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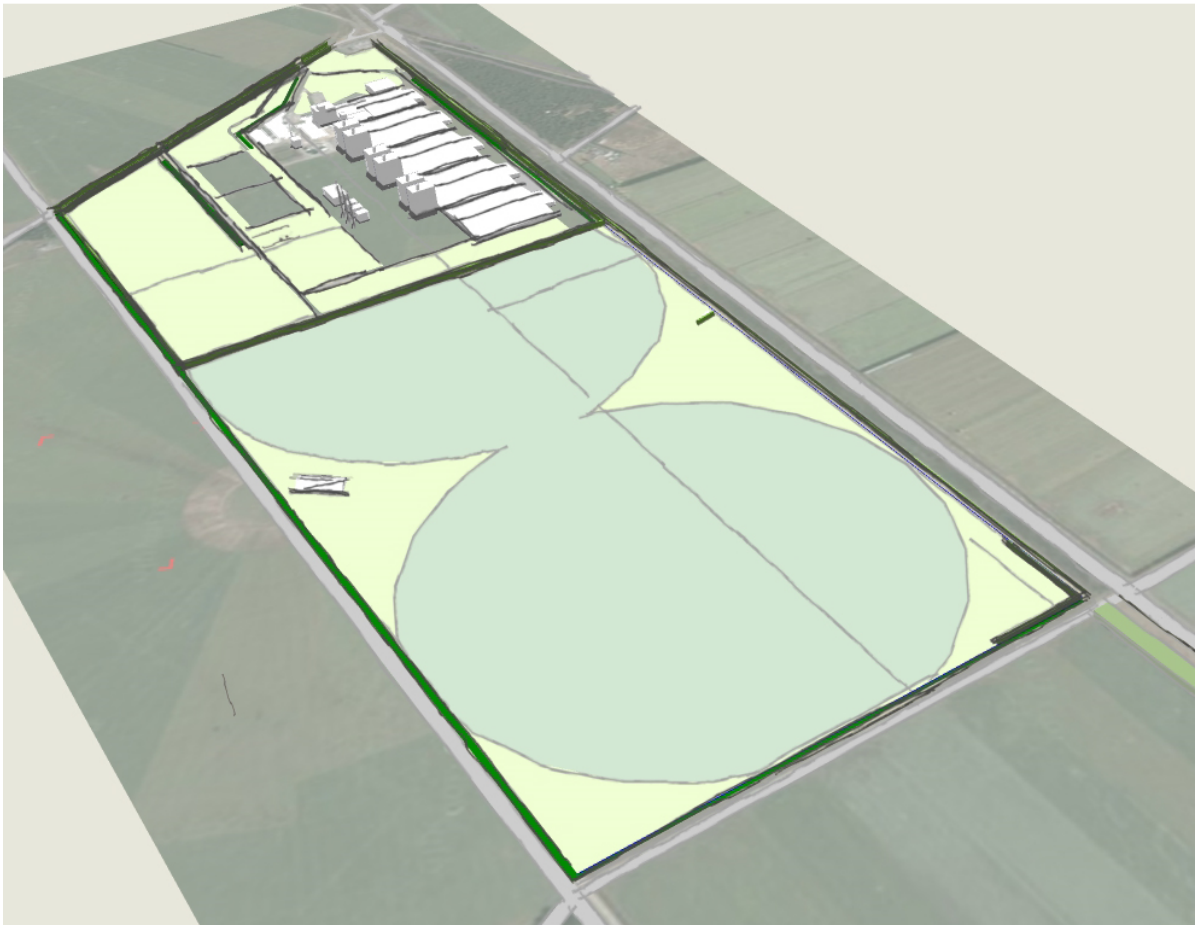
Report

Request for Plan Change: Dairy Processing Management Area - Landscape and Visual Assessment

Prepared for Synlait Milk Ltd

Prepared by Beca Ltd

5 June 2014



Revision History

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1	**Wade Robertson**	Draft for Client Review	30/01/14
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Document Acceptance

Action	Name	Signed	Date
Prepared by	**Wade Robertson**		05/06/14
Reviewed by	**Lesley Hopkins**		17/04/14
Approved by	**Ainsley McLeod**		05/06/14
on behalf of	**Beca Ltd.**		

Executive Summary

The proposed Plan Change introduces a Dairy Processing Management Area (DPMA) overlay into the Rural (Outer Plains) Zone of the Selwyn District Plan, and specifically identifies an area of land containing and immediately surrounding the existing Synlait dairy plant at Dunsandel as a Dairy Processing Management Area (DPMA). The purpose of the DPMA is to recognise the existing dairy plant and to provide for its continuing efficient use and future expansion.

The purpose of this report is to describe the landscape-related aspects of the DPMA and to assess the potential landscape (rural character) and visual effects that may result from future development and taking into account the mitigating properties that the proposed 2.6ha of landscape planting has in relation to built development.

Effects on the 'working' rural character of the wider landscape have been assessed in relation to flat topography with distant mountain and hill (e.g. Southern Alps and Port Hills) backdrops, the predominant arable/ pastoral land use and overall sense of openness typical of the Canterbury Plains. Effects on the character of the local landscape have also considered the existing Synlait Dairy Plant which imposes a larger scale rural-industrial element (i.e. large format warehouses and dryer towers) into the local context.

Based on the assessment, the proposed DPMA will not adversely affect the rural character of the wider rural landscape and the proposed DPMA is considered to be a positive step in the maintenance of wider rural character as it provides the community with a higher degree of certainty as to the scale and location of (generally) large scale dairy processing facilities in the district. Overall effects on the rural character of the plan change site and local landscape will be low to moderate in degree.

Visual effects have been assessed in relation to the existing Plant being a highly visible and recognisable landmark in a relatively open and undeveloped (in terms of buildings) local landscape. It is a well-known and highly recognisable feature in the local landscape and its connection with rural production is widely recognised. While the existing Plant currently represents a clear visual counterpoint in the local landscape characteristics such as openness, low development density and predominance of natural elements continue to dominate the wider landscape setting.

In reality the existing Plant has been a highly recognisable feature in the local landscape for seven years and while its overall scale is considerably larger than other rural buildings like implement and storage sheds, barns, stock yards, milking sheds, grain silos and hatcheries the vast majority of large scale rural industrial facilities like the existing Plant, Edendale, Darfield and Clandeboye are located 'close to source'.

Visual effects have been considered in the context of surrounding farm houses, local road users and travellers along state highway one. Overall, visual effects on farm houses will be of a low to moderate degree with the exception of one dwelling to the southeast that will experience a high degree of short term effect. In the worst case scenario visual effects on users of Sharlands and Irvines Road will be high in the short term and moderate to high in the medium to long term. Effects on SH1 users will range from moderate to low. It is acknowledged that there will be some short to medium term effects resulting from future development, however once the proposed landscape framework has an opportunity to mature it is anticipated that the degree of visual effect stemming from future development late in Stage 1 and throughout Stage 2 will be significantly reduced.

Contents

Appendices

1 Introduction

1.1 Purpose

The purpose of this report is two-fold:

1. To describe the landscape-related aspects of the proposed Plan Change; and

2. To assess the potential landscape and visual effects that may result from future development within the proposed Synlait Dairy Processing Management Area (DPMA) with a specific focus on rural character and visual amenity.

1.2 Report Structure and Process

Section 2 and 3 of this report provide the background and an explanation/ illustration of the landscape-related aspects of the proposed plan change. Section 4 provides an assessment of the actual and potential landscape and visual effects that may result from approval of the proposed plan change and subsequent development of the DPMA in the future.

The preparation of this assessment included the following tasks:

1. Review of the previous Landscape Assessments prepared by Beca in 2011[1], 2012[2] and 2013[3] as they relate to the previous drystore, cold store, canning and blending plant extensions, and addition dryer tower;

2. Initial project team workshop to have a preliminary discussion with regard the intended DPMA outcomes;

3. Follow up meeting with project planner to discuss landscape-related aspects of the plan change including outline development plan (ODP) and Rule wording;

4. Development of preliminary landscape concept plan for discussion with Synlait and with a specific focus on boundary treatments and staging of landscaping;

5. Project team workshop to discuss overall plan change and refine specific discipline requirements with regard ODP and Rule wording:

6. Site visit to 'ground-truth' proposed landscape treatments, their inclusion in the ODP and in order to re-confirm:

    a. The character of the local landscape and the contribution the Plant and the DPMA makes to it;

[1] Synlait Milk Stage Three Dry Store Landscape Assessment. Beca. 4 May 2011.

[2] Synlait Dairy Plant Stage Three (Part A) Canning and Blending Plant Landscape and Visual Assessment. Beca. 12 October 2012; and

Synlait Dairy Plant Stage Three (Part B) Drystore and Cold Store Landscape and Visual Assessment. Beca. 18 October 2012.

[3] Synlait Dairy Plant (Stage Four) Dryer 3 Landscape and Visual Assessment. Beca. 18 October 2013.

b. The location and extent of the Proposal;

c. The location, extent and growth habits of mitigation planting implemented as part of previous development phases; and

d. The overall visibility of the Proposal on its own and in the context of the Plant.

7. Refinement of the landscape concept plan and preparation of illustrative material attached as **Appendix 1**; and

8. Assessment of potential landscape and visual effects.

1.3 Background

Beca has been involved with the Synlait Milk site at Dunsandel since 2010 and has prepared landscape and visual assessments for the last four resource consent applications lodged by Synlait.

On-going development of the site has occurred subject to the approval of the various resource consents with landscape mitigation (e.g. earth bunding and planting) being undertaken in conjunction with building development. In general terms this has led to a situation where short to medium term visual effects have been assessed as relatively high until such time as planting matures and the scale of (predominantly) shelterbelts have reached a height relative to adjacent structures.

Our input into the proposed plan change seeks to move away from the current 'develop and plant' approach to landscaping to one that provides a comprehensive landscape overview for full development of the DPMA. The nature and timing of this landscaping is illustrated in the plans and sections attached as **Appendix 1** and discussed in more detail in subsequent sections of this report.

2 The Proposal

2.1 Plan Change Description

The proposed Plan Change introduces a Dairy Processing Management Area (DPMA) overlay into the Rural (Outer Plains) Zone of the District Plan, and specifically identifies an area of land containing and immediately surrounding the existing Synlait dairy plant at Heslerton Road, Dunsandel, as a Dairy Processing Management Area (DPMA).

The purpose of the DPMA is to recognise the existing dairy plant and to provide for its continuing efficient use and future expansion. The area of land within the DPMA is intended to provide sufficient space for the future development of the dairy plant. This is anticipated to occur over a period of decades and will progress in response to a range of factors including market demand for dairy products, developments in the dairy industry, the operational requirements for a dairy plant and the size of the catchment area serviced by the dairy plant, including travel distances from farms to plant. Accordingly, there is an optimal scale of development based upon the above considerations.

Whilst the ultimate development scenario for the plant is undefined, the size of the DPMA is generically based on a future development scenario which is informed by the existing plant layout and its activities. This scenario anticipates up to eight dryers with associated drystores, reception, roading and servicing as the maximum scale of development that would occur at this site.

The dairy plant is a rural based industrial activity and while it is recognised as a legitimate activity in the Rural Outer Plains Zone, the density and scale of built development and activity is distinctive from that which would typically be found on a farm where the built development may be limited to a dwelling, milking shed and other ancillary farm buildings.

A plant by comparison is industrial in appearance and of a scale that is economic and optimal relative to dairy production at the regional level. Accordingly, the DPMA provides for the scale and intensity of development that is anticipated at a dairy plant.

The key mechanism for achieving integrated management of the DPMA is compliance with an ODP. This shows the extent of the DPMA, the position of existing and proposed access points, the extent of the built footprint area, including any minimum setback requirements, locations for higher built development such as dryers, and the proposed landscape treatment. Mitigation relating to traffic, noise and landscape effects is built into the ODP.

In addition to the ODP, a number of amendments to the Rural Zone Issues, Objectives and Policies are proposed along with a new set of rules specific to the DPMA that will be contained in an Appendix to the Rural Volume.

2.2 Landscape components of the Plan Change

2.2.1 Outline Development Plan - Landscape

As mentioned above, future development will need to comply with the ODP which has been developed with 'reasonable and optimal future development' of the Synlait site in mind. The ODP – Landscape, attached as **Appendix 1**, includes provision for landscape treatment and shows the key elements of landscape treatment and their staging over time.

There are seven landscape treatment areas in total. Areas A – F will be implemented during Stage 1 of the ODP with implementation of Area G commencing at the outset of Stage 2. A short description of each area

is provided under the key on the ODP – Landscape plan with the proposed location, scale and species composition illustrated in the accompanying cross-section for each area. A detailed description of each of the proposed planting areas is provided in Section 4.2.2 below.

The proposed ODP – Landscape (and Synlait for that matter) recognises that the 'consent – construct – plant' process that has occurred over the past seven years of development of the existing site means that planting is 'playing catch-up' for the first 8-10 years until it reaches a height to mitigate the large rural-industrial buildings.

The purpose of the proposed landscaping is to ensure the establishment of a robust vegetation framework within the proposed plan change area and immediately adjoining land that is of a location, composition and scale that will effectively mitigate potential adverse effects of future development over the next (anticipated) 30 years.

2.2.2 Issues, Objectives and Policies

In a broad sense the current District Plan Issues, Objectives and Policies recognise that the Rural Zone is home to a diverse range of activities including primary production, outdoor recreation and a variety of business activities.[4]

In terms of this assessment and in relation to the issues of rural landscape character and amenity values of rural areas, the Plan Change seeks reference to the *"Processing of milk to dairy products in established plant sites"* be included under **Objective B3.4.2** and for the following new wording (underlined) for **Policy B3.4.3**:

"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 milk processing..."

The Plan Change also seeks the inclusion of new **Policy B3.4.5**:

"Enable the continued and enhanced efficient administration, processing, packaging and distribution of milk and dairy products on established dairy plant sites, 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 Outline Development Plans."

The explanation and reasons for new Policy B3.4.5 capture the central issue with regard potential impacts on existing rural character and amenity values of rural areas (**Emphasis added**):

"Policy B3.4.5 provides the basis for the rules controlling the use and development of land within the Dairy Processing Management Areas. ***The buildings associated with the processing of milk and dairy products, along with the buildings required for storage and distribution, are very large and industrial in appearance.*** *The scale and concentration of this built development exceeds that anticipated on a working farm however the processing of milk and dairy products is directly related to rural production and there are significant economic and operational benefits from enabling milk and dairy processing facilities within the Rural Area. Whilst* ***the Policy is providing for a concentration of buildings, including very tall buildings, and activities,*** *it is appropriate that the District Plan sets development standards beyond which new development will require a resource consent.*

[4] See B3.4 Quality of the Environment – Objectives, Explanation and Reasons.

***This policy** is intentionally limited to sites of established Dairy Processing facilities as at 2013 and **is not intended to provide a policy basis for new sites**, or other types of rural industrial activities to be established in the Rural Outer Plains.*

*Underpinning the Dairy Processing Management Area is a requirement to comply with an Outline Development Plan. The Outline Development Plan represents a comprehensive approach to landuse and development, controlling the overall layout of development. The proposed rules specific to the Dairy Processing Management Area are to be read in conjunction with the Outline Development Plan. **While the scale and density of development is greater than elsewhere in the Rural Area, this reflects the already established scale of dairying within the District and the Outline Development Plan provides certainty for the community and the landowner on the pattern of future development for the processing of milk and dairy products**."*

2.2.3 Rules

The following proposed rules are relevant to the management of landscape and visual effects resulting from future development of the (Synlait) DPMA. Specifically these rules seek to address potential effects resulting from the scale, location and appearance of large industrial-style buildings located in relatively close proximity to State Highway 1 (SH1), surrounding local roads and (limited) rural-residential dwellings[5] (**Emphasis added**):

> ***"STANDARDS FOR PERMITTED ACTIVITIES***
>
> ***Outline Development Plan***
>
> *26.2 The location of all buildings, activities, **landscape treatment**, and vehicle access points to the Dairy Processing Management Area, **shall be in general accordance with the Outline Development Plan** in Appendix 26A.*
>
> ***Location of Buildings and Activities***
>
> *26.3 All permitted activities shall be located within the **Height Control Zone** identified on the Outline Development Plan in Appendix 26A, with the exception of:*
>
> *(a) Any signage;*
> *(b) Infrastructure for roading, rail, the management of wastewater, stormwater and the supply of water associated with a permitted activity; and*
> *(c) Permitted activities provided for in Rule 26.1(a)iv.*
>
> *26.4 Where located within the **Rural Buffer Area buildings** and activities provided for in Rule 26.3(b) and (c) shall comply with the height rules of the Rural (Outer Plains) Zone and either the setback rules of the Rural (Outer Plains) Zone or any setback shown on the Outline Development Plan in Appendix 26A, whichever is the greater setback from the boundary.*
>
> ***Landscape Planting***
>
> *26.5 **Landscape planting** as shown on the Outline Development Plan in Appendix 26A shall be located in general accordance with the Outline Development Plan and is to be **completed in accordance with the staging specified in Appendix 26A**. This rule shall not apply to any planting for the*

[5] These locations have been recognised as central to the assessment of landscape and visual effects resulting from the development of the Synlait site through successful resource consent applications between 2007 and 2013.

purposes of amenity or enhancement within the Dairy Processing Management Area which is additional to the planting shown on the Outline Development Plan.

26.6 *Prior to the construction of new buildings which will increase capacity for processing or storage within the Dairy Processing Management Area, a* ***landscape plan shall be submitted*** *to the Selwyn District Council. The landscape plan shall detail the location of the planting, the plant species, the proposed timing of planting, the height and spacing of plants at the time of planting, and the maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants.*

Building Height

26.7 ***Buildings within the Height Control Zone shall comply with the height limits*** *shown in the Outline Development Plan in Appendix 26A. Up to 2 Boiler stacks and 4 exhaust vents per dryer shall be exempt from height limits.*

Building Colour

26.8 *Any building that has a finished* ***height above 12 metres and is not in the nature of a silo, external piping, or other milk processing equipment which shall retain its natural metallic finish*** *shall be finished in the following colours or equivalent colours, excluding trim, fittings, guttering, detailing and signage:*

(a) Colorcote "Kestrel"
(b) Titania
(c) Ironsand
(d) Grey Friars"

MATTERS OF CONTROL

26.33 ***Any activities which do not comply with the standards for Permitted Activities****, and which are not listed as a discretionary or non-complying activity, shall be a restricted discretionary activity. The Council shall restrict its discretion to consideration of those matters as specified in respect of each rule:*

(a) Location of Buildings and Activities

Any building or activity which does not comply with Rules 26.4 shall be a restricted discretionary activity and the ***Council shall restrict its discretion*** *to consideration of:*

- ***Any effects*** *of an increase in building height or a reduced setback from internal and road boundaries* ***on the rural amenity values*** *in the locality and the reasonable use of adjoining land.*
- *Those matters specified for inclusion in Management Plans for Noise and Hazardous Substances.*

Note: Non-compliance with Rules 26.2 and/or 26.3 is a full discretionary activity. See Rule 26.34 below.

(b) Landscape

Any landscape planting which does not comply with Rules 26.5 or 26.6 shall be a restricted discretionary activity and the ***Council shall restrict its discretion*** *to consideration of:*

- ***The species, density and height of plants at the time of planting;***
- ***The effectiveness of the proposed landscape planting to mitigate the adverse effects of proposed buildings and activities on landscape values in the locality of the Dairy Processing Management Area.***
- ***Maintenance of planting and ability of planting to establish and grow, including provision for access, methods of soil retention and irrigation.***
- ***The use of landform to assist in mitigation of landscape effects****.*

(c) Building Height

Any building which does not comply with Rule 26.7 shall be a restricted discretionary activity and the ***Council shall restrict its discretion*** *to consideration of:*

- *The* ***individual and cumulative effect*** *of additional building height* ***on the landscape values*** *in the locality of the Dairy Processing Management Area.*
- *The* ***form and function*** *of the over-height structure.*
- *The* ***material and colour finish*** *of the over-height structure.*
- *The* ***effectiveness of any mitigation****.*

(d) Colour

Any building which does not comply with Rule 26.8 shall be a restricted discretionary activity and the ***Council shall restrict its discretion*** *to consideration of:*

- ***Alternative colour finishes*** *and their effectiveness to address the* ***visibility of the proposed structure individually and cumulatively*** *within the Height Control Zone within the Dairy Processing Management Area."*

2.3 Summary

The landscape components of the proposed plan change have been developed to manage potential adverse effects on rural character and amenity values resulting from the likely development of the DPMA over time. The primary mechanisms to achieve this outcome are the ODP - landscape plan and cross-sections and the associated rules listed above.

The development of the ODP - landscape plan and cross-sections and the inclusion of Rule 26.5 provide an overall picture of the extent of landscaping to be implemented over time. This landscaping will provide a significant 'green structure' to the DPMA and will effectively mitigate long-term potential adverse landscape and visual effects whilst reinforcing the wider rural aesthetic (i.e. large scale exotic shelterbelts) and contributing to the overall biodiversity of the Rural Zone (i.e. planting of native vegetation).

The inclusion of Rule 26.6 and the requirement to prepare a detailed landscape plan to be submitted to Selwyn District Council and prior to the 'construction of new buildings' provides certainty around the implementation of planting (i.e. location, extent and type) that is consistent with the overall landscape concept for the site. The inclusion of an on-going maintenance regime as part of the detailed landscape plan will provide an added degree of certainty with regard the ability of landscaping to effectively mitigate any adverse landscape and visual effects.

3 Existing Environment

3.1 Physical Attributes

3.1.1 Wider landscape

The plan change site is located within the Canterbury Plains to the southeast of the Southern Alps and approximately 7km southwest of Dunsandel.

In addition to the characteristic 'flatness' of the Plains, the other key natural features include the braided Rangitata, Ashburton, Rakaia, Waimakiriri Rivers. When viewed against the backdrop of the Southern Alps (Main Divide) and the lower foothills, these attributes combine to form Canterbury's characteristic 'big sky' landscape.

These natural characteristics are overlain by the equally characteristic geometric patterns including: roads and railway lines, field patterns, irrigation canals, border dykes and shelter belts predominantly aligned perpendicular to predominant winds.

The main settlements are located along State highway 1 (SH1) through the middle of the Plains, or along the SH77 'inland scenic route'. The closest settlement to the site is Dunsandel.

3.1.2 Local landscape and plan change site

The local landscape includes the following characteristics:

- Extensive open pasture;
- Geometric paddock distribution and fencelines;
- Well-established shelterbelts, woodlots and boundary hedges;
- Combined SH1 and railway corridors;
- Local (metal) road network;
- Large pivot irrigators;
- Existing Synlait Dairy Plant and adjacent substation;
- Milking sheds;
- Widely dispersed farm houses and ancillary buildings;
- A combination of open and contained views (largely depending on adjacent vegetation patterns);
- A combination of rectangular and circular land use/ paddock patterns;
- Overall sense of openness with often compartmentalised views; and
- Typically 'rural' aesthetic with perceived naturalness set against high levels of human modification.

The Plan Change site includes the following characteristics (as illustrated in **Appendix 2**):

- The existing Plant occupies approximately 20% of the DPMA with:
- Several drystores located to the south approximately 110m from SH1;
- Several dryer towers and various plant adjoining the drystores to the south;
- Boilers, wash down areas, pump shed and water storage adjacent to the southern site boundary;
- Waste water treatment plant and storm water ponds are also adjacent to the southern site boundary, to the east of the above;
- Office block and adjoining staff and visitor carpark areas located to the west of the Plant (site photo 5);
- Site access off Heslerton Road;
- Sealed access off Heslerton Road to the carparks, wash down areas and adjacent to the dryer towers;
- Two existing earth bunds are located on the site. The bund to the north (see site photo 8, 9 and 10) was constructed (and planted) as part of the previous drystore visual mitigation. The planted bund to the southwest of the access road (see site photo 11) was constructed as part of the original development for acoustic and amenity purposes.
- In addition to the planted bund above there is a:
    - Double row of approximately 2.5m high Oak trees (Quercus sp) planted along and internal boundary to the north of the existing office block (see site photos 7 and 15);
    - Approximately 1.5 – 2m high Hawthorn hedge (Crataegus monogyna) along SH1/ Railway boundary between Heslerton Road and Sheats Road (see site photos 12 and 14);
    - Double row of approximately 1 – 2m high Pine trees (Pinus radiata) planted along the northern boundary, adjacent to the Hawthorn hedge and to the west of the bund (see site photo 12 and 14);
    - Single row of approximately 2.5m high Oak trees planted along the northern boundary, adjacent to the Hawthorn hedge and to the east of the bund (see site photo 12); and
    - Double row of Pine trees (Pinus radiata) planted along the northern boundary. These trees range in height from 1 – 5m depending on exposure to light and are located adjacent to the Hawthorn hedge to the east of the single row of Pines trees up to the water race that passes under SH1 at Sharlands Road. (see site photo 13)
- The areas between the existing Plant and the north-eastern, south-eastern and south-western plan change boundaries are open pasture, which currently accounts for the remaining 80% of the DPMA. (see site photo 16, 17 and viewpoint 13)
- The proposed plan change site is adjoined to the northeast by open pasture (owned by Synlait Farms Ltd)

- An existing shelterbelt extends along the length of the Heslerton Road southern boundary. Other than an approximately 12m long section of shelterbelt at 6m high the shelterbelt ranges in height 12 to 15m. (see viewpoint 1 and 4)

- There is also an existing row of Pine trees to the north-east of where the water race passes under SH1 and located between the Hawthorn hedge and race stretching up to Sharlands Road.

- The substation located to the northwest is perceived as part of the plan change area despite being located outside of the plan change boundary.

3.2 Landscape Character

The wider landscape has a 'working' rural character characterised by arable/ pastoral land use and overall sense of openness typical of the Canterbury Plains. These key characteristics are the result of flat topography with distant mountain and hill (e.g. Southern Alps and Port Hills) backdrops; geometric field patterns; linear boundary lines and shelter belts; variation between open and closed views; scattering of structures such as milking sheds, irrigators, houses and ancillary buildings; SH1 and Railway corridor; unformed (i.e. metalled) roads and access tracks; and exposure to the elements.

The local landscape reflects this rural character with the most notable exception being that of the existing Plant which introduces a larger scale rural-industrial element (i.e. large format warehouses and dryer towers) into the local context. Whilst a dairy plant development of this nature will influence the visual and aesthetic qualities and overall character of the local landscape, its location within a rural setting is a direct reflection of its connection (in terms of process and products) with the surrounding rural environment. The proximity to key transportation corridors and access to an adequate water source are also other key drivers for the location of the rural-industrial facilities in the rural environment.

Although the plan change site does contain the existing Plant, approximately 80% of the area is currently undeveloped, open pasture that reflects the character of both local and wider landscapes, which are considered 'typically rural'; exhibiting elements of perceived naturalness (e.g. trees and open pasture) but reflective of a modified cultural landscape as opposed to a truly natural one.

3.3 Visibility and visual attributes

The overall visibility of the plan change site has been considered in terms of distant, middle ground and close-up views and a full set of site and wider context photos and their locations are provided under **Appendix 3**.

In the context of this assessment:

- **Close up views** are from SH1 opposite the buildable area of the ODP and between Parkins Road to the southwest and approximately 250m past Sharlands Road to the northeast (approximately 1100m). The duration of these views from the highway is up to 40 seconds[6]. There are also views from those sections of Heslerton Road, Parkins Road and Sharlands Road that adjoin SH1. Views from these locations are generally from moving vehicles and those that stop at the respective SH1 intersections;

- **Middle ground views** are from SH1, up to 1.5km from the buildable area of the ODP and include the balance of the DPMA to the northeast of the buildable area. The duration of these middle ground views are approximately 50 seconds. There are also views from Heslerton Road, Parkins Road, Sharlands

[6] Based on 100km/hr or 28m/s travelling speed.

Road and Irvines Road, which are generally from moving vehicles and those that stop at the respective SH1 intersections. There are several dwellings that have 'static' middle ground views to the site; and

- **Distant views** include locations beyond 1.5km were clear views to the site are reduced significantly by a) distance and b) intervening vegetation. The duration of these views from SH1 are up to approximately 30 seconds for south-bound traffic with distant views for northbound traffic limited.

The overall visibility and specific visual attributes of the plan change site (in its entirety), existing Plant[7] and local landscape are illustrated in the context photos attached as **Appendix 3**.

3.4 Visual Characteristics

The overall appearance of the plan change site is one of contrast. The bulk of the plan change site consists of open pasture that provides a sense of openness and visual continuity with the local and wider rural landscape. This is directly contrasted with the industrial appearance of the existing Synlait Plant and its concentration of relatively simple, large format buildings (e.g. dryer towers, dry stores, boiler stacks, silos, flumes etc) and their proximity to other 'built' features like the existing substation, SH1 and rail corridors, and recently constructed Vodafone cell tower on the corner of Old South Road and Parkins Road.

Despite the Plant's inherent connection with surrounding rural land practices and the visual relief provided by adjacent open pasture, the presence of the existing Plant will mean that people's overriding perception of the character of the DMPA will continue to be rural-industrial.

Adding to this is the close proximity of the overall plan change site, buildable area of the ODP and existing Plant to SH1 and local road network, meaning people can readily interpret the 'make up' of the plan change site and existing Plant in particular and especially when viewed in the vicinity of Parkins Road, Heslerton Road and Sharlands Road. The overriding (perceived) industrial character is also clear when viewed from Irvines Road, where the combination of buildings and structures to the rear of the larger drystores create a 'busy' scene as illustrated in viewpoint 13 (Appendix 3). The scale of the Plant, including its associated horizontal and vertical profiles, is noticeably larger than the majority of buildings in the surrounding landscape. The fact that the existing dryer towers project above the skyline, in combination with the overall footprint and profile of the Plant, increases its overall visibility and visual prominence[8] further.

Notwithstanding the discussion above the overall appearance of the local landscape will continue to reflect the visual character of the wider rural landscape between Rolleston to the north and Rakaia to the south, which is characterised by open pasture and expansive 'big sky' views punctuated by shelterbelts and large stands of trees, particularly adjacent to the SH1 road corridor.

3.5 Visual Amenity

In terms of amenity values as defined under the RMA, the attributes that contribute to people's appreciation of the rural environment generally include tangible things *"such as noise, odour, density of development, shading etc"*[9]. Amenity also comprises people's perceptions and expectations with regard the rural

[7] Not including the recently consented cold store and dry store extensions, the latter is currently under construction with excavation of the building foundation being carried out.

[8] This is likely to increase further following the completion of consented drystores and Dryer 3.

[9] Ministry for the Environment: *Managing Rural Amenity Conflicts.* February 2000 Ref: ME372.

environment and recognises *"people's differing tolerances in relation to amenity attributes and changes to those attributes".*[10]

Several common perceptions that people share about the character of the rural area are identified under Part B – B3.4 of the Selwyn District Plan[11], including:

- 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, river valleys which are not modified by structures.
- Being able to see, hear and smell animals and birds.

The key aspects of amenity relevant to the proposed DPMA are its visual qualities, arising from the combination of built form; the combined effect of visible structures and activities within the plan change site, and retention of surrounding open undeveloped pasture.

There are no privacy issues associated with the proposed DPMA existing Plant because of the separation distance from rural dwellings and the fact that taller buildings, with potential views to dwellings (e.g. drystores and dryers), are set back some distance from the northern DPMA boundary and aren't occupied by people; rather they provide housing for internal plant.

As a highly visible and recognisable landmark in a relatively open and undeveloped (in terms of buildings) local landscape, the existing Plant represents a clear visual counterpoint and does tend to compromise overall aesthetic coherence as illustrated by the photos in **Appendix 3**. Characteristics such as openness, low development density and predominance of natural elements continue to dominate the wider landscape setting.

In reality the existing Plant has been a highly recognisable feature in the local landscape for seven years and while its overall scale is considerably larger than other rural buildings like implement and storage sheds, barns, stock yards, milking sheds, grain silos and hatcheries the vast majority of large scale rural industrial facilities like the existing Plant, Edendale, Darfield and Clandeboye are located 'close to source', within the rural environment and are well-known and highly recognisable features in their own right and their connection with rural production is widely recognised.

In addition and with regard people's appreciation of pleasantness, the majority of local people that 'experience' the plan change site and local landscape are associated with the Plant, either directly as employees or indirectly as farmers. While the presence of the existing Plant is unlikely to enhance overall pleasantness for these people, they are likely tolerant of its presence as a result of the working nature of the rural environment and their living and working in it.

[10] Ibid.

[11] Page B3-036.

Given the wide range of people that travel along SH1 (e.g. locals, commuters and both domestic and international holiday makers) it is difficult to summarise the breadth of appreciation for the pleasantness of the proposed plan change area.

While the gradual emergence of the plan change site and existing Plant for both north and south-bound traffic is likely to create a point of interest for some travellers there will be those people that do not recognise that the Plant has existed for some time and is inherently connected to the surrounding rural setting. As a general observation, it is possible that the Plant detracts from an otherwise pleasant rural experience for these people.

Considering the discussion above, the fact that the presence of the existing Plant likely detracts from the visual quality of the plan change site and local landscape[12], visual amenity is considered **moderate** in degree. The existing Plant has no impact on the visual amenity of the wider landscape.

[12] Based on the character and appreciation of what would otherwise be undeveloped pastoral land.

4 Assessment of Landscape and Visual Effects

4.1 Terms of reference

The key landscape and visual effects of on-going development of the DPMA include:

4.1.1 Rural character

The impact that future development will have on existing rural character including the overall balance between built (i.e. structures and human modification) and non-built (i.e. natural) elements and how they are perceived. The factors that contribute to effects on rural character (in general) include:

- Whether the proposal is consistent with existing land uses (i.e. is it 'foreign' or widespread);
- Whether the proposal includes modification to the existing landform and any significant features in particular;
- Whether the site is unique in the local rural context and whether development is consistent with these unique qualities;
- Whether the proposal is consistent with existing rural distribution patterns;
- Whether the proposal is located in an area that is already subject to modification; and
- Whether the proposal will have an effect on bio physical attributes such as vegetation and water ways.

4.1.2 Visual Amenity

The impact that future development provided for within the proposed DPMA will have on the existing visual qualities of the local landscape and if this will detract from existing visual amenity, particularly for users of SH1. The factors that (generally) contribute to effects on visual amenity include:

- The nature and sensitivity of the viewing location (e.g. static or moving; orientation of view; public or private location);
- The nature and sensitivity of the viewing audience (e.g. tourists, locals, dairy farmers, Plant workers etc)
- Overall bulk and scale of the Proposal;
- The nature and duration of construction works;
- Operational requirements (i.e. 24/7)
- Distance of the proposal from key view points;
- The complexity of the view and extent of intervening elements (e.g. topography, structure and vegetation);
- The nature of the existing view (e.g. heavily modified vs 'natural'; fixed or moving structures); and
- Transient values such as seasonal variation and weather patterns.

In line with previous landscape and visual assessments[13], the degree of effect on both rural character and visual amenity have been considered using a five point scale including very low; low; moderate; high and very high. By way of explanation:

- Effects that are **very low and low** are considered acceptable on their own and cumulatively and do not require additional mitigation;
- Effects that are **moderate** are discernible, without being significant on their own. There is the potential for cumulative effects to be more significant but they can generally be mitigated to an appropriate level;
- Effects that are **high** are significant on their own and are likely to increase in a cumulative sense. In general, a high degree of effect is likely to represent an inappropriate development[14] however, there is potential for additional mitigation to reduce effects to a lower degree; and
- Effects that are **very high** are also significant and additional mitigation is unlikely to reduce the degree of effect to any discernible degree.

4.2 Development scenario

4.2.1 Buildings

The proposed plan change will provide for the development of the Synlait plant over time and for the purposes of this assessment the following built features have been assumed to represent the full development scenario for the DPMA, and will be finished in accordance with the rules listed in Section 2.2 above that relate to building height and external appearance:

- Six (6) drystores and associated environmental load out areas.
- Eight (8) dryer towers. Maximum 55m high.
- Six (6) boilers and three (3) boiler stacks.
- Rail siding.
- Ancillary buildings.
- Two (2) transport yards with asphalt/ loose aggregate finish providing for on-site parking of milk trucks; and
- Ancillary services for wastewater treatment and stormwater management.

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[13] Synlait Milk Stage Three Dry Store Landscape Assessment. Beca. 4 May 2011.

Synlait Dairy Plant Stage Three (Part A) Canning and Blending Plant Landscape and Visual Assessment. Beca. 12 October 2012.

Synlait Dairy Plant Stage Three (Part B) Drystore and Cold Store Landscape and Visual Assessment. Beca. 18 October 2012.

[13] Synlait Dairy Plant (Stage Four) Dryer 3 Landscape and Visual Assessment. Beca. 18 October 2013.

[14] In a landscape and visual sense alone and not taking into account the 'balance' required under the broader RMA decision making process.

4.2.2 Landscaping

Together the ODP – Landscape Plan (including cross sections) and Rule 26.5 illustrate the nature of landscaping and how it will be implemented over time.

4.2.2.1 Stage 1

In Stage 1 the establishment of planting will be undertaken prior to the completion of construction of any building that increases the capacity for processing or storage on the site and will include:

Area A:

- Located outside of the DPMA along the north eastern property boundary directly adjacent to and at the north western (SH1) end of Sheats Road.
- Dimensions are 5m wide and 160m long.
- Planting includes a double row of Poplar trees with a single row of Macrocarpa trees fronting Sheats Road. The implementation of this planting will be immediately (i.e. first planting season) following construction of any building that increases the capacity for processing or storage and it is anticipated it will be 8-10m high in 10 years and >20m high in 30 years.
- Planting also includes additional native planting between the property boundary and existing SDC water race. The intention is to replenish the existing (sporadic) native planting in this area and its implementation will occur within two years of the screen planting above. This planting will be 4-5m high in 10 years and up to 10m high in 30 years.
- The overall purpose of planting is to obscure the future plant from distant views from SH1 and to contribute to native biodiversity.

Area B:

- Located outside of the DPMA along the northern property boundary adjacent the SH1/Railway corridor and perpendicular to Area A.
- Dimensions are 5m wide (including 2.5m track for water race access) and 210m long
- Planting includes a double row of Poplar trees. The implementation of this planting will be immediately (i.e. first planting season) following construction of any building that increases the capacity for processing or storage and it is anticipated it will be 8-10m high in 10 years and >20m high in 30 years.
- The purpose of this planting is to obscure the future plant from distant views from SH1.

Area C:

- Located within the DPMA along the northern property boundary adjacent to the SH1/Railway corridor and adjacent to an existing tree copse.
- Dimensions are 5m wide and 40m long
- Planting includes a double row of Poplar trees with a single row of Macrocarpa trees. The implementation of this planting will be immediately (i.e. first planting season) following construction of any building that increases the capacity for processing or storage and it is anticipated it will be 8-10m high in 10 years and >20m high in 30 years.

- The purpose of this planting is to obscure the future plant from middle ground views from SH1.

Area D:

- Located within the DPMA along the northern property boundary adjacent to the SH1/Railway corridor
- Dimensions are 13m wide and 390m long spanning from the end of the previously consented landscape treatment (e.g. bund and pine trees) to the north eastern end of the future building area.
- Planting includes a double row of Pine trees, consistent with previous boundary treatment, and growing to 8-10m high in 10 years and maintained at a minimum height of 10m. The implementation of this planting will be immediately (i.e. first planting season) following construction of any building that increases the capacity for processing or storage.
- Planting also includes additional native planting between the Pine trees and the buildable area to the south. The implementation of this planting will occur within two years of the screen planting above and it is anticipated it will be 4-5m high in 10 years and up to 10m high in 30 years.
- The overall purpose of planting is to obscure the future plant from close up views from SH1 and to contribute to native biodiversity.

NOTE: The establishment of the proposed rail siding will result in the removal of two 'pockets' of existing vegetation located along the northern/ SH1 site boundary. The removal of vegetation will not include any of the proposed Area D planting and it will not result in any alteration to the existing bund described previously under section 3.1.2.

Area E:

- Located within the DPMA along the southern Irvines Road between Heslerton Road and the Stage 1 boundary.
- Dimensions are 13m wide and 370m long.
- Planting includes a double row of Poplar trees with a single row of Macrocarpa trees inwards toward open pasture. The implementation of this planting will be immediately (i.e. first planting season) following construction of any building that increases the capacity for processing or storage and it is anticipated it will be 8-10m high in 10 years and >20m high in 30 years.
- Planting also includes additional native planting between the Poplar trees and DPMA boundary. The implementation of this planting will occur within two years of the screen planting above and it is anticipated it will be 4-5m high in 10 years and up to 10m high in 30 years.
- The overall purpose of planting is to obscure the future plant from the dwelling to the south and close up views of the rear of the plant from Irvines Road and to contribute to native biodiversity.

Area F:

- Located within the DPMA along the Heslerton Road boundary between SH1 and Irvines Road.
- The proposed planting is located 'behind' the existing mature pine shelterbelt and is 13m wide and 800m long.
- Planting includes a double row of Pine trees, consistent with previous boundary treatment. The implementation of this planting will be within three years following construction of any building that

increases the capacity for processing or storage and it is anticipated it will be 8-10m high in 15 years and >20m high in 30 years.

- Planting also includes additional native planting between the Pine trees and the existing shelterbelt/DPMA boundary. The implementation of this planting will occur within five years of the screen planting above and it is anticipated it will be 4-5m high in 15 years and up to 10m high in 30 years.

- The overall purpose of planting is to provide successional screening of the Plant from the south west (including SH1, Irvines Road and Heslerton Road) once the existing shelterbelt is removed. The native planting will also contribute to native biodiversity. The delayed implementation of this planting is due to the fact that the existing shelterbelt already provides effective screening of the site and that other proposed native planting provides sufficient biodiversity value to allow Heslerton Road planting to be delayed.

4.2.2.2 Stage 2

In Stage 2 planting will commence immediately following the issue of consent to subdivide land identified within or including all of Stage 2 *or* the construction of a new building which will increase capacity for processing or storage within the Stage 2 area. Planting will include:

Area G:

- Located along the length of the north eastern DPMA boundary between SH1 and Irvines Road.

- Dimensions are 5m wide and 800m long.

- Planting includes a double row of Pine trees, consistent with previous boundary treatment, and growing to 8-10m high in 10 years and maintained at a minimum height of 10m. The implementation of this planting will occur immediately following the acquisition of Stage 2 land by Synlait Milk Ltd.

- The overall purpose of planting is to provide some long term screening of the future Plant from middle ground and distant views.

4.3 Assessment of effects

4.3.1 Rural Character

The purpose of the proposed DPMA *"is to recognise the existing dairy plant established by Synlait at Dunsandel and to provide for its continuing efficient use and future expansion"*. In simple terms and based on the development scenario described in Section 4.2.1 above, the proposed plan change will mean that over the next 30 years the existing Synlait Dairy Plant is potentially twice as large as its current size. As a function of increased size and scale the Plant will become more prominent and its rural-industrial scale has the potential to 'own' the site and more of the local landscape.

The plan seeks to reduce potential effects on rural character of the plan change site and local landscape through the restriction of buildable area to approximately 40% of the DPMA and retention of the bulk of the site (to the west and south) in open pasture. The proposed planting framework also seeks to compliment this open pasture with the establishment of significant shelter belt planting, which is also another key characteristic of the surrounding rural landscape. The proposed native planting also introduces another notable 'green component' to the plan change and local landscape and increasing general (e.g. plant, bird, fauna and invertebrate) biodiversity in the rural environment.

Once the proposed planting framework is established it will provide a noticeable counterpoint to the rural industrial character of the expanded Plant and the intention is that in combination with the retention of open pasture to the east and south (both within and outside of the DMPA) the planting will reduce the overall adverse effect on the rural character of the plan change site and local landscape to a **low to moderate** degree.

The DPMA will not adversely affect the rural character of the wider rural landscape because:

- Typical rural characteristics will continue to dominate
- The existing Plant already establishes a rural-industrial component in the landscape; and
- The DPMA it is a defined geographic area with future development governed by the proposed policy and rule framework.

4.3.2 Visual Amenity

The central issue to the consideration of landscape and visual effects resulting from the proposed Plan Change is: Time.

Unlike previous resource consents where landscape mitigation was implemented immediately following the construction of buildings, the proposed plan change framework provides an opportunity to explore (and implement where practicable) early strategic planting and to provide a degree of clarity and certainty around the relationship between the location, scale and timing of built development and planting over time.

The inclusion of Landscape Treatment Areas A, B, C and D as part of Stage 1 development is an acknowledgment that SH1 provides the key viewing audience for the DPMA in terms of proximity to development, orientation of views and volume of traffic. The early implementation (see section 4.2.2 above) of this strategic planting means that medium to long term visual effects[15] of Stage 1 development and the full spectrum of visual effects of Stage 2 development will be notably reduced.

4.3.2.1 Key Viewing Audiences

The following audiences will have views of the proposed plan change site:

a. Farm houses

There are very few dwellings located in close proximity to the site, the closest being approximately 120m to the northeast on the corner of SH1 and Sharlands Road and approximately 60m to the southeast on Irvines Road. There are also several houses located more than 500m to the north and west of the DPMA along Parkins, Sharlands and Irvines Road.

The context photos provided for viewpoints 6, 7 and 8 are taken from public roads in close proximity to the relevant dwellings and are intended to illustrate the nature of those views.

Factors that **contribute** to visual effects from these locations include:

[15] For the purposes of this assessment: 0-5 years is short term; 5-10 years is medium term; and +10 is long term. It is anticipated that the proposed shelterbelt/ screen planting will reach +10m in the medium term, with some areas being subject to minimum 10m maintenance height (e.g. Area D).

- The static nature of views;
- Views across open pasture are often simple and increase visual prominence of the Plant and potential visibility of the future dryer towers and boiler stacks; and
- The increase in the vertical profile of the Plant, with the upper portion of additional dryers in particular, visible above intervening vegetation when viewed from existing houses.

Factors that **mitigate** visual effects from these locations include:

- Dwellings are located >500m from the DPMA;
- Views are generally oriented to the north 'away' from the site and existing Plant;
- Where views towards the DPMA do exist, the majority of future development (with the exception of dryers) will be screened or obscured by intervening vegetation;
- Future development will be viewed in the context of the existing Plant and its continuous operating hours;
- Observations suggest that the majority of these houses are associated with dairy farming and are likely to be more accommodating of the on-going use of the site for dairy processing.

With distance and intervening vegetation (both existing and proposed) being key mitigating factors adverse effects on the those surrounding farm houses that are over 500m away will increase from a **low to moderate** degree over the **short to long term period**.

The main contributing factor in this case is the increase in the number of visible dryer towers from two (looks like one due to conjoined buildings) to potentially eight and up to 4 boiler stacks[16], all projecting well above any notable background features and generating a 'skyline' effect that will increase overall visual prominence of the Plant.

Conversely, the long term development timeframe (anticipated 30 years) is a key mitigating factor and means that additional buildings and structures will likely appear on a 'slow and steady basis' with the proposed buildable area giving local residents time to adjust to increased built form in their view.

Although the dwelling located to the southeast, on the corner of Irvines Road and Heslerton Road, is only 60m away from the DPMA boundary, it is approximately 250m away from the edge of the proposed buildable area and future development will be screened from view in the medium to long term by the proposed Area E planting.

In the short term it is likely that future Stage 1 development will add to the already busy visual appearance of the rear of the Plant through additional Dryer towers, boiler stacks, transport yards and wastewater and storm water treatment facilities being clearly visible and identifiable from this location. **Short term** visual effects on this property will be **high** with **medium to long term** visual effects reducing to **low** once planting matures (see Figure 6).

The dwelling to the northwest on the corner of SH1 and Sharlands Road is surrounded by mature, well established trees and shelterbelts and has restricted views to the surrounding landscape. This house will be

[16] Although the plan change provides for two stacks per boiler, Synlait have indicated that one stack can adequately service two boilers as part of future development.

located on the opposite side of the SH1/ Railway corridor to Stage 2 of the DPMA and proposed Area D pine shelterbelt and native planting. Given the proximity of this dwelling to the DPMA and the buildable area in particular it is likely that the roofline of future drystores and large portions of future dryers will be visible to one degree or another. It is anticipated that visual effects on this property will be of a **low degree** owing to the long term development timeframe and extent of existing screen planting around the property.

b. Local Roads

The relevant local roads include Parkins Road, Sharlands Road, Sheats Road, Irvines Road and Heslerton Road. The following context photos are taken from these roads and are intended to illustrate the nature of middle distance and distant views of the DPMA:

- Viewpoint 6 – Parkins Road;
- Viewpoint 11 – Hunters Road;
- Viewpoints 7 – Sharlands Road;
- Viewpoints 12 and 13 – Sheats Road;
- Viewpoints 5, 9 and 13 – Irvines Road; and
- Viewpoint 8 – Heslerton Road

Factors that **contribute** to effects on visual amenity from these locations include:

- Views across open pasture are often 'simple' with little in the way of screening vegetation of a scale relevant to the existing Plant and DPMA. The exceptions being illustrated in:
  - Viewpoint 5 – where the existing shelterbelt adjoining Heslerton Road provides a notable screen to the site. This shelterbelt is also visible in viewpoints 8, 9 and 10; and
  - Viewpoint 7 – where the existing trimmed shelterbelt (along Sharlands Road) screens views to the site for a distance of 400m from the Sharlands Road/ Old South Road intersection;
- The increase in overall footprint of the Plant within the proposed buildable area will increase visual prominence e.g. vehicles travelling towards SH1 along Sharlands Road will be looking directly at the northern-most drystores;
- Existing and future dryer towers and boiler stacks are/ will increase the vertical profile of the Plant and will be viewed against a sky backdrop, increasing the overall visual prominence of the Plant.

Factors that **mitigate** effects on visual amenity from these locations include:

- Viewers are moving and focus tends to be on the road and/or direction of travel;
- Where views do exist they often begin from some distance away so the presence of the Plant 'registers' well before individual features are visible;
- Future expansion will be viewed in the context of the existing Plant and its current continuous operating hours;
- The maintenance of large areas of open pasture within the DPMA creates a visual buffer between the proposed buildable area and Irvines Road and Sheats Road;
- The establishment and growth of the proposed landscape framework overtime will help to screen views of the lower portions of the Plant (e.g. drystores); and

- The local roads do not carry heavy volumes of traffic, with Irvines and Parkins Roads being very low volumes, and the people that use them are primarily locals, farm owners and/ or directly associated with the dairy sector and Synlait Plant.

In many respects the potential adverse effects on local road users will be the same as those experienced by surrounding farmhouses given that the nature of both contributing and mitigating factors are essentially the same.

Again, additional future dryers and boiler stacks and their associated 'skyline' characteristics are the key physical drivers for short, medium and long term adverse visual effects on local road users. Whilst this future development will increase the overall vertical profile and visual prominence of the Plant in reality views from local roads tend to be greater than 500m away and include the existing Plant and various intervening vegetation. Visual effects on the majority of the local road network will (on the whole) be **moderate** in the **short, medium and long term**. Potential exceptions to this include[17]:

Sharlands Road (south eastern/ SH1 end):

Views towards the DPMA from the bulk of Sharlands Road are screened/ obscured by adjacent vegetation. However, the view from the approach and intersection with SH1 is largely unobstructed with the existing Plant, SH1/ railway corridor and open pasture to the east characterising this view. (see Viewpoint 7)

Stage 2 of the proposed buildable area will be directly opposite the Sharlands Road/ SH1 intersection and an increase in overall building footprint and profile of the Plant mean that visual prominence will notably increase from this viewpoint over time. The implementation of Area D planting during Stage 1 development will mean that views of future dry stores and lower profile buildings during Stage 2 will be significantly obscured or screened with the upper portions of dryer towers and boiler stacks remaining visible.

Figure 1: View towards the site from the end of Sharlands Road showing established Area D planting and potential Stage 1 and 2 building development.

The primary contributing factor in this case is the proximity of views to the DMPA and as a result **short term** visual effects from the end of Sharlands Road are likely to be of a **high degree** as Stage 1 built development occurs and the planting in Area D is becoming established. Once this vegetation matures it will screen future

[17] Figures 1 – 14 above and below have been provided to illustrate building bulk and scale relative to existing and proposed vegetation. They are intended representative/ pictorial as opposed to literal/ realistic. Larger versions of the same images are provided in Appendix 4.

Stage 2 drystores and the lower portions of future dryers towers although the increase in the number of overall dryers and the increase in visual prominence created by their projection above the skyline will result in a **moderate to high degree** of visual effect in the **medium to long term**. The removal of vegetation to provide for rail siding will not change the nature of this view or degree of potential effect because any 'gap' will be located further to the north. In addition the combination of existing bund and vegetation and proposed vegetation will screen train carriages from view.

Parkins Road (south eastern/ SH1 end):

Unlike Sharlands Road there is little intervening vegetation on approach to the Parkins Road/ SH1 intersection. Future development will be to the north east across the existing Plant and away from Parkins Road and whilst the construction of additional dryer towers will increase the vertical profile and overall visual prominence of the Plant, future development will 'sit' behind the existing Plant and will be viewed within the sites rural-industrial context. Future drystores and the lower portions of additional dryer towers will be screened from view by the growth of the proposed planting over time. With the existing Plant being highly visible and the SH1/ Railway corridor, power and light poles and existing substation all contributing to an infrastructural/ industrial aesthetic the overall quality of this view is low. The combination of these factors means that potential adverse visual effects will be **moderate to low** from this location in the **short, medium and long term**. Because of the angle of this view in relation to both existing and proposed planting, the removal of vegetation to provide for rail siding will not change the nature of this view or degree of potential effect. In addition the combination of existing bund and vegetation and proposed vegetation will screen train carriages from view.

Figure 2: Existing view towards the site from the SH1/Parkins Road intersection. (Note: excludes substation from view)

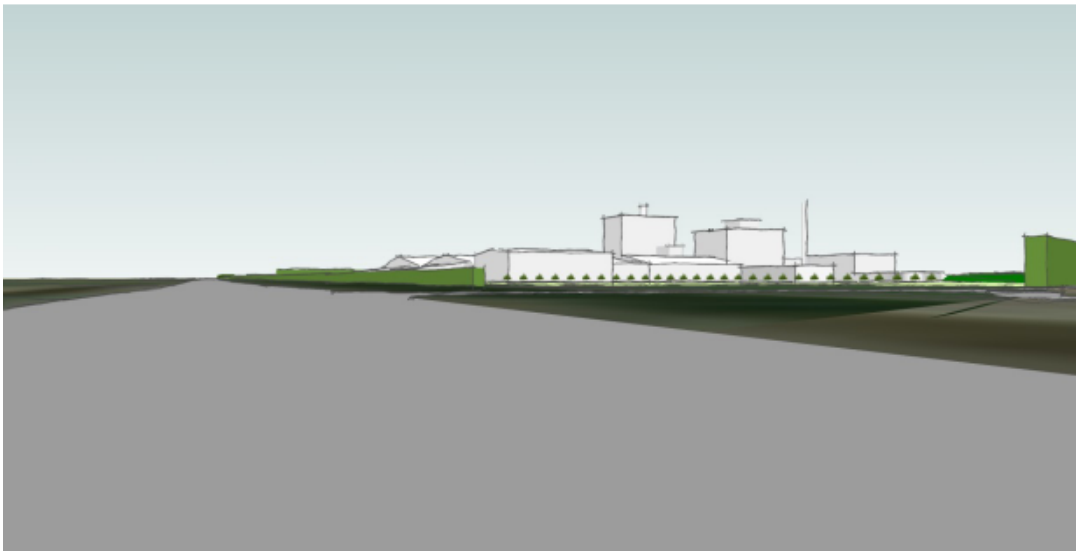
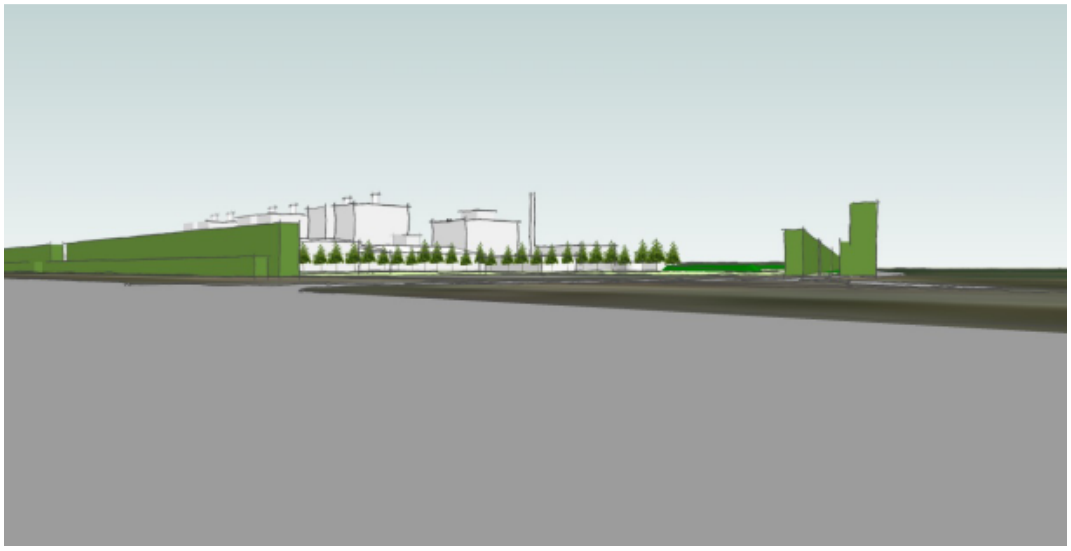


Figure 3: View towards the site from the SH1/Parkins Road intersection showing established planting and potential Stage 1 and 2 building development. (Note: excludes substation from view)



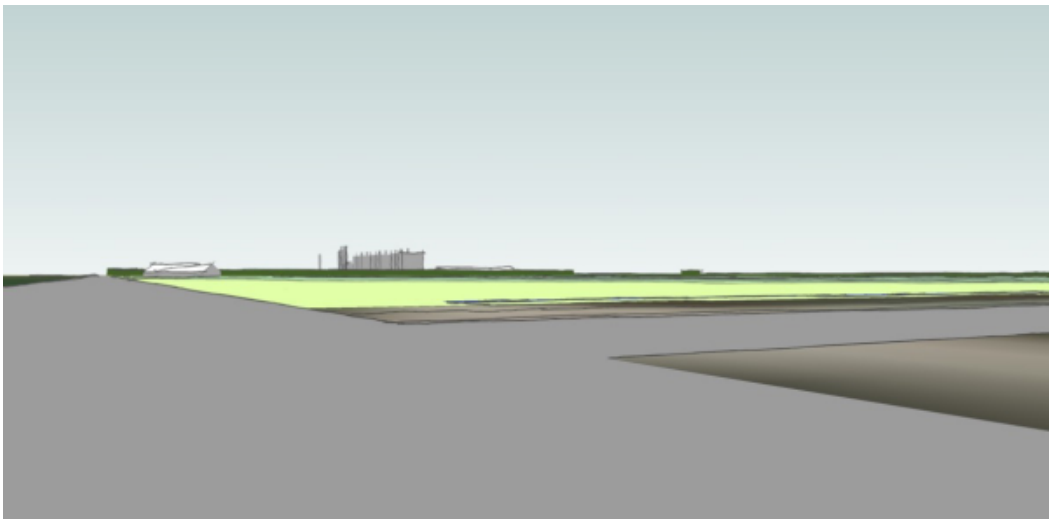
Irvines Road (east of Heslerton Road):

Views from Irvines Road to the boundary of the proposed building area range from approximately 250m at the south western end (closest to the existing Plant) to 1.4km at the junction with Sheats Road to the south east. There are currently clear views of the Plant from the length of Irvines Road with the combination of open pasture and distant shelter belts typical of the wider landscape and reflective of the 'big sky' Canterbury landscape. Currently the Plant is highly visible and although the existing drystores and lower buildings are generally set against backdrop vegetation the existing dryer towers and boiler stacks project above this backdrop and increase overall visual prominence.

The proposed landscape treatment along Irvines Road consists of shelterbelt and native planting within Stage 1.

The combination of distance, expansive views, backdrop vegetation, the presence of the existing Plant and proposed planting will ensure that **medium to long term** visual effects from the majority of Irvines Road will be of a **low degree.**

Figure 4: View towards the site from the Irvines Road/ Sheats Road intersection showing potential Stage 1 and 2 building development and established planting.



The existing Plant is already a dominant feature in terms of close up views with vehicles having clear views to the rear of the Plant where the collection of separate buildings and other components create a 'busy' appearance. In the short term it is likely that future Stage 1 development will add to this already busy appearance through additional dryer towers, boiler stacks, transport yards and wastewater and storm water treatment facilities being clearly visible and identifiable from the south western end of Irvines Road. In the **short term**, while the proposed Area E planting matures visual effects will be **high** and reducing to **moderate** in the **medium to long term**.

Figure 5: View towards the site from the south western (Heslerton Road) end of Irvines Road showing established Area E planting and potential Stage 1.

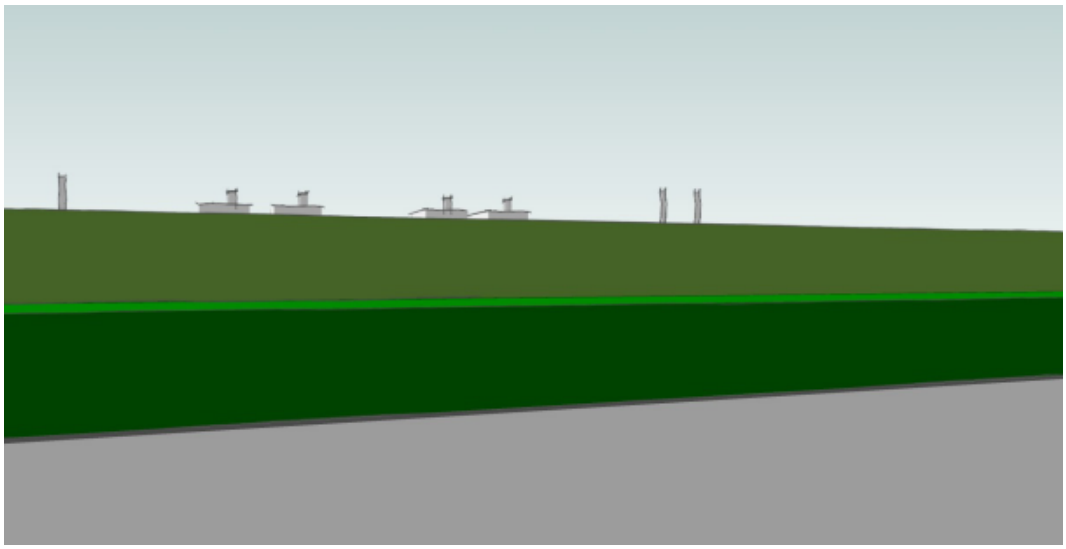
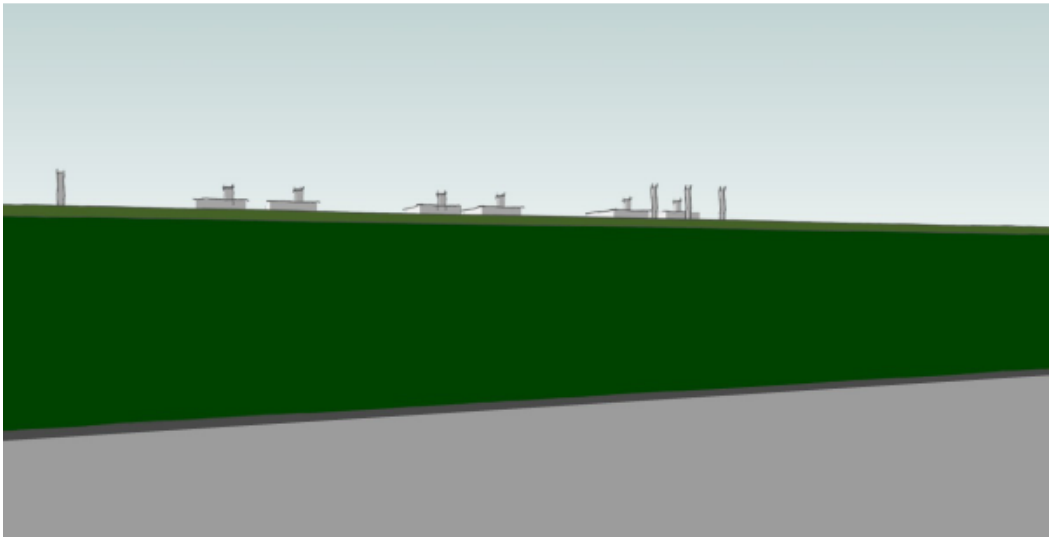


Figure 6: View towards the site from the south western (Heslerton Road) end of Irvines Road showing established Area E planting and potential Stage 1 and 2 building development.



Heslerton Road:

Close up and middle distance views of the DPMA and existing Plant are screened by the existing shelterbelt that stretches from the entrance to the Synlait Plant approximately 1.5km to the southeast and is located to the east of Heslerton Road. It is anticipated that the existing shelterbelt has another 15 years of life before selective trimming and/or removal of trees will be required for health and safety reasons (e.g. windblown trees and branches onto Heslerton Road). With this in mind additional native and shelterbelt

planting is proposed to be carried out during Stage 1 of the Plan Change to ensure that close up views from the west/ southwest of the Plant will continue to be screened/ obscured and visual effects will continue to be **very low into the future**.

While Synlait has no control over the section of the shelterbelt to the southeast of Irvines Road it provides effective shelter for adjoining pasture land and is unlikely to be removed unless it becomes unhealthy or damaged by wind. It is therefore likely to provide screening of the Plant in the short to medium term.

In terms of **distant views** any **short to medium term** visual effects arising from future development will be of a **low degree** with distance, expansive views, backdrop vegetation and the presence of the existing Plant key mitigating factors. **State Highway 1 (SH1)**

The existing Hawthorne hedge provides a highly visible cue to the entire northern boundary of the DPMA which is aligned parallel to the SH1/ Railway corridor for a distance of 1.5km. The proposed buildable area of the DPMA is visible for both north and south-bound traffic on SH1 from the vicinity of Sheats Road in the northeast to the vicinity of viewpoint 3 and 12.

The most notable mitigating factor in the context of these distant views is distance itself. At 1.5 – 2.0km away the existing Plant and DPMA is viewed in the context of an expansive panorama and a 'big sky' setting. At this distance the existing Plant is barely visible and the fact that its exact nature and individual details are difficult to determine mean that the scale of the Plant gradually unfolds (see discussion below) which, as far as visual effects are concerned, is preferable over a development suddenly appearing to the viewer in an immediate or very short space of time.

The proposed DPMA will not change the nature of these **distant views from the south west** (i.e. toward Rakaia) because future development will occur in the opposite direction to the view, will be screened by the existing Plant, and views are expansive and from a considerable distance away. As a result the degree of adverse visual effect will be **low.**

Despite future development spreading to the **northwest** within the proposed building area and an overall noticeable increase in the size of the Plant, distant views will be >1km from the edge of future development and at this distance any resulting visual effects will be of a **low degree**.

Figure 7: View towards the site from SH1 approximately 200m north of Sheats Road showing existing shelterbelts and potential Stage 1 and 2 building development.

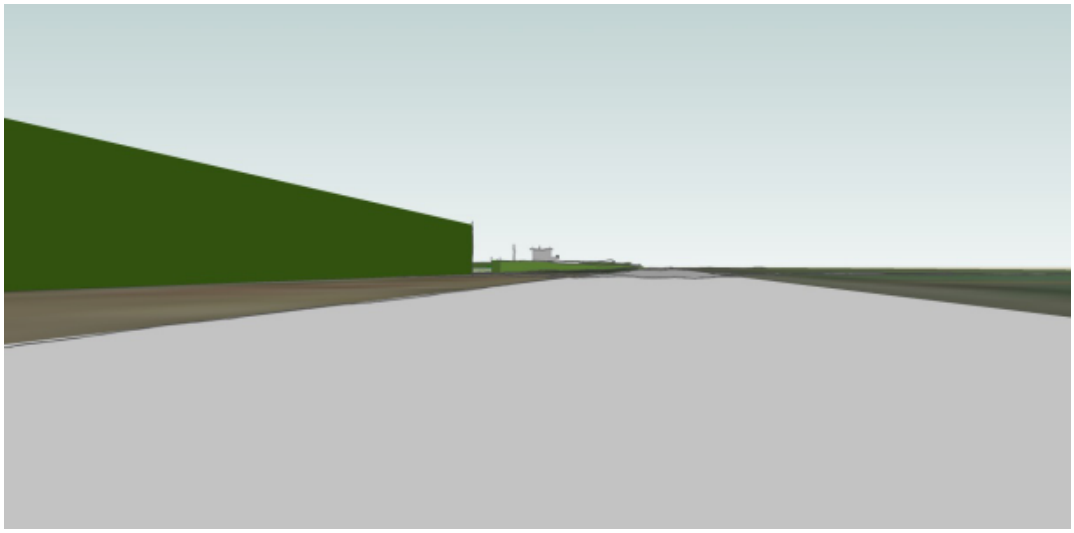
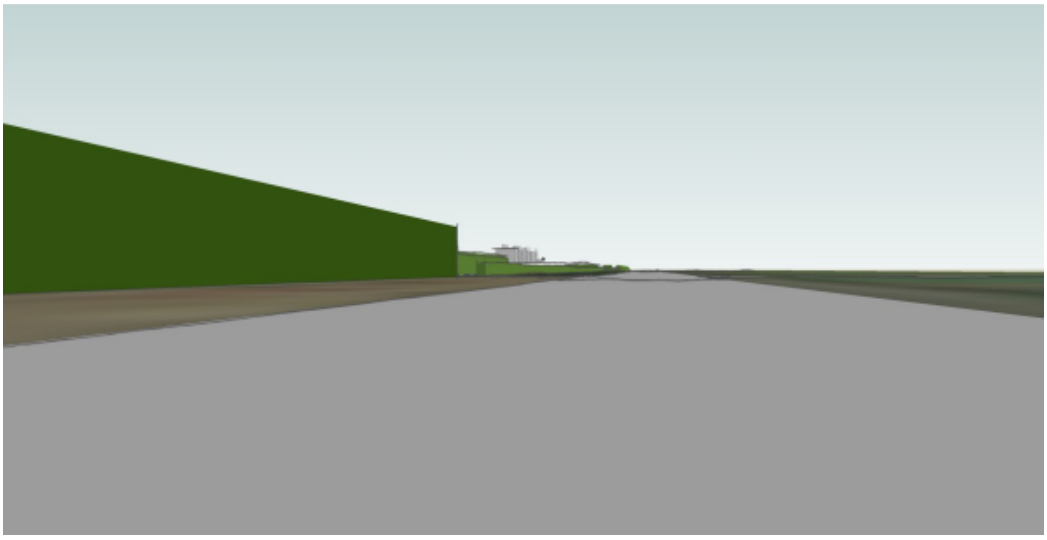


Figure 8: View towards the site from SH1 approximately 200m north of Sheats Road showing existing shelterbelts and established Area A and B planting and potential Stage 1 and 2 building development.



As vehicles get closer to the site the nature and specific detail of the Plant are increasingly revealed through **middle distance** locations up to (approximately) the north eastern edge of the DPMA.

Figure 9: View towards the site from SH1/ Sheats Road intersection showing existing shelterbelts and established Area B planting and potential Stage 1 and 2 building development.

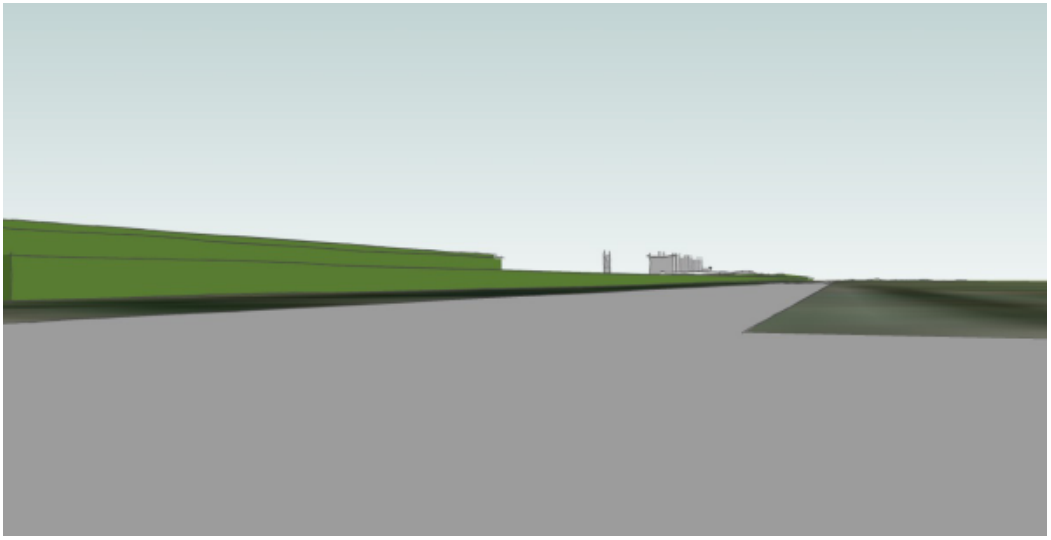
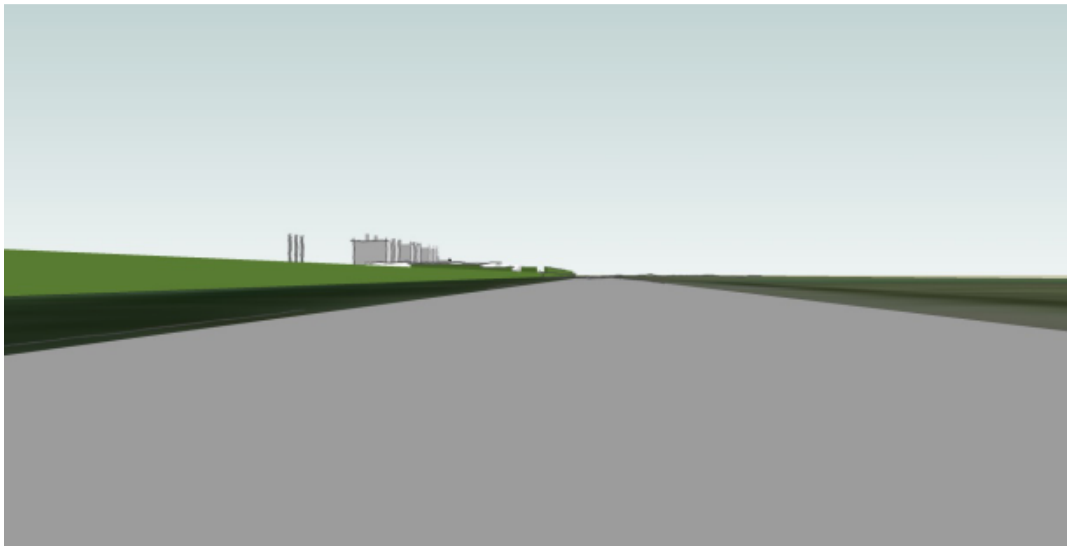


Figure 10: View towards the site from SH1 approximately 500m northeast of Area C planting showing existing shelterbelts and potential Stage 1 and 2 building development



Middle distance views for **south-bound** vehicles are at 100km/h with duration of approximately 30 seconds and are largely screened by existing vegetation with the (existing) Hawthorne hedge and pine shelterbelt effectively screening lower lying buildings now and in the short term. Future dryers and boiler stacks will be clearly visible from locations such as this and will remain the most visually prominent part of the Plant into the future. At the same time the existing shelterbelt and proposed Areas C, D and G planting will have been established and had an opportunity to mature in the medium term and so it is anticipated that as the number of buildings and visual prominence of the dryers and stacks increases, so will the screening properties of the proposed planting resulting in a consistently **moderate** degree of visual effect on road users. The removal of vegetation to provide for rail siding will have no bearing on the nature of this view or degree of potential effect due to distance and angle of view.

Existing views for **north-bound** vehicles are of the south western parts of the Plant and a small section of the north western (front) façade of the existing drystore. Full views for these vehicles would be limited to a 20-30 second period as they draw nearer to the SH1/Parkins Road/ Heslerton Road intersection.

Figure 11: Existing view towards the site from SH1 approximately 500m southwest of Parkins Road. (Note: excludes substation from view)

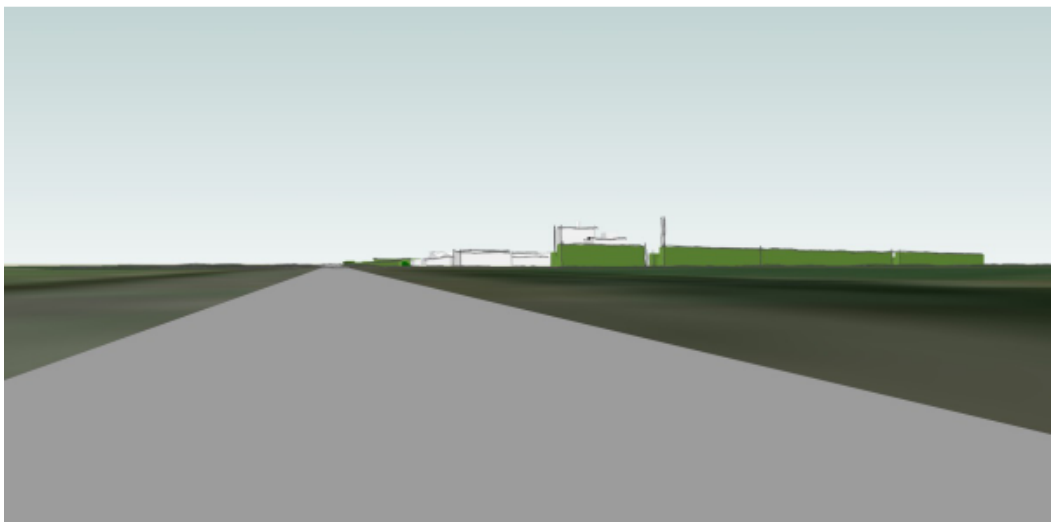
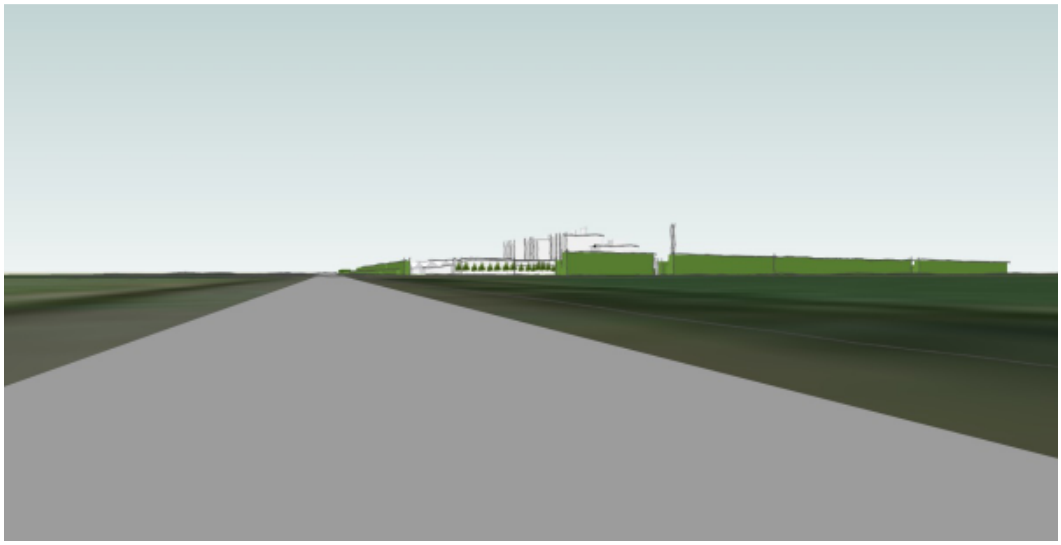


Figure 12: View towards the site from SH1 approximately 500m southwest of Parkins Road showing established planting and potential Stage 1 and 2 building development. (Note: excludes substation from view)



The combination of SH1/ Railway corridor, existing Plant, power and light poles and existing substation on the corner of SH1 and Heslerton Road results in an increasingly developed and somewhat industrial aesthetic for north-bound travellers.

The existing dryer towers and boiler stacks are currently the most prominent elements in these views with the existing shelterbelt along Heslerton Road screening large portions of the Plant. Unlike views for south-bound vehicles the majority of future development will be viewed in the context of the existing Plant.

The addition of several dryers in the future will increase the visual prominence of the existing Plant, however, the combination of a relatively short viewing window (approximately five second period of the overall 20-30 second north-bound experience) and the growth of existing (previously consented mitigation) vegetation, which will screen large portions of future development, means that the overall visual and aesthetic qualities for north-bound travellers along SH1 will not change to a significant degree. Overall visual effects will consistently be of a **low** degree for these middle distance views.

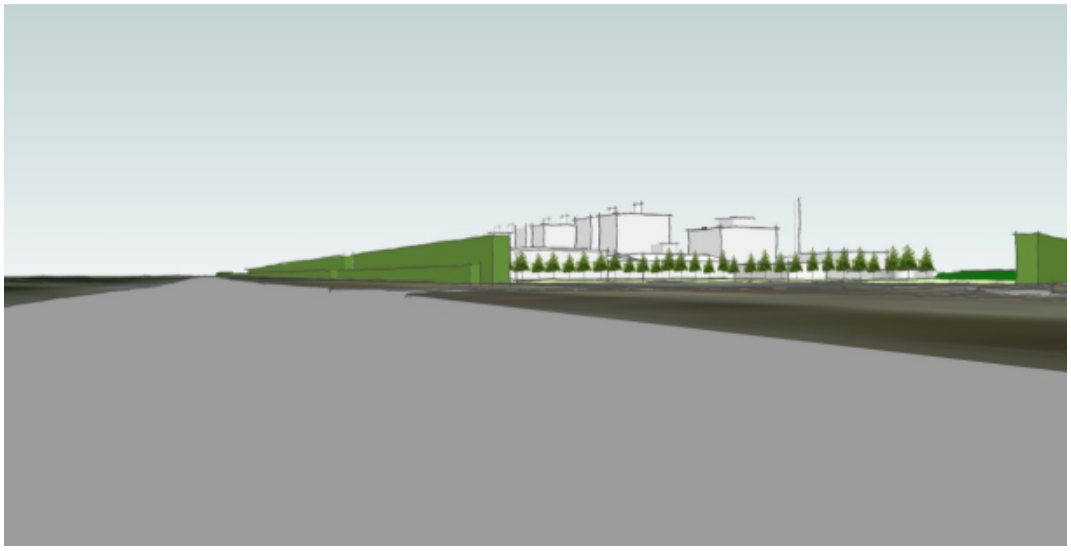
The images below have been included to represent **close up views** of the proposed plan change area from SH1.

These locations were chosen in recognition of:

- The proximity of the DPMA and future development to SH1;
- The volume of traffic and diversity of viewers travelling along SH1;
- The existing physical characteristics of the Plant and resulting prominence and impact on rural character; and
- The location of visual simulations prepared as part of previous consent applications and a desire to retain consistency in identifying and assessing actual and potential effects.

The Figure 13 image below is taken from the SH1/ Parkins Road/ Heslerton Road intersection and (the existing view) illustrates the overall character and quality of the existing view for north-bound vehicles. The duration of this type of view is approximately 5 seconds (maximum).

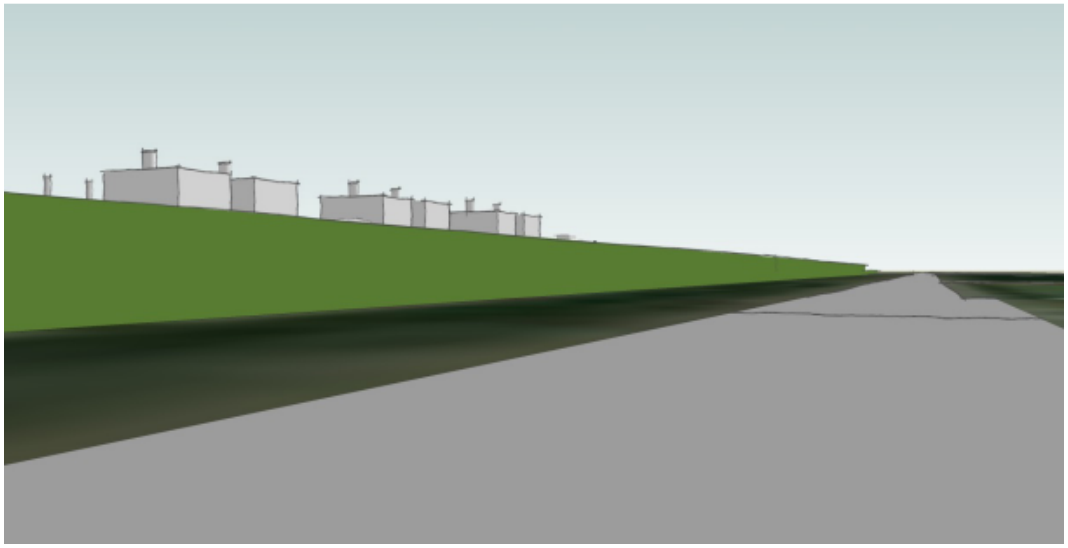
Figure 13: View towards the site from the SH1/Parkins Road intersection showing established planting and potential Stage 1 and 2 building development. (Note: excludes substation from view)



The overall quality of the existing view is low with the SH1/ Railway corridor, existing Plant, power and light poles and existing substation all contributing to an infrastructural/ industrial aesthetic. This view illustrates how the introduction of additional dryers and boiler stacks in the future will add several clearly visible vertical components and increase the overall visual prominence of the Plant over time. Adverse effects on visual amenity will be consistently **moderate** in this location given that future short, to medium term development will be obscured by the existing plant and proposed vegetation with the latter mitigating additional development in the long term.

The Figure 14 image is taken from the SH1 adjacent to the north eastern end of the proposed buildable area / Sharlands Road intersection and (the existing view) illustrates the screening effect that proposed Area D planting and existing (previously consented) mitigation planting has in relation to future development.

Figure 14: View towards the site from SH1 adjacent to north eastern edge of proposed building area showing existing shelterbelts, proposed planting Area D and potential Stage 1 and 2 building development



Despite this screening of the long, low profile drystores the future dryers will be prominent features and will add to the existing vertical profile of the Plant over time. Again, visual effects on this close up view will be

moderate in the short, medium and long term with increased vegetation growth and associated screening effect occurring in conjunction with the progressive development of buildings overtime. Because southbound traffic will have passed the indicative 'gap' in vegetation required to provide for rail siding any vegetation removal will have no bearing on the nature of this view or degree of potential effect.

4.4 Summary of Effects on Visual Amenity

Overall visual effects on surrounding farm houses will be low to moderate with a high degree of short term effect for one dwelling to the southeast of the DPMA.

Overall visual effects on local road users will vary depending on location, distance to the proposed buildable area, timing of development and proposed planting and subsequent growth. In the worst case scenario visual effects on users of Sharlands and Irvines Road will be high in the short term and moderate to high in the medium to long term primarily due to the combination of the Plant's proximity to viewers and increased vertical profile resulting from future dryers and boiler stacks projecting above the established landscape framework.

Visual effects on users of SH1 have been considered in terms of distant, middle distance and close up views.

Effects on distant views for both north and south-bound travellers will be low.

Effects on middle distance views for north bound travellers will be low and moderate for south-bound travellers.

Effects on close up views will be moderate for north and south-bound travellers alike.

5 Conclusion

The proposed Plan Change introduces a Dairy Processing Management Area (DPMA) overlay into the Rural (Outer Plains) Zone of the District Plan, and is intended to provide sufficient space for the future development of the existing Synlait dairy plant.

Whilst the ultimate development scenario for the plant is undefined, the size of the DPMA is generically based on a future development scenario which anticipates, as the maximum scale of development that would occur at this site, up to eight dryers with associated drystores, reception, roading and servicing.

The key mechanism for achieving integrated management of the DPMA is compliance with an outline development plan (ODP). This shows the extent of the DPMA, the position of existing and proposed access points, the extent of the built footprint area, including any minimum setback requirements, locations for higher built development such as dryers, and the proposed landscape treatment

The ODP – Landscape, attached as **Appendix 1**, includes provision for landscape treatment and shows the key elements of landscape treatment their staging over time. There are seven landscape treatment areas in total. Areas A – F will be implemented over a five year period, beginning once the first building is constructed within the Stage 1 portion of the identified primary buildable area. Implementation of Area G will commence at the outset of Stage 2.

The purpose of the proposed landscape treatment is to ensure the establishment of a robust vegetation framework within the proposed plan change area and immediately adjoining landscape that is of a location, composition and scale that will effectively mitigate potential adverse effects of future development over the next (anticipated) 30 years.

A series of landscape context photos have been included in **Appendix 3** to illustrate the existing rural character, visual amenity and overall visibility of the site and local landscape.

An assessment of landscape and visual effects is provided under Section 4.2 of this report.

In terms of **rural character** overall adverse effects on the plan change site and local landscape will be **low to moderate** in degree. The proposed DPMA will not adversely affect the rural character of the wider rural landscape and the proposed DPMA is considered to be a positive step in the maintenance of wider rural character as it provides the community with a higher degree of certainty as to the scale and location of (generally) large scale dairy processing facilities in the district.

In terms of **visual amenity**, potential effects have been considered in the context of several key viewing audiences:

- **Surrounding farm houses** – will experience a low to moderate degree of effect across the anticipated 30 year development time line with a high degree of short term effect for one dwelling to the southeast of the DPMA.

- **Local road users** – will experience a variable degree of effect depending on location, distance to the proposed buildable area, timing of development and proposed planting and subsequent growth. In the worst case scenario visual effects on users of Sharlands and Irvines Road will be high in the short term and moderate to high in the medium to long term.

- **State Highway 1** – effects on SH1 users will vary subject (primarily) to viewing distance and amount of existing and future intervening vegetation. The degree of effect ranges from moderate to low and in

addition to distance and vegetation, the presence of the existing Plant and extended development timeframe are also key mitigating factors.

The proposed DPMA will enable a potential increase in the overall scale of the existing Synlait dairy plant over the next 30 years subject to market and operational conditions. The overall physical presence of the Plant on the site and local landscape will consequently increase as a result. The proposed plan change seeks to avoid adverse landscape and visual effects arising from future development through the establishment of controls of building size and location on the site and specifically through the retention of approximately 60% of the DPMA as open rural land, with essentially the same development controls as existing Rural Zone, and the implementation of approximately 2.6ha shelterbelt and native planting most of which is implemented early in the Stage 1 development process.

It is acknowledged that there will be some short to medium term effects resulting from future development, however once the proposed landscape framework has an opportunity to mature it is anticipated that the degree of visual effect stemming from future development late in Stage 1 and throughout Stage 2 will be significantly reduced.