Appendix C

Landscape and Visual Assessment

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Report

Tatua Plan Change - Landscape and Visual Assessment

Prepared for

Prepared by (Beca)

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Contents

1 Introduction 1

2 The Proposal 2

2.1 Plan Change Description 2

2.2 Landscape components of the Plan Change 3

2.3 Plan Change Comparison 6

3 Existing Environment 9

3.1 Landscape context 9

3.2 The Plan Change site and immediate surrounds 9

3.3 Rural Character and Amenity 10

4 Visibility 11

4.1 Visual Catchment & Audiences 11

5 Assessment of Effects 12

5.1 Methodology 12

5.2 Development scenario 13

5.3 Effects Analysis 16

5.4 Summary of Findings 21

6 Conclusions 23

Appendices

Appendix 1 – Development Concept Plan (Landscape)

Appendix 2 – Plan Change Model (Development Scenario)

Appendix 3 – Viewpoints / Illustrative Sketches and context photos

1 Introduction

Beca Ltd (Beca) has been engaged by The Tatua Co-operative Dairy Company Limited (Tatua) to undertake a landscape and visual effects assessment of the proposed Plan Change as outlined in section 2 below.

The scope of this report includes:

1. A description of the plan change proposal with a focus on those aspects that have the potential to generate adverse visual effects and effects on rural character. The Development Concept Plan (DCP) is illustrated in **Appendix 1** and a 3D concept of a potential plan change scenario is illustrated in **Appendix 2**;
2. A description of the existing physical environment including characteristics of the site and local rural landscape. This description is supported by a series of context photographs included in **Appendix 3**;
3. Description of assessment method and potential development scenario;
4. Identification of the visual catchments and associated audiences likely to be affected by the plan change;
5. An assessment of potential visual effects and effects on rural character using representative viewpoint locations and illustrative sketches (see **Appendix 3 sheets 14 - 18**) of the potential development scenario as a basis;
6. Conclusion.

A site visit was undertaken on 29 May 2015 and again on 21 October 2015 to assess the context of the area and to take viewpoint photographs.

2 The Proposal

2.1 Plan Change Description

The proposed Private Plan Change introduces a Development Concept Plan (DCP) as a standalone chapter in the District Plan, and specifically identifies an area of land containing and immediately surrounding the existing Tatua plant on SH26 at Tatuanui – see **Appendix 1**. The proposed changes being sought to the District Plan include an updated planning map, additional parcels of land included in the DCP, and a chapter of objectives, policies, rules and assessment criteria that the site and future development will be subject to.

The purpose of the DCP is to recognise the existing plant and to provide for its continuing efficient use and future expansion. The area of land within the DCP is intended to provide sufficient space for the future development of the 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 plant and the size of the catchment area serviced by the plant, including travel distances from farms to plant. Accordingly, there is an optimal scale of development based upon the above considerations.

The size of the DCP is generally based on a future development scenario which is informed by the existing plant layout and its activities. This scenario anticipates up to two additional dryers with associated drystores, processing facilities, administration/corporate offices, rural supply store, warehousing, storage space (relocated from offsite) waste water treatment plant and distribution fields, roading and servicing as the maximum scale of development that would occur at this site.

While the density and scale of built development and activity is distinctive from that which would typically be found on a farm, the Tatua plant is consistent with rural distribution patterns in the area as it is one of many processing facilities in the local rural environment. As such, a processing plant is recognised as a legitimate activity in the Rural Zone.

Its industrial appearance and overall scale is driven by the need to deliver both economic and optimal dairy production at the regional level. The proposed DCP provides for the on-going operation and development of the Tatua plant within this context whilst providing for its interface with and potential impact on adjoining rural land and its users.

The key mechanism for achieving integrated management between the Plan Change and surrounding rural landscape is compliance with the DCP. The DCP clearly illustrates the extent of the Plan Change area; position of existing and proposed access points; 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 DCP.

In addition to the DCP, a number of amendments to the Rural Zone Issues, Objectives and Policies are proposed along with a new set of rules specific to the Plan Change that will replace the current DCP in the District Plan.

2.2 Landscape components of the Plan Change

2.2.1 Development Concept Plan

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

There are seven landscape treatment areas proposed (A – G) which incorporate five planting 'type's – see DCP: **Landscape Plan** and include:

- Oak grove – extending the existing established line of oaks along the north-west boundary of the site;
- Amenity planting – low (2-4m high) native species along SH26 frontage;
- Shelterbelt – double row evergreen & deciduous shelterbelt along parts of the eastern boundary;
- Riparian planting – along the Totorokura Stream (southern boundary of the site);
- Woodlot planting – clusters of deciduous trees strategically placed along the sites boundary.

The landscape treatment is recommended to be implemented in seven stages (A – G) and is triggered by the construction of a building in the corresponding building area – see DCP: **Staging diagram.** The composition of the planting areas is illustrated in a series of cross-sections in the DCP: **Sections**. A list of species proposed, plant grades, and spacing is outlined in DCP: **Plant Schedule.**

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.

2.2.3 Rules

The following proposed rules are relevant to the management of landscape and visual effects resulting from future development of the (Tatua) DCP. 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 26 & 27, SH16 & 27, surrounding local roads and (limited) rural-residential dwellings (**Emphasis added**):

2.1 Performance Standards for Permitted Activities	
(a) Building height	The maximum height of any building and / or structure shall be no greater than 8m unless otherwise identified on the Development Concept Plan, except that: (i) Up to 2 Boiler stacks per boiler and 4 exhaust vents per dryer (for up to 4 dryers) may exceed the height limit by up to 5m
(b) Setbacks	All buildings and structures shall be set back a minimum of 10 metres from the site boundary except where otherwise shown on sheet 6 of the Development Concept Plan

2.1 Performance Standards for Permitted Activities	
	Note: Setbacks will not apply for any proposed signage not requiring a building consent or any proposed underground utility relating to infrastructure for roading, rail, the management of wastewater, stormwater or the supply of water *Note: Parties seeking to plan or undertake works in the Sub-Transmission Underground Cable Corridor or in close proximity to overhead sub-transmission lines should contact Powerco directly to obtain further and more accurate information before making such plans and/or commencing works.* *No works can be undertaken in the Gas Pipeline Corridor without obtaining a work permit from Vector Gas Limited (a minimum of two working days' notice is required)*
(c) Building Colour	(i) Any structure/building that is in the nature of a silo, external piping, or other milk processing equipment shall retain its natural metallic finish. (ii) Any building/ structure that is not in the nature of a silo, external piping, or other milk processing equipment shall be finished in the following colours, excluding trim, fittings, guttering, detailing and signage: (i) Tatua colours – off white, with red roofing and trim
(d) Building envelope for existing dwellings	(i) Maximum height: 10m (ii) Front yard: No extension or addition to the existing dwelling, garage or accessory building shall occur forward of the current building line. (iii) All other yards 10m
(j) Lighting and glare	(i) At no time between 7.00am and 10.00pm shall any outdoor lighting be used in a manner that causes an added illuminance in excess of 125 lux, measured horizontally or vertically at the boundary of any non-Industrial zoned site adjoining (ii) At no time between the hours of 10.00pm and 7.00am shall any outdoor lighting be used in a manner that causes: • An added illuminance in excess of 10 lux measured horizontally or vertically at any window of an adjoining building outside of the DCP • An added illuminance in excess of 20 lux measured horizontally or vertically at any point along any non-Industrial zone boundary (iii) Where measurement of any added illuminance cannot be made because any person refuses to turn off outdoor lighting, measurements may be made in locations of a similar nature which are not affected by such outdoor lighting (iv) The outdoor lighting on any site adjoining any non-Industrial zoned site shall be so selected, located, aimed, adjusted and screened as to ensure that glare resulting from the lighting does not cause a significant level of discomfort to any occupants of the non-industrial site (v) The exterior of any structure shall not utilise reflective material or unpainted surfaces that could cause nuisance glare For the purposes of this rule, the discomfort level is defined as one that can be detected or determined to be a nuisance by an appropriately experienced Council Officer who is able to apply the frequency, intensity, duration and offensiveness to their observations and who is able to report on these accurately
(m) Landscaping	(i) Landscape planting, including retention of the existing oaks, shall be located in general accordance with the Development Concept Plan and is to be completed in accordance with the staging specified in the Development Concept Plan (Attachment B: sheets 7-11). i.e. Development within a building area requires planting to be undertaken in the corresponding planting area (ii) Prior to the construction of new buildings/structures with a gross floor

2.1 Performance Standards for Permitted Activities	
	area (GFA) greater than 200m^2 or 8m in height, outside the existing DCP shown on Sheet 7, a landscape plan shall be submitted to the Matamata-Piako District Council as per (i) above. When considering the landscape plan under (iii), Council should consider whether the level of detail gives effects to the plan in the DCP (iii) 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 (iv) Planting in all staging areas must be established in the nearest planting season immediately following completion of construction of any new buildings within the designated 'Building Area' *Note: This rule shall not apply to any planting for the purposes of enhancement within the Development Concept Plan which is additional to the planting shown on the Development Concept Plan*
(n) Carparking and Formation standards	(i) A minimum of 1 space per employee shall be provided on the site in association with permitted activities. Provision shall be made for staff parking at a rate equivalent to the staff requirement for each consented increase (ii) 9 visitor parking spaces shall be provided at all times (iii) 1 parking space shall be provided for a courier van at all times (iv) All visitor parking and loading spaces shall be clearly identified (v) All parking and loading spaces, access and manoeuvring areas shall be designed, formed and constructed in accordance with the MPDC Development Manual 2010; and (vi) All internal roading and parking areas shall be formed with an all-weather surface designed to minimise dust and noise nuisance, and provide for the safe and efficient disposal of stormwater (vii) Manoeuvring areas shall be provided at a standard adequate to accommodate a 99.8 percentile car or a 99 percentile truck in order to ensure that all vehicles have the ability to access any adjoining road in a forward direction after no more than a three point turning manoeuvre on the site (viii) All required carparks shall be marked or delineated

3.1 Matters of control/ discretion

Controlled Activities

For controlled activities Council has reserved control over the matters as outlined in the District Plan, for the underlying Zone as shown on the Planning Maps.

Restricted Discretionary activities

For restricted discretionary activities the Council has restricted its discretion to the matters as outlined in the table below. Resource consent conditions can only be imposed over the matters to which discretion has been restricted.

Discretionary activities

In considering discretionary activities, the Council shall, unless otherwise stated, have regard to any or all of the following matters, as appropriate. The criteria are only a guide to the matters that the Council will consider and shall not restrict the Council's discretionary powers.

The following are matters of discretion.

Matters of discretion	
General:	- Suitability of the activity with regard to its location as shown on the DCP - Extent to which activity complies with the Performance Standards within Section 2.1 of the DCP.
Bulk and Location	(a) 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. (b) The individual and cumulative effect of additional building height on the landscape values in the locality of the Development Concept Plan. (c) The form and function of the over-height structure. (d) The material and colour finish of the over-height structure. (e) Proposed signs; (f) The intensity of lighting when viewed from a distance. (g) The effectiveness of any mitigation.
Landscape	(a) The suitability of species, density and height of plants at the time of planting; (b) 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 Development Concept Plan. (c) Maintenance of planting and ability of planting to establish and grow, including provision for access, methods of soil retention and irrigation. (d) The use of landform to assist in mitigation of landscape effects.
Colour	(a) Alternative colour finishes and their effectiveness to address the visibility of the proposed structure individually and cumulatively within the Height Control Zone within the Development Concept Plan.
Traffic	(a) The impacts on the safe and efficient operation of the transportation system including, but not limited to: i. Impacts on the road network and the efficient operation of local intersections; and ii. Infrastructure provision, including works needed to maintain the safety and efficiency of the transportation system such as any upgrades necessary to pedestrian and cycle facilities, intersections, pavements and structures on the system affected by the proposed activity.
Noise and Vibration	(a) Ensure that existing activities on neighbouring properties in the locality are not adversely affected by unreasonable noise from the proposal. In determining appropriate noise levels, Council shall have regard to the noise environment of the locality in which it is proposed to site the facility and the practicality of reducing noise from the utility components;
Odour	(a) The effect of the probability of offensive odours from the operation of facilities and in particular the operation of waste treatment and disposal facilities and solid waste management disposal sites.

2.3 Existing DCP and Proposed Plan Change Comparison

This section provides a comparison of the existing and proposed DCP's for Tatua. The current DCP is subject to the objectives, policies and rules of its underlying Industrial Zone – there are specific rules for a DCP within the industrial zone listed under 'scheduled sites'. The recently constructed dryer tower at the southern end of the Plant is located outside of the existing DCP in the Rural Zone and subject to the relevant provisions of the Rural Zone.

The proposed DCP incorporates the existing industrial zoned land and will act as a standalone chapter in the District Plan which has specific objectives, policies and rules that relate directly to the development and operation of the site as a Processing Plant.

The key provisions of the industrial (existing DCP) and rural zoned land relevant to this assessment are:

ACTIVITY (or similar)	INDUSTRIAL	RURAL	Proposed DCP
Industry	**Permitted (scheduled DCP sites)**	**Non-complying**	**Permitted**
Building Envelope (scheduled sites): 1. Maximum Height	20m	10m	Five designated height zones of 8m, 10m, 12m, 25m, and 35m as illustrated on the DCP.
2. Yards adjoining any road or non-industrial zone	80m	50m	80m from SH26 for buildings over 25m in height. 10m from SH26 for buildings less than 8m in height located on the NW side of SH26. 20m for all other buildings.
3. All other yards	10m	N/A	N/A
4. Height relative to boundary	Height (h) shall not exceed one quarter the distance (d) to the closest boundary adjoining (h = d/4) for boundaries adjoining any non-industrial zone.	N/A	N/A
Landscaping (Scheduled and Non-Scheduled Sites):	A minimum of 50% of the front yard requirement shall be landscaped, planted and maintained for the full length of the boundary (excluding vehicle entrances). Landscaping shall be required and designed to either screen or enhance the appearance of the on-site industrial activities when viewed from any public space adjoining or non-industrial zone	N/A	Comprehensive landscape framework that will be implemented in seven stages (A – G) utilising five landscape treatment types. The landscape treatment is triggered by the construction of a building in designated areas

	opposite or facing.		as illustrated in the DCP.
Maximum Coverage (Non-Scheduled Sites)	Maximum coverage on any site shall be determined by the need to comply with the building envelope, landscaping, access, parking, and loading requirements or a Development Concept Plan.	Total building coverage for accessory buildings on lots less than 4000m2 shall not exceed 10% of the net site area. ii. Except that in an identified Structure Plan (refer Activity Table 2.2) total building coverage of the site shall not exceed: 15% of the net site area	N/A

While the bulk and location rules of the proposed DCP are clearly more permissive than the existing Rural Zone provisions and to a lesser extent the existing Industrial Zone provisions, the proposed DCP provides an added layer of spatial certainty to development by way of individual height zones whilst providing for a more comprehensive landscaping framework and overall a more targeted response to the matters addressing rural character and amenity with the rural and industrial zones. The existing Industrial and Rural Zones provide a generic set of rules relating to setback and building envelope provisions that doesn't necessarily respond to large scale industrial development. The key difference between the existing and proposed DCP's, with regard to bulk and location, is that a maximum building envelope scenario of 20m under the industrial zone (schedule sites) would potentially result in a greater bulk than the proposed DCP which allows buildings of varying heights up to 35m and across five height zones. The purpose of this approach is to establish some variability in the building profile and a 'stepping down' in building height across the site in an effort to reduce perceived bulk and scale and minimise potential visual and landscape effects.

Another key difference between the proposed DCP and the industrial and rural zone provisions are those pertaining to 'landscaping'. The proposed DCP introduces a landscape framework which is developed to manage potential adverse effects on rural character and amenity values resulting from the likely development of the DCP over time. Again, the landscape framework is targeted to specific areas around the DCP taking in to account viewing catchments and audiences, building heights, terrain, and character. Five landscape treatment 'types' are proposed and are to be implemented in seven stages, the sequence of which is dependent on building location and development timing. In addition, the landscape framework within the proposed DCP addresses all of the site boundaries, as opposed to just the front yard as specified in the industrial zone. In this sense, the proposed DCP focuses more on integrating an isolated industrial activity completely surrounded by rural farmland.

In addition, the inclusion of Rules pertaining to landscape planting and the requirement to prepare a detailed landscape plan to be submitted to the Matamata Piako District Council prior to the construction of new buildings provides certainty around the implementation of planting (ie. Location, extent and type) that is consistent with the overall landscape framework for the site. The inclusion of an on-going maintenance regime as part of the detailed landscape plan will provide an added degree of certainly with regards to the ability of landscaping to establish, thrive and effectively mitigate an adverse landscape and visual effects.

3 Existing Environment

3.1 Landscape context

The Tatua plant is located at Tatuanui near the intersection of SH 26 and SH27, northeast of Morrinsville.

At a very broad scale, the site forms part of the central Hauraki Plains – an expansive flat area that extends between the Firth of Thames in the north and Matamata in the south. The Plains are hemmed in by the Kaimai Ranges in the east and elevated hill country to the west which includes the Hapuakohe Range, Hangawera Hills, and Pakaroa Range.

The Waihou River, Waitoa River, and Piako River wind their way across the plains draining in to Kopuatai Peat Dome and the Firth of Thames. The location of River and stream corridors across the plains remain noticeable due to areas of down cutting that contrast with adjoin flat topography and the irregular profile and composition of both exotic and indigenous vegetation – this is particularly apparent along the central Waitoa River immediately east of the Tatuanui.

In contrast the vast majority of the plains are highly channelized, which have been progressively compartmentalised and subdivided into a series of 'layers' by pastoral farming (mostly dairying). The open plains around the site are wholly defined by rural activities and comprise a geometric matrix of dairy pasture, shelterbelts, hedges, fields of different kinds, a broad scattering of dwellings, milking sheds, and barns.

Although pockets of this landscape – particularly around the margins of the Waitoa River, and more remotely the Kamai Ranges – display more residual natural characteristics, the central Hauraki Plains remains a highly modified landscape.

Further contributing to this perception are a number of large factories in the vicinity of the site including Fonterra's UHT site at Waitoa (4km north of Tatua), Ingham's poultry processing factory (7km northeast of Tatua), Wallace meat rendering and tanning plant (3.3km northeast of Tatua), and the Balance fertiliser plant (6.5km south-west of Tatua).

As a result, there is already a certain preconditioning and receptiveness to farming land use and associated production factories. While the landscape and rural amenity values of this sector are inevitably enhanced by exposure to the broader natural landscapes and features of the Kaimai Ranges and Waitoa River, much of the local landscape involves a mixture of productive land uses.

3.2 The Plan Change site and immediate surrounds

The Tatua factory fronts directly on to the south side of SH26 and comprises a mix of large scale buildings including dry store warehousing, dryer towers, stainless steel milk silos, and a number of ancillary buildings/structures. The colour/tone of buildings is fairly consistent across the site comprising off white walls with red trim and roofs along with an array of stainless steel pipes and trays connecting to various buildings.

While the plan change site contains the existing factory, approximately the majority of the area is currently in open pasture and contains a number of barns/sheds and two dwellings south of the existing factory.

While the northern half of the factory fronts directly on to SH26, recent additions to the factory to the south have been setback from the road corridor, allowing a thin strip of planting to be established along the road berm. This comprises an established 105m section of Pittosporum (sp. tenuifolium) hedge, flax (Phormium cookianum), and grasses (Carex sp). A further 140m of planting has recently been established in front of the new dry store and dryer building and comprises lower growing species including a row of Coprosma

virescens and Pittosporum (sp. tenuifolium), and flax (Phormium cookianum). Overall, the site has little in the way of landscape treatment.

Adjacent to the factory on the northern side of SH26 is the PGG Wrightsons rural supply depot which is flanked by a grove of oaks (Quercus robur) and the Waitoa Branch railway.

North-east of the site is the roundabout intersection of SH26 and 27. South-east of the roundabout is the Tatuanui School (approximately 270m from the site) while the Tatuanui community hall and tennis courts site opposite directly south of the roundabout (approximately 190m from the site). The land immediately surrounding Tatuanui and the site is predominately open pasture demarcated by fences, shelterbelts, and hedges interspersed by a broad scattering of dwellings, milking sheds, and barns.

The southern boundary of the site is demarcated by an incised tributary that drains into the Totorokura Stream. The eastern portion of the tributary has been channelized while the western end remains largely naturalised although has little to no vegetation cover.

3.3 Rural Character and Amenity

Section 7(c) of the Resource Management Act states that those exercising power under the Act shall have regard to (among other matters) “The maintenance and enhancement of amenity values”. Such values are defined as being “those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes”.

Although the Matamata Piako District Plan confirms that local areas of significant landscape and amenity value are limited to the Kaimai & Mamaku Ranges to the east and Kopuatai Peat Dome to the north, section 3.5 of the Matamata Piako District Plan clearly outlines the importance of maintaining amenity values within the surrounding Rural Environment. Subsequently, although the proposal site is not listed as having significant amenity value, the proposal is required to be cognisant of the local countryside environment and not detract from the visual qualities that contribute to the character of the area.

As a broad concept rural amenity is a reflection of an area’s unity and consistency of character reinforced by legible, repeated patterns such as those associated with shelterbelts or stands of trees, open pasture, rolling topography, and farm buildings that create a certain bucolic imagery and certain visual continuity.

The essence of all amenity landscapes, regardless of their underlying nature (rural, peri-urban, coastal, montane, etc) and related audiences, is an existing character that is ‘glued together’ by a cohesion, expression and unity of elements that gives rise to it being ‘pleasant’, ‘aesthetically cohesive’ and having cultural or recreational appeal. The essence of maintaining such values is usually the retention of the status quo, or at least the maintenance of the major ‘building blocks’ that contribute most to a locality’s present-day appearance and imagery.

In the case of the plan change site and surrounds, the amenity is largely derived from:

- Prevalence of mature trees – this influencing the degree of visibility across the plains by creating a dynamic combination of openness and enclosure
- Flat geometric grids of open pasture in sequence – emphasising the legibility of the Hauraki Plain as a landform and sense of remoteness within an area of rural production.
- Prominence of the Kaimai Ranges and western hill country that flank the Hauraki Plains.

4 Visibility

4.1 Visual Catchment & Audiences

A combination of fieldwork and contour map analysis shows that the site has a relatively small and localised visual catchment which is highly exposed to those parts of SH26 and 27 directly adjacent to the site. This is due to the low lying nature of the site on the Hauraki Plains which means views to the site are increasingly dominated and hemmed in by a patchwork of shelterbelts, established clusters of vegetation, and boundary hedges. Continuous paddocks of open pasture allow more distant views of the site, particularly south of Tatuanui. As a result, the Tatua plan change area is primarily visible within its immediate foreground, while more distant views – up to 1.2km from the site – can be obtained from the south.

The key viewing sectors with views to the Tatua site include:

- **SH27 North and Wilton Road –** the portion of SH27 (North) extends north from its intersection with SH26. Glimpses of the site can be obtained along SH27 (North) and Wilton Road (approximately 1.2km from the site) although views of the site are largely screened by a row of mature oaks that sit adjacent to the northern boundary of the site. Similarly, views toward the site from residences within this sector are largely filtered and screened by the row of oaks, shelterbelt vegetation, and clusters of mature trees. When approaching the SH27/26 intersection views of the site are obtained (between approximately 320m – 370m from the site).
- **SH27 South and Cussen Road –** the southern portion of SH27 extends south of its intersection with SH26 and includes Tatuanui School and Tatuanui Hall. The site is clearly visible along SH27 (south) between Tatuanui Hall (approximately 230m from the site) and Cussen Road (approximately 980m from the site). Partial views of the site are obtained along Cussens Road up until 62 Cussen Road where the terrain drops away to the south obscuring views of the site. Relatively close up views of the site are obtained from Tatuanui School (230m) and Tatuanui Hall (160m) although these are partially screened by clusters of mature trees, particularly from Tatuanui School. A number of residences sit in close proximity to both the Tatuanui School and Hall although they are largely hemmed in by established vegetation. A dwelling at 4228 on SH27 (approximately 200m from the site) does have an open view towards the site, interrupted only by a cluster of farm sheds to the west.
- **SH26 West and Brown Road –** the site is clearly visible from SH26 (west) between the SH27/26 intersection and the property at 3294 SH26. Further west of 3294 SH26 shelterbelts and established vegetation limited views to the site although glimpses of the site are obtained along the road corridor as far as 3249 SH26. There are three residences within this sector including 3294 SH26 (600m from the western boundary of the site), 3311A & B SH26 (530m from the western boundary of the site) that have clear views of the site. Views of the site from Brown Road are filtered by clusters of vegetation along the Totorokura Stream in the foreground. Beyond the property at 114 Brown Road the terrain slopes away to the south obscuring views to the site. Two residences at 105 and 114 (approximately 780m from the south boundary of the site) will have partial views of the site filtered by vegetation around the properties themselves and along the Totorokura Stream.

Related Audiences potentially exposed to the proposed site include the following:

- Dwellings on SH27, SH26, Wilton Road, Cussen Road, and Brown Road;
- Those using public roads including SH27, SH26, Wilton Road, Cussen Road, and Brown Road;
- Those working on local farms adjacent to the site.

5 Assessment of Effects

5.1 Methodology

In general terms, adverse effects on landscape and amenity values typically arise where there is discontinuity between a proposal and 'valued' characteristics of the existing landscape setting. Negative perceptions arise when a proposal 'challenges' these existing characteristics and the natural landscape 'order' is negatively impacted.

Five viewpoints have been selected to provide a representative 'view' of the Tatua site. All of the viewpoints are located within the identified visual catchment and described in Section 4 and provide varying levels of visibility to the site from different viewing sectors. In turn, this means that the viewpoints represent different viewing quadrants (angles), audiences and distances to the site.

For each of these viewpoints, photos were taken of the existing landscape with views oriented towards the Tatua plant. In addition, those same viewpoints have been captured in a model, which indicatively portray a potential plan change scenario (bulk and scale) and proposed mitigation measures as and where appropriate for each viewpoint (see **Appendix 3** sheet 14 - 18). Comparison of these indicative sketches and existing site photos has, together with several site visits, assisted in the assessment of landscape and visual effects.

A viewpoint map shows the locations of the five viewpoints (see **Appendix 3**). These are:

- Viewpoint 1: SH26 (west) opposite 3311B SH26
- Viewpoint 2: Corner of SH26 (west) and Brown Road
- Viewpoint 3: SH27 (north) near the intersection of SH27 and SH26
- Viewpoint 4: SH27 (south) opposite 4543 SH27
- Viewpoint 5: Corner of SH27 and Cussens Road

The following criteria provide the basis for the assessment (where relevant) of the Tatua Plan Change

- **Rural Character:** the extent to which future development will negatively impact on 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:

  i. Whether the proposal is consistent with existing land uses (i.e. is it 'foreign' or widespread);

  ii. Whether the proposal includes modification to the existing landform and any significant features in particular;

  iii. Whether the site is unique in the local rural context and whether development is consistent with these unique qualities;

  iv. Whether the proposal is consistent with existing rural distribution patterns;

  v. Whether the proposal is located in an area that is already subject to modification;

  vi. Whether the proposal will have an effect on bio physical attributes such as vegetation and water ways; and

  vii. the extent to which the proposal will impair or disrupt the aesthetic cohesion of the local landscape, including views from key locations (ie, views to specific (valued) landmarks).

- **Visual Effects**: the extent to which the proposal and associated location, bulk, scale and overall appearance of the plan change site would increase visual prominence, dominate views, and negatively impact on key viewing audiences. Factors considered in this evaluation include:

  i. The distance of the proposal from key view points;
  ii. The complexity of the view and extent of intervening elements (e.g. topography, structure and vegetation);
  iii. The nature and sensitivity of the viewing location (e.g. static or moving; orientation of view; public or private location);
  iv. Operational requirements (i.e. 24/7)
  v. The nature and sensitivity of the viewing audience (e.g. home owners, local road users, tourists etc);
  vi. Overall bulk and scale of the proposal;
  vii. 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.

- **Effectiveness of Landscape Framework**

  - A rating will be given as to the effectiveness of the proposed landscape treatment in integrating the plan change into the landscape or filtering views from local roads, residential viewpoints or properties in the vicinity of the site. This is acknowledged and described in relation to each individual viewpoint.

Visual Effects and effects on rural character have been considered using a five point scale including very low; low; moderate; high and very high. By way of explanation:

- Potential effects that are **low to very low** in degree are generally appropriate in a given setting. These sorts of effect do not generally require additional mitigation measures.
- A **moderate** degree of potential effect is notable without being significant and is generally appropriate in a given setting. The inclusion of additional mitigation measures, such as integrative screen vegetation has the ability to reduce effects further and in some instances to a notable degree.
- A **high or very high** degree of potential effect is significant. In general, a high degree of effect is likely to represent an inappropriate development[1] however, there is potential for additional mitigation to reduce effects to a lower degree.

Given there is a level of subjectivity in assessing where a proposal fits along this spectrum of effects this scale is not to provide a specific mathematical 'score' but more to provide a useful way of describing the degree of landscape change and/or visual effect when considering the overall appropriateness of a proposal.

5.2 Development scenario

The following potential development scenario has been modelled in 3D to provide an understanding of the increased bulk and scale of the Tatua plant and the integration of a landscape framework (see **Appendix 2**).

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

Illustrative sketches (see **Appendix 3**) of this model are provided for each viewpoint in the effects analysis (section 5.3) below.

5.2.1 Buildings

The proposed plan change will provide for the development of the Tatua factory overtime and for the purposes of this assessment the following built features have been assumed to represent the full development scenario for the DCP, and will be finished in accordance with the building height, setback and external appearance controls listed in Section 2.2 above.

- Six (6) warehouse/dry store and associated environment load out areas.
- Four (4) dryer towers. Maximum 35m high.
- Four (4) boilers and two (2) boiler stacks
- Processing facilities and ancillary buildings
- Waste water treatment facility
- Administration building
- Farm supply outlets
- Transport thoroughfare and associates yards with asphalt/loose aggregate finish providing for on-site parking of milk trucks.

5.2.2 Landscape Framework

Together the DCP – landscape plan (including cross sections) and Rules pertaining to landscape planting illustrate the nature of the landscaping and how it will be implemented over time. All landscape treatment is located within the DCP and is illustrated in **Appendix 1**

Area A – located along the northern boundary of the site (see Appendix 1 sheet 6). The key attributes of this planting area are:

- Planting includes low native amenity planting adjacent to the existing factory edge, a double row shelter belt using both evergreen and deciduous species and a mixed woodlot adjacent to the undeveloped northern boundary and access road to SH27.
- Dimensions are 5m wide and approximately 210m long.
- The implementation of this planting will be immediately (ie. first planting season) following the construction of any buildings in area A – northern-eastern corner of the site. It is anticipated that the amenity planting will reach 3-4m in height and the woodlot and shelterbelts 8 – 10m in height in 10 years.
- The purpose of this area of planting is to filter views and soften the increase in bulk and scale of the factory from Tatuanui School and Hall, and the SH26 / 27 intersection

Area B – located along part of the eastern boundary of the site (see Appendix 1 sheet 6). The key attributes of this planting area are:

- Planting includes a mixed woodlot and double row shelter belt using both evergreen and deciduous species adjacent to the undeveloped eastern boundary and access road to SH27.
- Dimensions are 5m wide and approximately 130m long.
- The implementation of this planting will be immediately (ie. first planting season) following the construction of any buildings in area B – north-eastern corner of the site. It is anticipated that both types of planting with reach 8 – 10m in height in 10 years.
- The purpose of this area of planting is to filter views and soften the increase in bulk and scale of the factory from SH27 and nearby residences.

Area C – located along part of the eastern boundary of the site (see Appendix 1 sheet 6). The key attributes of this planting area are:

- Planting includes a mixed woodlot and double row shelter belt using both evergreen and deciduous species adjacent to the undeveloped eastern boundary.
- Dimensions are 5m wide and approximately 180m long.
- The implementation of this planting will be immediately (ie. first planting season) following the construction of any buildings in area C – northern-eastern corner of the site.
- The purpose of this area of planting is to filter views and soften the increase in bulk and scale of the factory from SH27, Cussens Road, and nearby residences.

Area D – located along the south-eastern and southern boundary of the site (see Appendix 1 sheet 6). The key attributes of this planting area are:

- Planting includes two separate areas - a mixed woodlot and double row shelter belt using both evergreen and deciduous species adjacent to the undeveloped eastern boundary and riparian planting interspersed with woodlots along the part of the tributary that demarcates the southern boundary.
- Dimensions are 5m wide for shelterbelt and woodlots and approximately 100m long. Dimensions for the riparian planting are 4.5m wide and approximately 250m long.
- The implementation of this planting will be immediately (ie. first planting season) following the construction of any buildings in area D – northern-eastern corner of the site.
- The purpose of this area of planting is to filter views and soften the increase in bulk and scale of the factory from SH27, Cussens Road, and nearby residences.

Area E – located along the southern boundary of the site (see Appendix 1 sheet 8). The key attributes of this planting area are:

- Planting riparian planting interspersed with woodlots along the part of the tributary that demarcates the southern boundary.
- Dimensions for the riparian planting are 4.5m wide and approximately 330m long.
- The implementation of this planting will be immediately (ie. first planting season) following the construction of any buildings in area E or F – southern extent of the site adjacent SH26.
- The purpose of this area of planting is to filter views and soften the increase in bulk and scale of the factory from Brown Road and nearby residences.

Area F – located adjacent to SH26 and Brown Road (see Appendix 1 sheet 8). The key attributes of this planting area are:

- Planting includes two separate areas - low native amenity planting adjacent to SH26 and mixed woodlot adjacent to the intersection of SH26 and Brown Road. A mixed woodlot is also located adjacent to the intersection of Brown Road and new factory access way.
- Dimensions are 5m wide and approximately 300m long.
- The implementation of this planting will be immediately (ie. first planting season) following the construction of any buildings in area F – south-western corner of the site. It is anticipated that the amenity planting will reach 3-4m in height and the woodlot 8 – 10m in height in 10 years.
- The purpose of this area of planting is to filter views and soften the increase in bulk and scale of the factory from SH26, Brown Road and nearby residences.

Area G – located along the western boundary of the site adjacent to the railway (see Appendix 1 sheet 7). The key attributes of this planting area are:

- Planting includes a sequence of mixed woodlots along the western boundary and a grove of deciduous or evergreen canopy trees along the north-west boundary (adjacent to the railway).
- Dimensions for the woodlot are 5m wide and approximately 180m long and an grove (Quercus robur or similar) are 25m wide (planted at 15m centres).
- The implementation of this planting will be immediately (ie. first planting season) following the construction of any buildings in area F – south-western corner of the site. It is anticipated that the woodlot will reach 8 – 10m in height and the grove 7 – 8m in 10 years.
- The purpose of this area of planting is to filter views and soften the establishment of administration and farms outlet buildings from SH26, Brown Road and nearby residences.

5.3 Effects Analysis

The following viewpoint evaluations analyse and summarise the rural character, visual considerations, and landscape framework listed above. Each viewpoint evaluation (below onwards) concludes with an overall impact rating.

Viewpoint 1. SH26 (west) opposite 3311 SH26 (see **Appendix 3** sheet 7).

Rural Character Effects:

Low / Moderate – views from this sector reveal an open sequence of pasture, cultivated fields, the existing Tatua plant, framed by a sequence of shelterbelts and other pockets of exotic trees which are the dominant 'cultural' elements in this managed landscape. It is also largely devoid of any residual natural elements or features with the exception of the jagged profile of the Kaimai Range on the horizon.

The increased scale and mass of the Tatua plant is notable as shown in the illustrative sketch. Its rural industrial scale has the potential to dominate the local landscape. This would inevitably add to the modification of its environment, and, in so doing, would exacerbate the working nature of the landscape.

The landscape framework planting provides a noticeable counterpoint to the rural industrial character of the expanded Plant and builds on the existing vegetation network that is a key characteristic of the wider landscape.

Visual Effects:

Low / Moderate – from this vantage point there are clear views of the existing Tatua plant approximately 680m away. The plan change would extend the Plant south toward this viewpoint to within 420m (approximately) increasing its prominence which is also exacerbated by the open nature of the foreground. The built profile of the Plant would be similar to the existing Plant and add to the busy visual appearance of the site – particularly the additional dryer towers. Key mitigating factors are the background of the Kamai Range rising well above the factory profile, future development is seen in context with the established Plant, and the filtering and grounding of views toward the Plant by intervening vegetation (both existing and proposed). In addition, the long term development of the Plant (anticipated 320 years) will be incremental where new buildings and structures will appear on a 'slow and steady basis'. Short term visual effects on this

viewpoint and nearby residents will be moderate in the short term reducing to low once the landscape framework planting matures.

Effectiveness of Landscape Framework:

Low / Moderate – from this viewpoint the landscape framework serves to 'ground' the bulk and mass of the Plant as a whole. As the woodlots mature they will completely obscure portions of the Plant, yet allow viewshafts through the site to create depth and texture in the overall scene. The amenity planting along the SH26 road frontage grounds and lower profile buildings and increasingly softens their built form when travelling north towards the site.

Overall Impact Rating: Low / Moderate

Viewpoint 2. Corner of SH26 (west) and Brown Road (see **Appendix 3** sheet 8).

Rural Character Effects:

Low – this viewpoint represents close up views approaching the site from SH26. The view reveals open pasture in the foreground of the existing Tatua plant which rises above the profile of the Kaimai Range. The working nature of this view is reinforced by the prominence of the existing Plant, shelterbelts, exposed earthworks, and open pasture which are the dominant elements in this managed landscape.

The increased scale and mass of the Tatua plant is notable as shown in the illustrative sketch, though it is largely concealed behind the 4m high strip of amenity planting fronting on to SH26. During the establishment of this planting, which will take some 6 -8 year to mature, the lineal sequence of rural industrial scale buildings along SH26 (approximately 700m in length) will be particularly prominent, the effects of which will be moderate in the short term. Overtime the landscape framework planting will provide a significant counterpoint to the rural industrial character of the expanded Plant. As a result the long terms effects of the Plan Change on this viewpoint will be Low.

Visual Effects:

Low / Moderate – while the existing plant is already a dominate feature from close up views along SH26 the resulting sequence of buildings along SH26 towards Brown Road will clearly exacerbate the presence of the Plant. Similarly the development of farm supply buildings on the western side of SH26 will also contribute to the prominence of the Tatua site, albeit of a much lesser scale.

Similar to Viewpoint 1, the incremental development of the site will limit the extent of impact overall, allowing different components of the landscape framework to establish while different areas of the site are built on.

The proposed amenity planting along the eastern side of SH26 introduces a notable vertical green component and almost completely screens out the lower warehouse buildings adjacent.

Short term visual effects on this viewpoint and nearby residents will be moderate in the short term reducing to low once the landscape framework planting matures.

Effectiveness of Landscape Framework:

Moderate – from this viewpoint the landscape framework almost completely screens out the built form of the expanded Plant to the east of SH26. It is acknowledged, however, that this planting will take some 8 – 10 years to achieve a height and density that will have a similar screening affects as illustrated in the Viewpoint Sketch. In the short term, this planting will 'ground' the bulk and mass of the Plant and filter views towards it.

Overall Impact Rating: Low / Moderate

Viewpoint 3. SH27 (north) near the intersection of SH27 and SH26 (see **Appendix 3** sheet 9).

Rural Character Effects:

Very Low – this viewpoint encapsulates views from those travelling south along SH27, the primary focus of which is the transport corridor and intersection with SH26. It is only at this point that the Tatua plant is revealed, as it is screened by a large grove of oaks from views along SH27 to the north. The landscape scene is dominated by roading infrastructure in the foreground and is framed by groups of established trees, the existing Plant and distant hillcountry on the skyline. In this vein, the existing Plant does not appear out of context or scale within its surrounds, nor does it disrupt the patterns and characteristics of the local landscape. It appears from the illustrative sketch that the bulk of the warehousing and ancillary buildings will be entirely screened by existing intervening vegetation alongside SH26 and within several properties as well as proposed shelterbelt planting along the northern boundary. The Dryer towers appear as the only visible component of the plan change, rising well above vegetation in the mid ground of views from this location. The additional visibility of the Dryer towers amplifies the presence of the Plant; however, the typical rural characteristics of the local area will continue to dominate.

Visual Effects:

Low – while the majority of the plan change components are screened from view and will occur with no effect to views from this sector, the additional dryer towers project well above any notable background and generate built form skyline that increases the overall prominence of the Plant. However, there are a number of mitigating factors that reduce the overall effect of the Dryers including that views are generally orientated to the south away from the site and existing Plant, the Dryers are viewed in the context of the

existing Plant, the existing and proposed vegetation 'grounds' the buildings reducing their overall scale, and that there is a certain conditioning to builtform being co-located around existing factories and Tatuanui as a development node.

Effectiveness of Landscape Framework:

Moderate – from this viewpoint the landscape framework almost completely screens out the built form of the expanded Plant to the south. The shelterbelt planting also functions as a secondary layer of screening in the event that existing vegetation in removed in the foreground.

Overall Impact Rating: Low

Viewpoint 4. SH27 (south) opposite 4543 SH27 (see **Appendix 3** sheet 10).

Rural Character Effects:

Low – views from this sector reveal an open sequence of pasture, framed by the existing Tatua plant which are the dominant 'cultural' elements in this managed landscape. It is also largely devoid of any residual natural elements or features.

With the exception of the Dryer towers, the increased scale and mass of the Tatua plant isn't particularly notable as shown in the illustrative sketch despite the Plant encroachment towards this viewpoint by approximately 100m. This is largely due to a lack of intervening elements in the foreground, flat terrain, and lineal massing of the existing plant which encompasses the majority of the view.

Clearly the additional Dryers and development to the south of the existing plant would increase the Plants rural industrial scale; however this is seen as largely incremental given the dominance of the existing Plant from views within this sector.

That said, the landscape framework planting provides a noticeable counterpoint to the rural industrial character of the existing and expanded Plant and builds on the existing vegetation network that is a key characteristic of the wider landscape. This is seen as a positive effect given the visibility and dominance of the existing Plant.

Visual Effects:

Moderate – clear views are obtained of the existing Tatua plant from this vantage point and much of the SH27 corridor in the vicinity. The existing Plant viewed 'side on' from this vantage point is particularly dominant. This is exacerbated by the absence of any intervening vegetation and flat terrain in the foreground of such views. While the expansion of the Plant towards SH27 represents a significant increase in scale and mass, this would be seen in the context of the existing plant which acts as a key mitigating factor when analysing the extent of visual intrusion. Again, the Dryer towers remain the key visual components of the future plan change due to their height and bulk. In particular they project well above any notable background and dominate the skyline

Similar to Viewpoint there are a number of mitigating factors that reduce the overall effect of the Dryers. This includes that views are generally orientated to the north - south away from the site and existing Plant, the Dryers are viewed in the context of the existing Plant and are located approximately 350m from SH27, the existing and proposed vegetation 'grounds' the buildings reducing their overall scale, and that there is a conditioning to builtform being co-located around existing factories and Tatuanui as a development node.

Effectiveness of Landscape Framework:

Low / Moderate – from this viewpoint the landscape framework serves to 'ground' the bulk and mass of the Plant as a whole. As the sequence of shelterbelt and woodlots mature they will obscure the lower portions of the Plant, yet allow viewshafts through the site to create depth and texture in the overall scene.

Overall Impact Rating: Moderate

Viewpoint 5. Corner of SH27 and Cussens Road (see **Appendix 3** sheet 11).

Rural Character Effects:

Low / Moderate – views from this sector reveal an expansive area of open pasture in the foreground, framed by the existing Tatua Plant, oak grove, and distant farmland and hill country beyond. The expansion of the Plant to the south is particularly noticeable from this vantage point as it is viewed 'side on'. The expansion to the south will increase the visible scale of the Plant and reads as a lineal strip of built form. As a result additional Dryers and development to the south of the existing plant would increase the its rural industrial scale; however this is seen as largely incremental given the dominance of the existing Plant from views within this sector.

The landscape framework planting provides a noticeable counterpoint to the rural industrial character of the expanded Plant and builds on the existing vegetation network that is a key characteristic of the wider landscape. This is seen as a positive effect given the lack of existing intervening vegetation that would otherwise help to break up and soften the bulk of the Plant.

Visual Effects:

Low – clear views are obtained of the existing Tatua plant from this vantage point. The existing Plant viewed 'side on' from this vantage point is particularly prominent, albeit at a distance of 1.2km. Given the backdrop of the existing Plant, visual effects from this viewpoint are largely limited to the additional dryer towers and building to the south of the existing Plant.

There are a number of mitigating factors that reduce the visual effect of these components. This includes distance of 1.2km to the Plant, additional development is seen the context of the existing Plant, the profile and scale of the existing and future Plant is grounded by the oak grove and distant hill country in behind. In addition, the landscape framework obscures the lower

portions of the Plant and provides a soft edge to what is a lengthy strip of built form development.

Effectiveness of Landscape Framework:

Moderate – from this viewpoint the landscape framework serves to 'ground' the bulk and mass of the Plant as a whole and provides a notable green component to the plan change and local landscape which was previously absent. As the sequence of shelterbelt and woodlots mature they will obscure the lower portions of the Plant, yet allow viewshafts through the site to create depth and texture in the overall scene.

Overall Impact Rating: Low / Moderate

5.4 Summary of Findings

Table 1 summarises the ratings for the five viewpoints:

Table 1 Viewpoint Ratings Summary

Viewpoint:	*Effects on Rural Character*	*Visual Effects:*	*Effectiveness of mitigation*	***Impact Rating:***
1. SH26 (west) opposite 3311 SH26	*Low / Moderate*	*Low / Moderate*	*Low / Moderate*	***Low / Moderate***
2. Corner of SH26 (west) and Brown Road	*Low*	*Low / Moderate*	*Moderate*	***Low / Moderate***
3. SH27 (north) near the intersection of SH27 and SH26	*Very Low*	*Low*	*Moderate*	***Low***
4. SH27 (south) opposite 4543 SH27	*Low*	*Moderate*	*Low / Moderate*	***Moderate***
5. Corner of SH27 and Cussens Road	*Low / Moderate*	*Low*	*Moderate*	***Low / Moderate***

5.4.1 Rural Character Effects

Based on the development scenario described in section 5.2 above, the proposed plan change will mean that over the next 30 years the existing Tatua plant has the potential to double in size. As a function of increased size and scale the Plant will become more prominent and its rural-industrial scale has the potential to over-dominate the wider landscape. A key mitigating factor of the Plant's potential to dominate, is the introduction of a comprehensive landscape framework that encompasses entire site. The 'greening' of the sites edges will provide noticeable counterpoint to the rural industrial character of the expanded Plant and builds on the existing vegetation network that is a key characteristic of the wider landscape. This is seen as a positive effect given the lack of existing intervening vegetation that would otherwise help to break up and soften the bulk of the Plant.

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 the overriding perception of the Plan Change site and its vicinity will continue to be rural-industrial.

In terms of loss of 'undeveloped' rural land the proposal includes a relatively small block of pasture to the south and east of the existing factory. Whilst the character of this new site will clearly change it will not

significantly affect the wider productive land use or associated rural character of the local landscape in an adverse way.

Notwithstanding the above, the overall appearance of the local landscape will continue to reflect the character of the wider rural landscape across the Hauraki Plains, which is characterised by open pasture, expansive views towards the Kaimai Ranges and distant hill country, punctuated by shelterbelts and large stands of trees.

5.4.2 Visual Effects

The overall visual effects on surrounding farm houses and local roads will be low to moderate.

The development scenario appeared most prominent in 'side on' views along SH27 in close proximity to the site. However, given the backdrop of the existing Plant, visual effects from this viewpoint are largely limited to the additional dryer towers and buildings to the south of the existing Plant. From several viewpoints the 35m high dryer towers project well above any notable background and generate built form skyline that increases the overall prominence of the Plant. Key mitigating factors include the orientation of views from residences and road users away from the site, the existing and proposed vegetation 'grounds' the buildings reducing their overall scale, and the Dryers are viewed in the context of the existing Plant which creates a certain conditioning to additional built form being co-located around existing factories and Tatuanui as a development node.

Overall, the establishment and growth of the proposed landscape framework will help to screen the lower portions of the Plant overtime and 'ground' the increased building mass. The future expansion of the Plan Change will be viewed in the context of the existing Plant and its current continuous operating hours.

6 Conclusions

The proposed Plan Change replaces the existing Development Concept Plan (DCP) in the District Plan, and is intended to provide sufficient space for the future development of the existing Tatua plant.

The size of the DCP is generically based on a future development scenario which anticipates, as the maximum scale of development that would occur at this site, up to four dryers with associated drystores and processing facilities, administration/office buildings, roading and servicing. The DCP is the key mechanism for achieving integrated management of the site. This shows the extent of the DCP, 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 DCP – Landscape, attached as **Appendix 1**, includes provision for landscape treatment the key elements of landscape treatment and staging over time is also illustrated. There are seven landscape treatment areas in total. Areas A – G will be implemented once a building is constructed within their corresponding building zones.

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

An assessment of landscape and visual effects is provided under Section 5.3 of this report. 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.

The overall effects on **rural character** within the plan change site and local landscape will be **low to low/moderate** in degree. The proposed DCP will not adversely affect the rural character of the wider rural landscape and the proposed DCP 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 processing facilities in the district.

The overall **visual effects** on surrounding farm houses and local roads will be **low to moderate.** While the prominence of the Plant will increase, the establishment and growth of the proposed landscape framework overtime will help to soften the appearance of the Plant and 'ground' the increased building mass. In addition, the Plant's future expansion will be viewed in the context of the existing Plant and its current continuous operating hours.

The proposed DCP will enable a potential increase in the overall scale of the existing Tatua [lant 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 specifically through the establishment of controls of building size and location on the site, retention of the southern portion of the site as open pasture, with the exception of buildings & structures associated with wastewater treatment, and through the proposed landscape framework.

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 will be significantly reduced.

Overall, with regard to the criteria outlined in section 5.1 and the rural character and amenity provisions within Matamata Piako District Plan it is considered that the proposed Tatua Plan Change is – subject to the proposed DCP landscape framework – acceptable from a landscape and visual perspective.

TATUA PLAN CHANGE

LANDSCAPE AND VISUAL ASSESSMENT : APPENDICES 1 - 3

Prepared for TATUA by Beca Ltd
DECEMBER 2017

Revision History

Revision No.	Prepared By	Description	Date
A	Anne Lassé, Ben Frost and Kate McNeill	For Internal Review	February 2016
B	Ben Frost	For Client Review	February 2016
C	Ben Frost and Saskia Bottenberg	Final	April 2016
D	Anne Lassé	Final	July 2016
E	Anne Lassé	Final	August 2016
F	Emma Stiven	Update Appendix 1 DCP Plans	September 2017
G	Corinne Frischknecht	Update Appendix 1 DCP Plans	December 2017

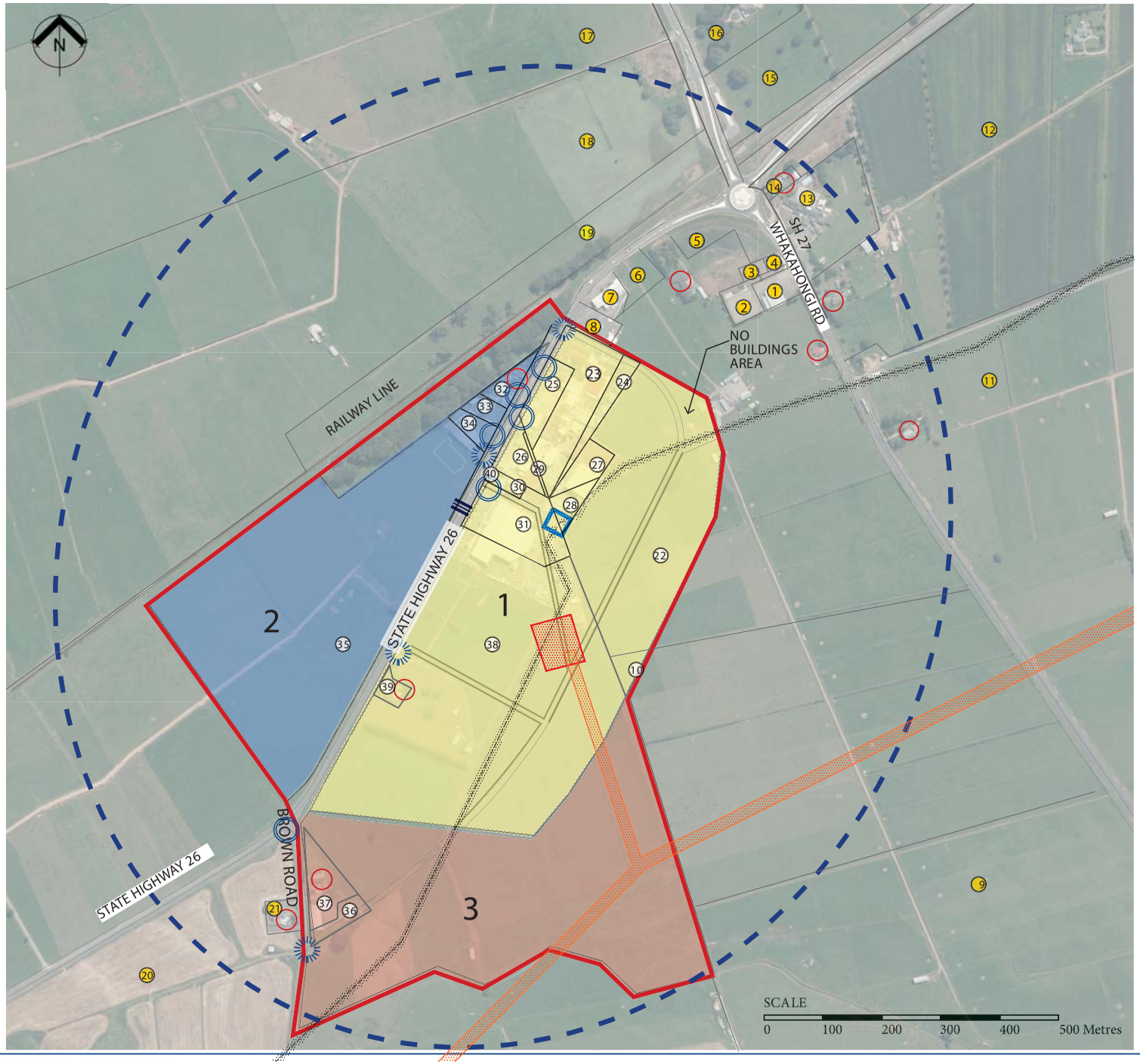
Document Acceptance

Action	Name	Signed	Date
Prepared by	Anne Lassé, Ben Frost and Kate McNeill		December 2017
Reviewed by	Wade Robertson		December 2017
Approved by	Richard Douch		December 2017
on behalf of Beca Ltd.			

This document should be printed at A3.

Images in this document: Unless otherwise noted, drawings, illustrations, photos and other images have been provided directly by Beca. In all other instances, best efforts have been made to reference the image to its original source.

APPENDIX 1 - PROPOSED DEVELOPMENT CONCEPT PLAN



KEY

- Development Area 1 - Manufacturing and Processing Activities
- Development Area 2 - Support Activities
- Development Area 3 - Wastewater and Stormwater
- Noise Emission Control Boundary (NECB)
- Property Boundaries
- Existing Dwellings inside NECB as at 1 December 2017
- DCP Boundary

Powerco

- Site
- Sub Trans Underground Cable Corridor

Vector Gas

- Gas Pipeline & Corridor
- Gas Station Site

PROPOSED ACCESS

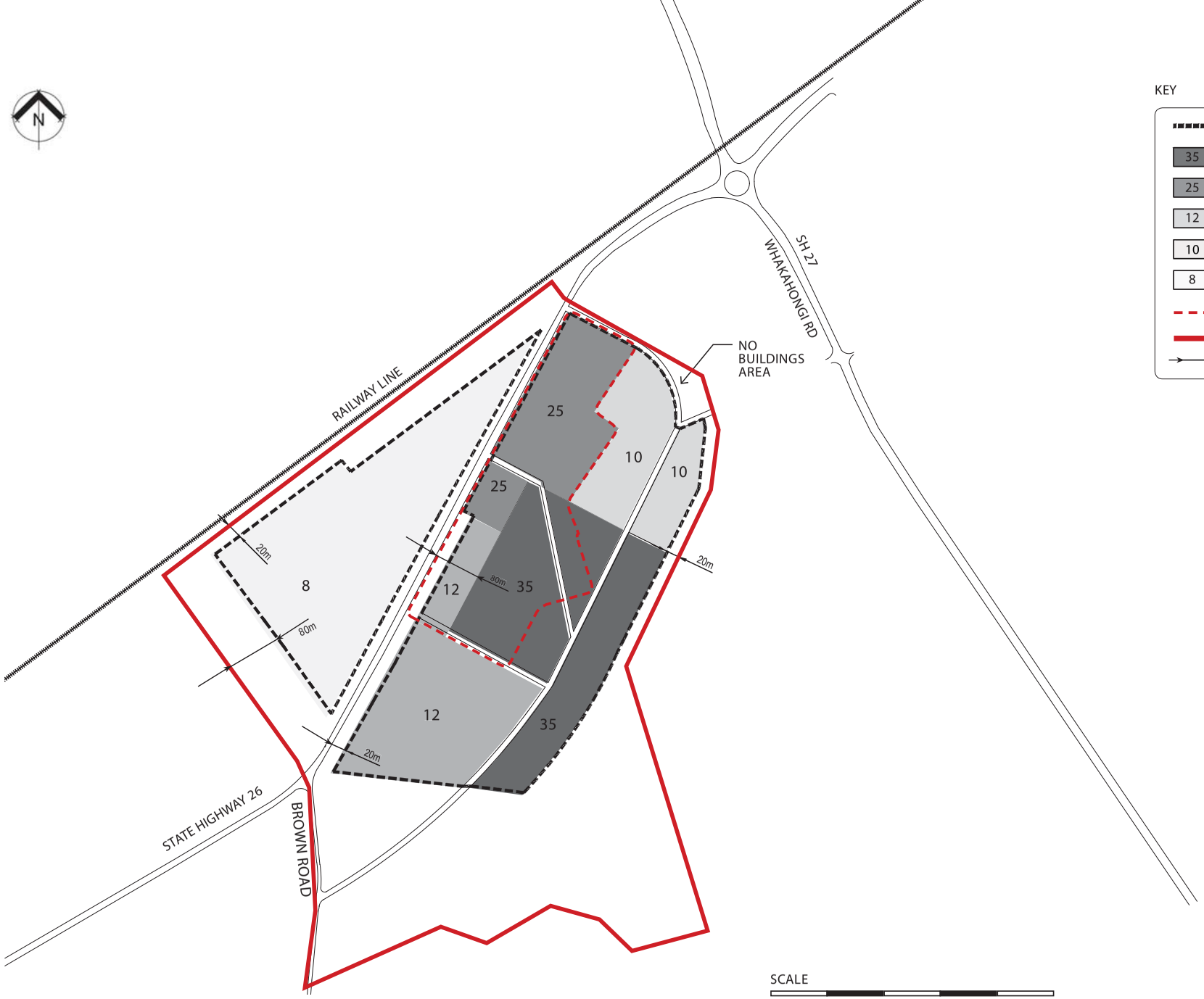
- Existing Access
- Possible Future Access
- Possible Pedestrian Underpass

LEGAL DESCRIPTION

Outside of DCP / Inside the DCP

1. Section 21 SO 468539
2. Section 19 SO 468539
3. Section 17 SO 468539
4. Section 8 SO 468539
5. Section 16 SO 468539
6. Section 14 SO 468539
7. Lot 1 DPS 8607
8. Part Lot 1 DP 9358
9. Lot 3 DP 14236
11. Lot 2 DP25518
12. Section 18 SO 468539
13. Pt Lot 4 DP 14236
14. Lot 1 DPS 38971
15. Part Te Kahia Block
16. Lot 1 DPS 7021
17. Section 11 SO 468539
18. Section 12 SO 468539
19. Section 13 SO 468539
20. Pt lot 5 DP 9358
21. Lot 1 DPS 19332
10. Lot 2 DP 14236
22. Section 15 SO 468539
23. Lot 1 DP 12404
24. Lot 1 DPS 11186
25. Part Tatuaohaua 1 Block
26. Lot 1 DPS 68
27. Lot 1 DPS 16815
28. Lot 2 DPS 33988
29. Part Lot 2 DP 12404
30. Lot 1 DPS 3109
31. Lot 1 DPS 33988
32. Part Lot 3 DP 12471
33. Lot 2 DPS 41895
34. Lot 3 DPS 41895
35. Part lot 3 DP 9358
36. Lot 1 DPS 57607
37. Lot 2 DPS 57607
38. Lot 2 DPS 71013
39. Lot 1 DPS 35994
40. Section 1 SO 414767

Note: For underlying zone, refer to Planning Map 25 in the District Plan


N
KEY
Height Control Zone
35
35m Height Restriction Zone
25
25m Height Restriction Zone
12
12m Height Restriction Zone
10
10m Height Restriction Zone
8
8m Height Restriction Zone
Existing Development Area
DCP Boundary
Setback
RAILWAY LINE
SH 27
WHAKAHONGI RD
NO
BUILDINGS
AREA
25
10
10
25
20m
8
80m
12
35
80m
20m
12
35
20m
STATE HIGHWAY 26
BROWN ROAD
SCALE
0
100
200
300
400
500 Metres

Scale 1:5000 @ A3

KEY

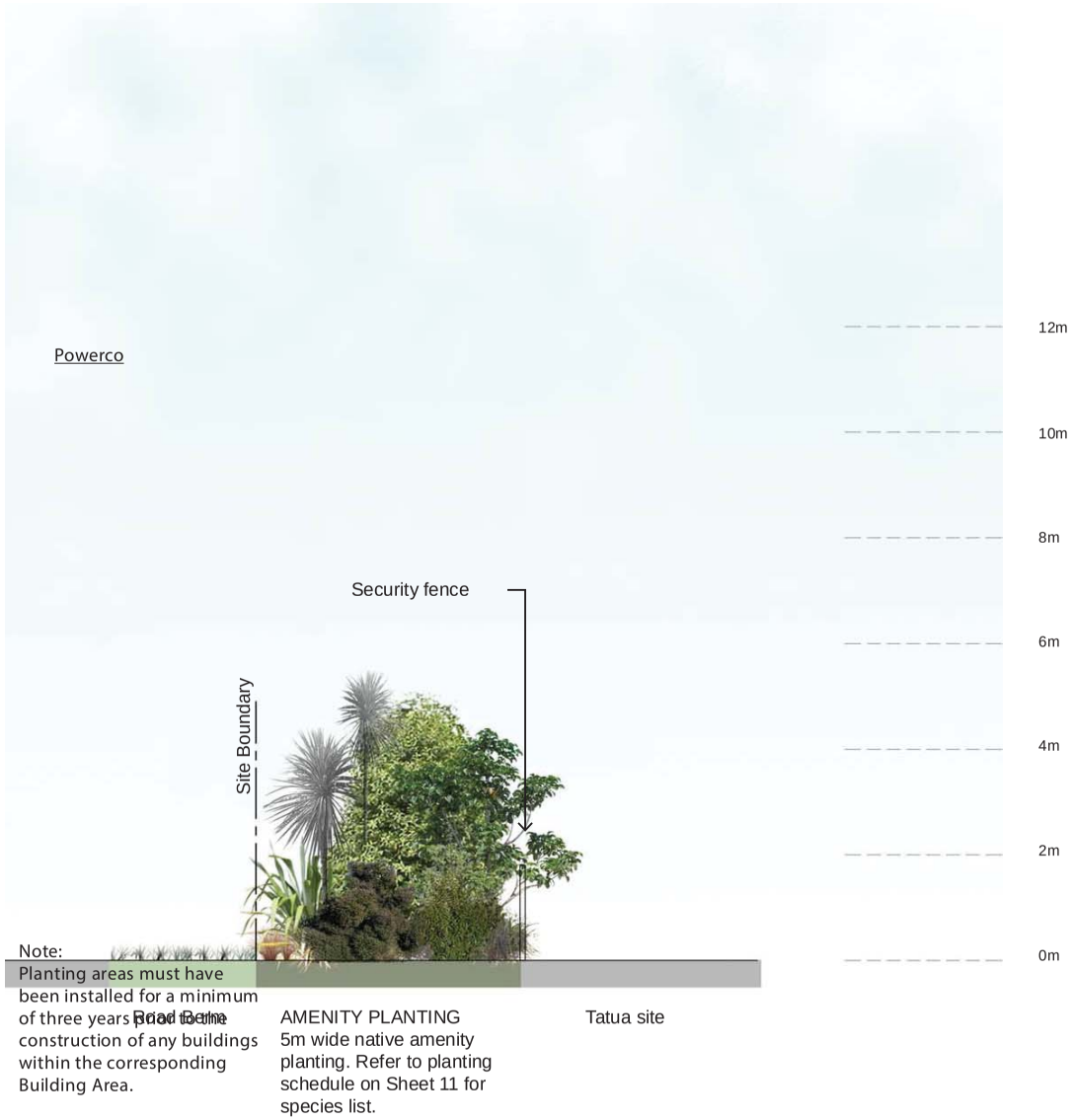
A	Building Area A	A	Planting Area A
B	Building Area B	B	Planting Area B
C	Building Area C	C	Planting Area C
D	Building Area D	D	Planting Area D
E	Building Area E	E or F	Planting Area E/F
F	Building Area F	F	Planting Area F
G	Building Area G	G	Planting Area G
	DCP Boundary		

PROPOSED PLANTING

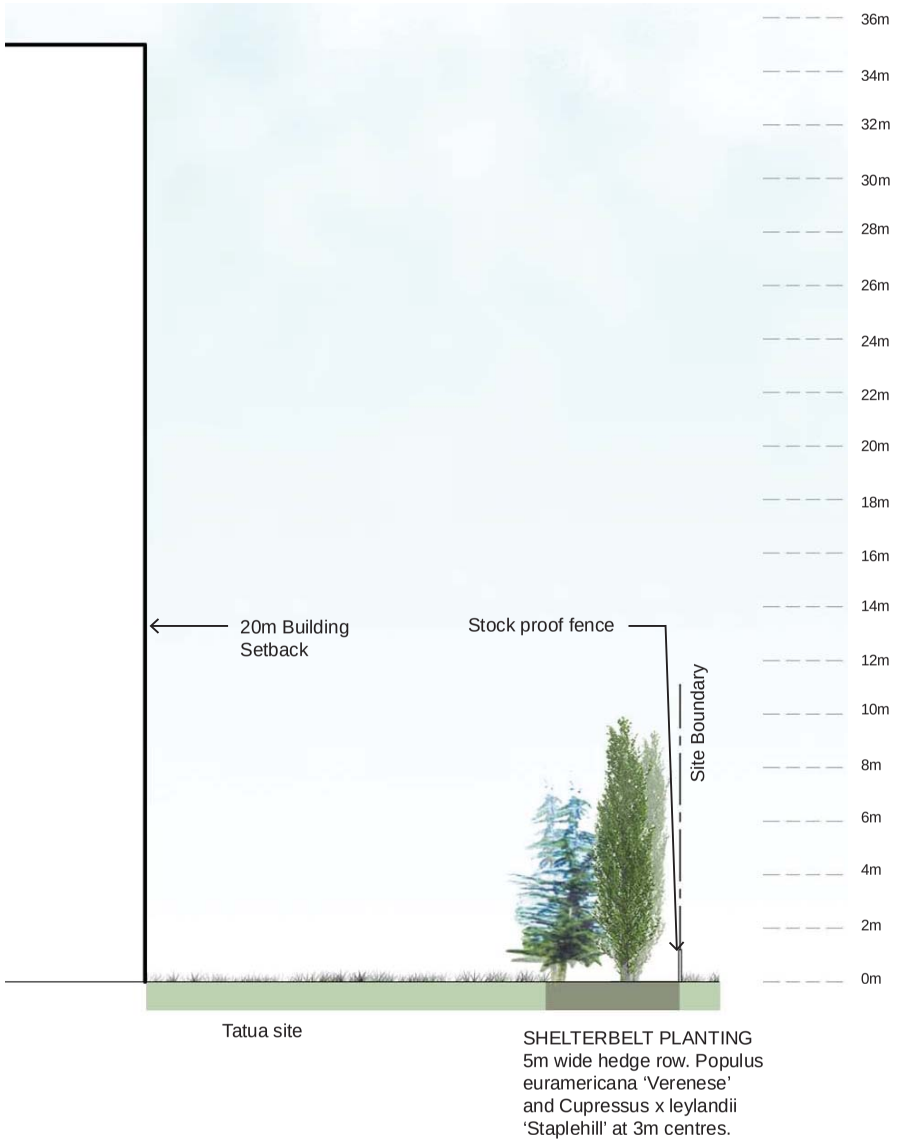
aa		Amenity Planting
bb		Shelterbelt Planting
cc		Northern Boundary Grove
dd		Riparian Planting
dd		Woodlot Planting
x	x	Cross sections (see Attachment C)

NOTE:
- Planting to be implemented as per Staging Plan.
- Planting in all staging areas must be established in the nearest planting season immediately following completion of construction of any new buildings within the designated 'building area'.
- See cross-sections for further detail on width of planting and indicative landscape outcomes in Attachment C.

DW	Domestic wastewater treatment area
WW & SW	Wastewater and stormwater treatment area (to remain inpasture except where required for tanks/structures/ processing facilities for the purposes of wastewater and stormwater treatment.



CROSS SECTION aa - AMENITY PLANTING
5 Years Vegetation Growth
Scale 1:100 @ A3



CROSS SECTION bb - SHELTERBELT BOUNDARY
5 Years Vegetation Growth
Scale 1:200 @ A3

CROSS SECTION cc - NORTHERN BOUNDARY GROVE
5 Years Vegetation Growth
Scale 1:200 @ A3

WOODLOT PLANTING
3m wide woodlot planting. Refer to planting schedule on Sheet 11 for species list

RIPARIAN PLANTING
4.5m wide riparian planting. Refer to planting schedule on Sheet 11 for species list list.

CROSS SECTION dd - RIPARIAN AND WOODLOT PLANTING

Scale 1:100 @ A3

INDICATIVE PLANT LIST

	BOTANICAL NAME	COMMON NAME	GRADE	SPACING
aa	AMENITY PLANTING			
	Cordyline australis	Te Kouka, Cabbage Tree	1L	1m
	Leptospermum scoparium	Manuka	2L	1m
	Muehlenbeckia astonii	Shrubby Tororaro	1L	1m
	Phormium cookianum	Harakeke	1L	1m
	Pittosporum tenuifolium	Black Matipo	1L	1m
bb	SHELTER BELT PLANTING			
	Populus euramericana 'Veronese'	Poplar	Bareroot (min 1.5m high)	3m
	Cupressus x leylandii ' Staplehill'	Cypress	PB12 (min 1.5m high)	3m
cc	NORTHERN BOUNDARY GROVE			
	Quercus robur	English Oak	PB12 (min 1.5m High)	15m
dd	RIPARIAN PLANTING			
	Carex secta	Purei	0.5L	1m
	Cordyline australis	Te Kouka, Cabbage Tree	1L	1m
	Dacrycarpus dacrydioides	Kahikatea	2L	10m
	Leptospermum scoparium	Manuka	2L	3m
	Phormium tenax	Harakeke	1L	1m
dd	WOODLOT PLANTING			
	Fraxinus angustifolia 'Raywood'	Ash	PB12 (min 1.5m high)	3m
	Liquidambar styraciflua	Liquidambar	PB12 (min 1.5m high)	3m
	Poplar 'Kawa'	Poplar	PB12 (min 1.5m high)	3m

APPENDIX 2 - PLAN CHANGE DEVELOPMENT SCENARIO

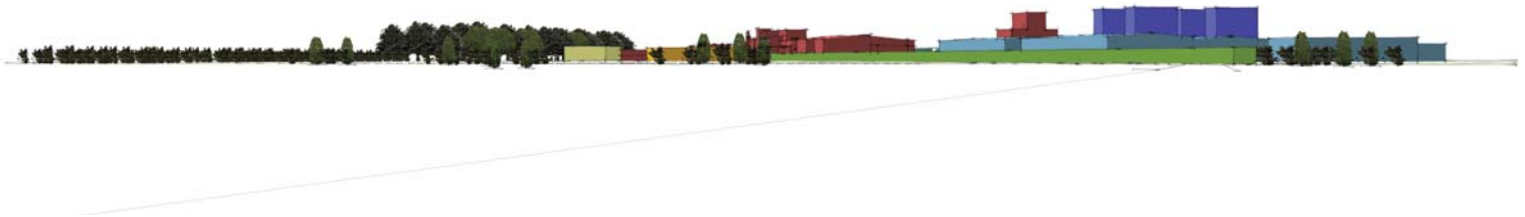
ITEM	BUILDING FLOOR AREA (M2)	MAX HEIGHT (M)
EXISTING BUILDINGS	-	-
FUTURE BUILDINGS (WAREHOUSE)	10,800	10
FUTURE BUILDINGS (WAREHOUSE)	20,400	12
FUTURE BUILDINGS (DRYER TOWER)	4,000	35
FUTURE BUILDINGS (WASTE WATER TREATMENT PLANT	15,000	10
FUTURE BUILDINGS (ADMINISTRATION BUILDING)	1,200	8
FUTURE BUILDINGS (FARM SUPPLY OUTLETS)	11,400	8

APPENDIX 3 - VIEW POINTS AND CONTEXT PHOTOGRAPHS

KEY

- Plan Change Boundary
- Viewpoints
- Context Photographs

VIEWPOINT 1 - Looking east along SH26 opposite no. 3311B SH26 (existing photograph)

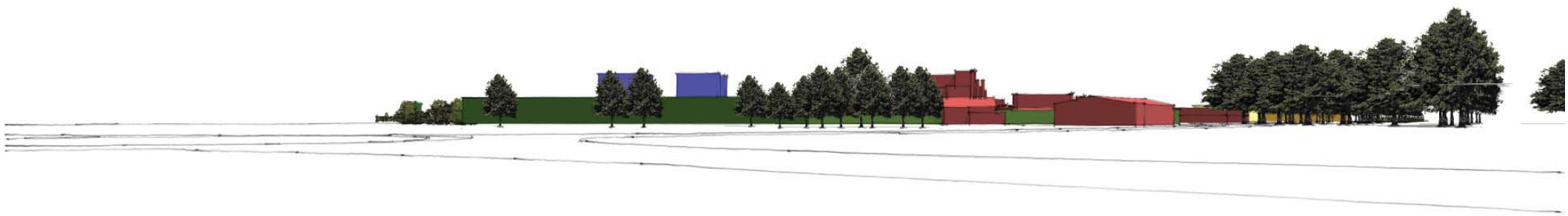


VIEWPOINT 1 - Looking east along SH26 opposite no. 3311B SH26 (illustrative sketch)
(Note: planting shown after 10 years growth)

VIEWPOINT 2 - Looking east along SH26 opposite the corner of SH26 and Brown Road (existing photograph)

VIEWPOINT 2 - Looking east along SH26 opposite the corner of SH26 and Brown Road (illustrative sketch)
(Note: planting shown after 10 years growth)

VIEWPOINT 3 - looking south along SH27 near the intersection of SH27 and SH26 (existing photograph)



VIEWPOINT 3 - looking south along SH27 near the intersection of SH27 and SH26 (illustrative sketch)
(Note: planting shown after 10 years growth)

VIEWPOINT 4 - Looking west from SH27 opposite no. 4543 SH27 (existing photograph)

VIEWPOINT 4 - Looking west from SH27 opposite no. 4543 SH27 (illustrative sketch)
(Note: planting shown after 10 years growth)

VIEWPOINT 5 - Looking north from the corner of SH27 and Cussens Road (existing photograph)

VIEWPOINT 5 - Looking north from the corner of SH27 and Cussens Road (illustrative sketch)
(Note: planting shown after 10 years growth)

CONTEXT PHOTOGRAPH 6 - Looking northeast opposite no. 11 Brown Road towards Tatua

CONTEXT PHOTOGRAPH 7 - Looking northeast opposite no. 105 Brown Road towards Tatua

CONTEXT PHOTOGRAPH 8 - Looking southeast opposite no. 176 Winton Road towards Tatua

CONTEXT PHOTOGRAPH 9 - Looking southeast opposite no. 6 Winton Road towards Tatua

CONTEXT PHOTOGRAPH 10 - Looking southwest towards Tatua from SH27 opposite Tatuanui School

CONTEXT PHOTOGRAPH 11 - Looking southwest from SH26 near the northern boundary of Tatua Dairy Plant