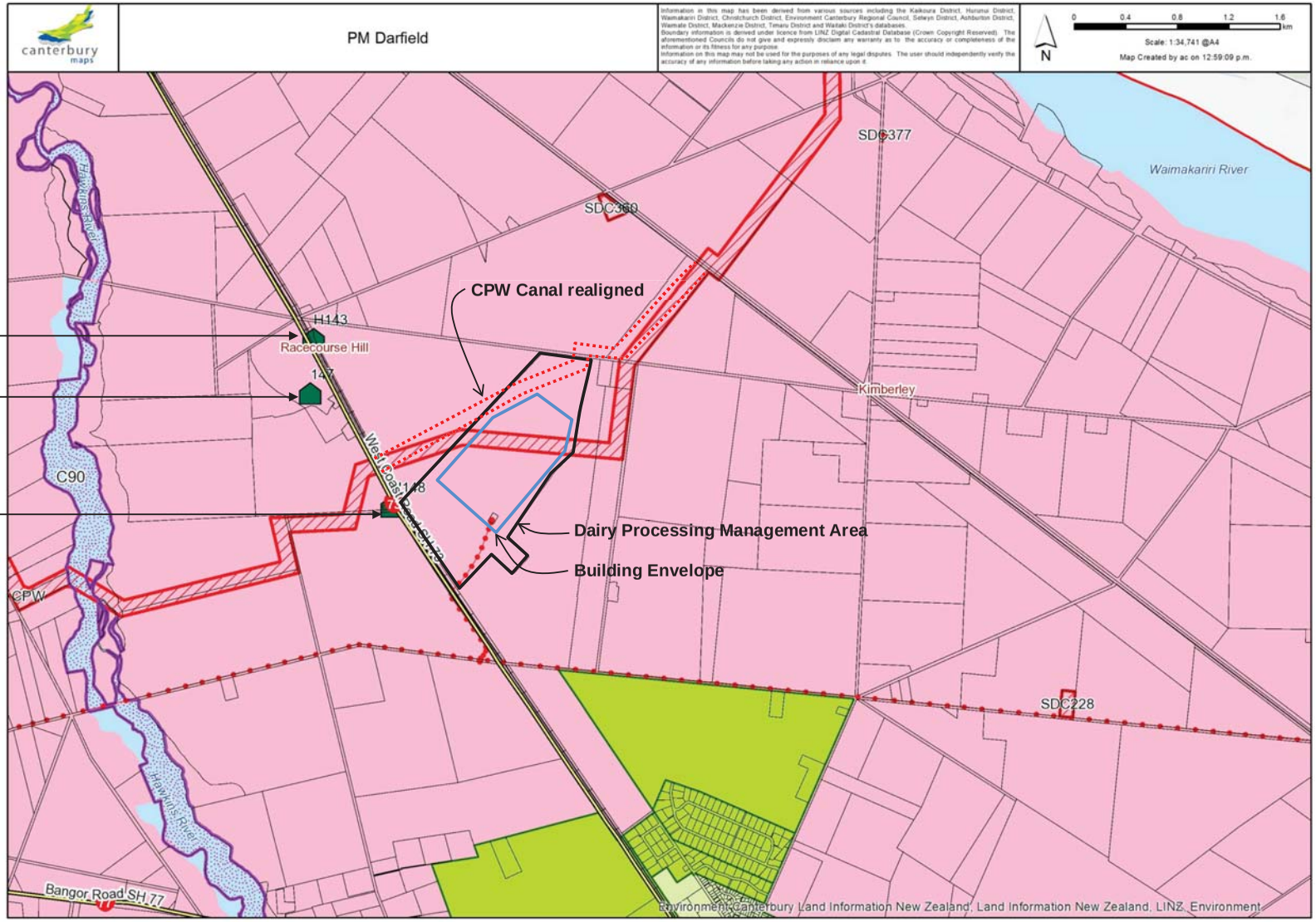
Photograph 6 *As viewed from Loes Road opposite the vehicle entry at 'The Gums' views of the Southern Alps are interrupted by the dairy plant. Views from the dwelling however are blocked by vegetation. Distance to the dryers is approximately 1.1km*

Heritage Sites

H143 Railway Long Drop

H147 Racecourse Hill

H143 The Oaks



Map 1 **Selwyn District Planning Map**

Showing the plan change site in relation to various nearby features.
No recognised features are shown within the Plan Change Site

Photograph 7 *The dairy plant as viewed from Kimberley Road, approximately 3km distant. It is evident here that the dairy plant appears much diminished in the greater expanse of the landscape in which it is located*

Photograph 8 *Showing locations of dwellings and roads nearest the existing dairy plant and plan change site. The yellow dashed square is 1km from the 'Height Control Area' – blue dashed line - within which the buildings are potentially dominant.*

Photograph 9 *View toward the existing dairy plant from 'The Oaks'*

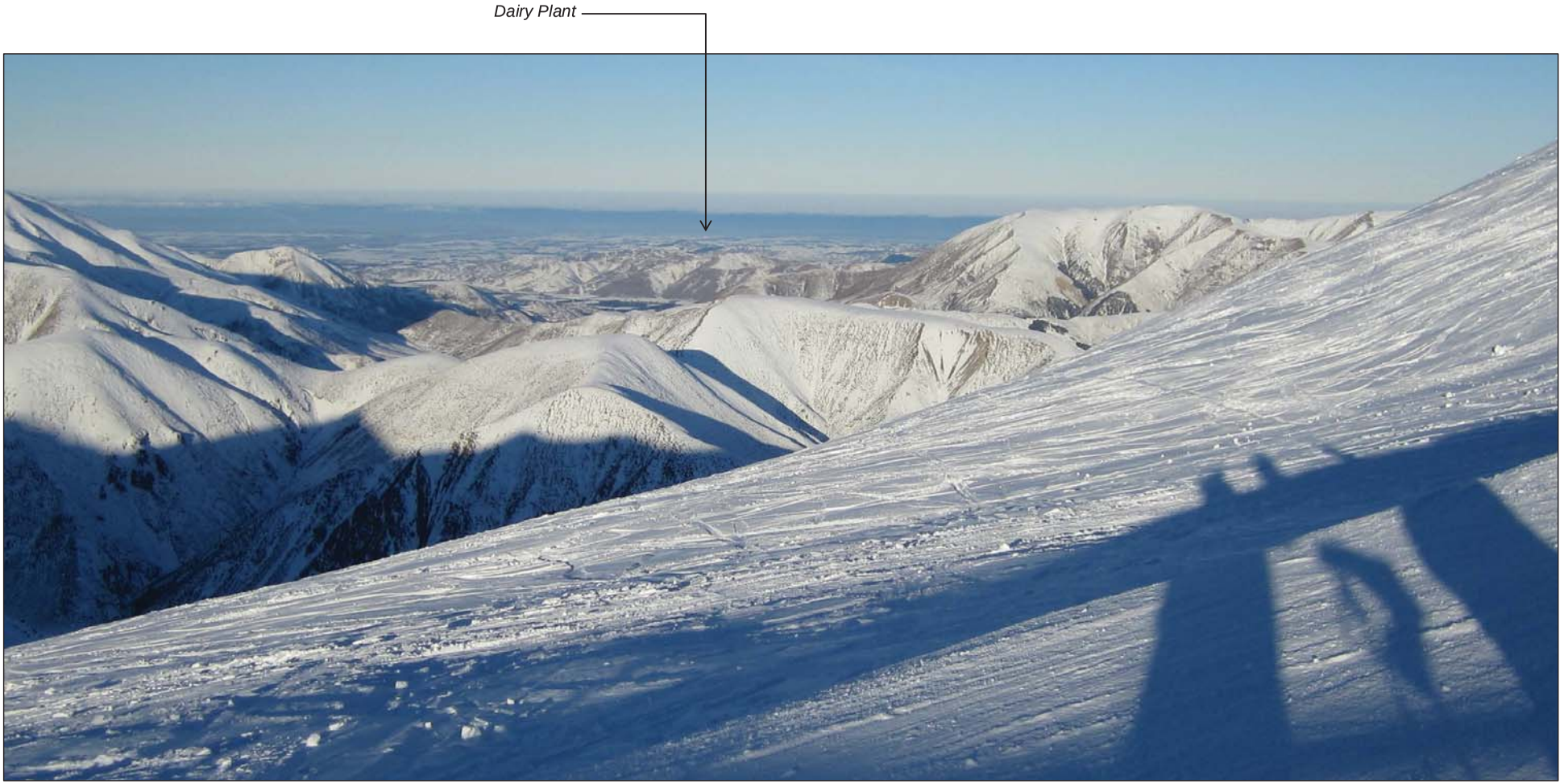
Photograph 10 *The view from SH73 from opposite the driveway and upholsterer's dwelling at Racecourse Hill*

Photograph 11 *The view from SH73 at the Auchenflower Road junction in line of sight from dwelling.*

Photograph 12 *The view in line of sight from dwelling on Bleak House Road.*

Photograph 13 *The view from Loes Road opposite 'Aigen Farm'*

Photograph 14 *The view from Homebush Road showing the Buxton dwelling with the dairy plant beyond*

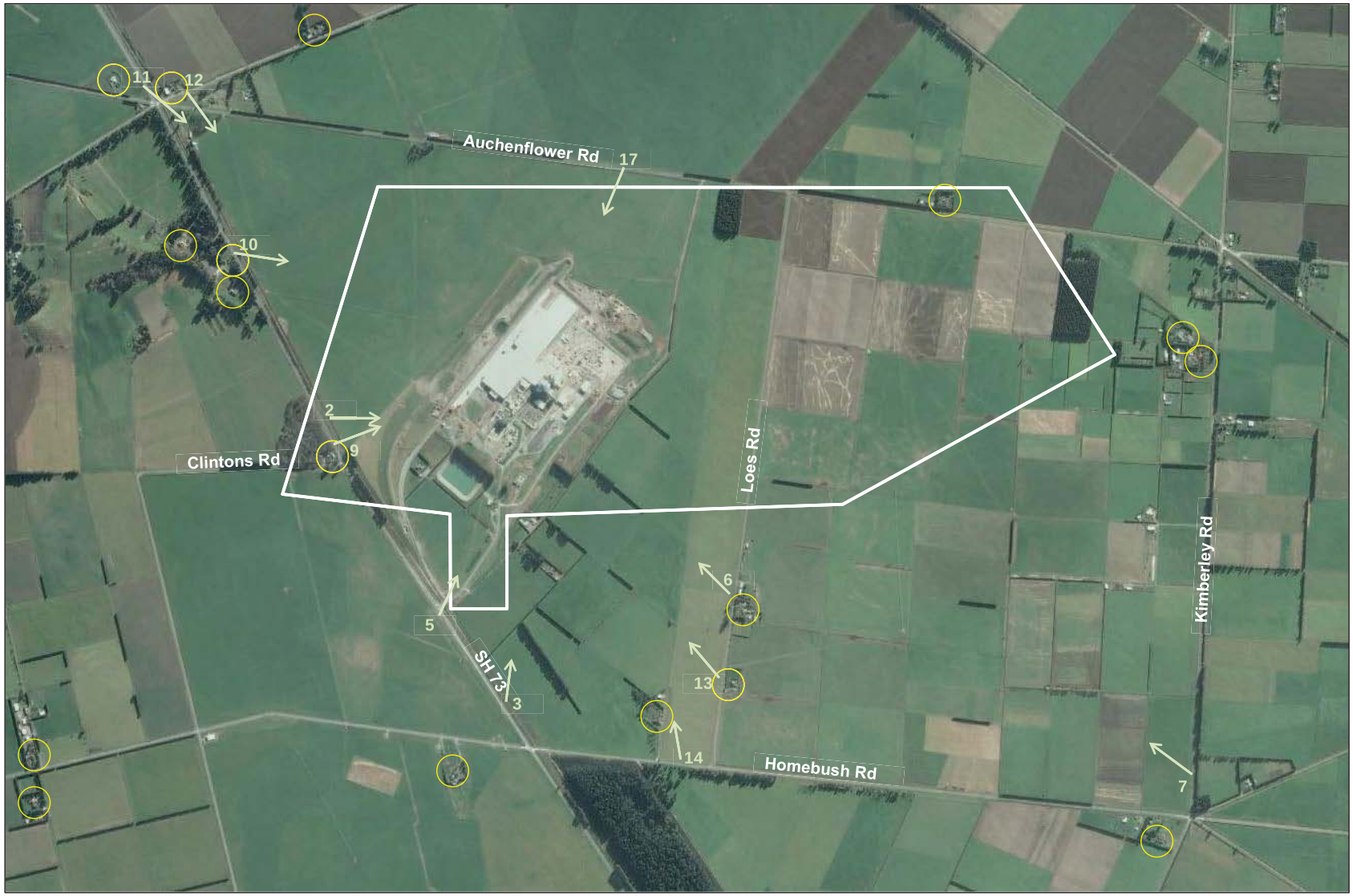


Photograph 15 *The dairy plant as viewed from the summit ridge at Porter Heights ski field.*

Photograph 16 *The dairy plant 3km away as viewed from Whitcombe Road within the Landsborough Subdivision at Darfield. Note that it does not intrude the skyline from this vantage point.*

Photograph 17 *The effectiveness of pine shelter belt screen planting is evident here where the trees are not yet 3m high. The screening will become increasingly effective as the trees mature.*

Photograph 18 *An aerial photograph showing the relationship of the proposed building envelope to surrounding roads and the applicant's property boundary (blue line) where it occurs within these.*



Photograph 19 *Showing location of photo-points*
Yellow circles indicate dwellings

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