



Appendix D

Landscape and Visual Impact Assessment



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Landscape and Visual Effects Assessment

DAIRY PROCESSING MANAGEMENT AREA PLAN CHANGE

prepared for

Rolleston Industrial Developments Ltd

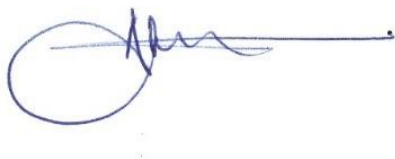
Rolleston

January 2020

Landscape and Visual Effects Assessment (LVA)

Dairy Processing Management Area Plan Change

Document Date:	24/01/2020
Document Version/Status:	Final Draft 1.0
Project Reference:	021024
Project Manager:	Kim Seaton
Prepared by:	Anne Wilkins, Senior Landscape Architect
Reviewed by	Kim Seaton, Senior Planner



Anne Wilkins

Senior Landscape Architect

BLA (Hons) (NZILA Reg.)

Dated

24 January 2020

Rev 1.0

Address for service:

Novo Group Limited
PO Box 38 123
Christchurch 8842
03 365 5570
anne@novogroup.co.nz

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1.0 Introduction

Purpose

1. The purpose of this report is to assess the landscape and visual (LVA) matters and potential effects resulting from the proposed plan change for the establishment of a Dairy Processing Management Area (DPMA).
2. The components for the visual assessment are as per the proposed height limits within the plan change (as outlined by the Outline Development Plan Appendix B).
3. The structure of the report is:
 - a) To describe and analyse the receiving environment, and the character and amenity of the site to frame the proposal context.
 - b) An assessment will provide the actual and potential effects resulting from the proposed plan change and the development of the DPMA in the future.
 - c) A review of any potential design and mitigation decisions follows to further establish the ability for the proposal to be able to be suitably absorbed into the surrounding environment.

Methodology

4. The assessment of landscape and visual effects was undertaken using best practice methodology undertaken by a Registered Landscape Architect (author). The methodology, including the effects assessment, the rating and the scaling methodology, has been outlined in Appendix C. This aligns qualitative assessment, with the NZILA Landscape Assessment Guidelines (10.2), and other relevant best practice guidelines.
5. The investigation and research reviewed for this report includes the Novo Planning Reports and the Outline Development Plan (ODP), a review of the Babbage Report '62916 – DPMA Letter', a review of the IPort plans and the LPC plans. This was alongside project team meetings over the duration (of the project).
6. Several site visits have been undertaken over the period of the project development, on the 07.08.19, the 13.01.20 and the 18.01.20 respectively. Observations made on the site visits enabled understanding of the general site conditions and character and the relationship of the site to the surrounding topography, buildings and vegetation. The likely visibility of the subject site and the proposed infrastructure was made in order to frame the visual assessment. The review of residential dwellings was done via site visit observations and a desktop study to analyse any potential visual effects. Any site-specific views from private properties would require a visit in order to accurately evaluate exact viewsheds.
7. Photos were taken during visits at key locations for reference and assessment. Additionally, a desktop analysis of site surrounds including GIS, Google Earth and LINZ Maps has been undertaken. These are outlined in the Appendix A.



8. An Outline Development Plan (ODP) has been prepared. This is described in the Section 2 Proposal Details following. The scope of the assessment will include an assessment of the potential visual impacts of the Plan Change i.e. height limits. These height limits are up to 55m (consistent with Appendices E26A and E26B of the Selwyn District Plan). Given the built form is not defined, the height limits will generally be based upon a 'worst-case scenario' i.e. the full extent of the height limit boundary areas as defined by the ODP. No visualisations or montages have been provided for this initial assessment given the high-level nature of the ODP.
9. It is of note that two similar areas in the local vicinity have been developed of a comparable nature and will be referred to as required in the report for context and/or analogy. These sites are the (existing) Fonterra and Synlait DPMA sites, located at Darfield 27km away (Fonterra) and 24 km away in Dunsandel (Synlait) respectively.

2.0 Proposal Details

Plan Change Description

10. The site is located at Lot 3 DP 52556 Maddison's Road and is currently zoned as Rural Inner Plains. The site immediately adjacent; the developing IPort industrial area, is zoned 'Business 2A Zone'. The wider site to the north is Rural Inner Plains with some residential in the vicinity.
11. The Plan Change application is; to include an overlay for a Dairy Processing Management Area for the subject site, with the overall zoning of the site to remain unchanged.
12. The dairy plant requires a set area in order to respond to, and develop with, any future requirements. This is dependent on a range of factors, such as demand, operational requirements, expansion or upgrades. This leaves a degree of ambiguity for the actual appearance of the site over time, which will need to be controlled via height limits within defined areas within the site itself. The ODP (outlined below) has aligned with considerations for layout and design opportunities, including for future development.
13. Generally, the Plan Change will be:
 - a) Subject to the Selwyn District Plan provisions as outlined in the main Plan Change application. These pertain to access, landscaping and (any) mitigation as shaped by the relevant assessments.
 - b) Be of a similar nature that currently applies to the (existing) Fonterra and Synlait DPMA sites (where a similar undertaking has occurred).
 - c) Outline specific amendments to recognise the new IPort site adjacent and the proposed ODP.
14. The key objective is to ensure the DMPA would be seamlessly incorporated into the surrounding areas, diverse as they are, being an alignment with the highly built-up and developed nature of the IPort site and industrial Business Zone area. This also includes allowing for the reinforcement of the wider rural character such as vegetative stands,



shelterbelts and rural features, while including and contributing to the biodiversity of the Rural area.

15. Generally, this can be met through the restrictions in the suggested amendments in the planning application; particularly with controls on elements such as colourations, landscaping and other constraints. These are further detailed in the Mitigation in Section 5.0.

Outline Development Plan

16. The outline development plan (ODP) has been developed for the site to show the potential development that could occur, if an overlay provision is added. It also provides general constraints, restrictions and mitigation areas that would be associated with the site development. The development of the area could include warehouses, dryer towers, drystores, boilers and boiler stacks, office and service buildings, asphalt and/or loose aggregate areas for servicing, roading and servicing as required to function these features.
17. Primary vehicle access to the site for dairy processing purposes has been specified on the west boundary. A potential additional access will be provided to the LPC Midland Port land to the south. A secondary existing vehicle access is to be retained to Maddisons Road. That access will generally be available for farming activity, emergency access and where other road access is temporarily unavailable, only. An area for an extension of the rail siding has been included as part of the plan; which may be developed in the future.
18. The ODP establishes general areas based on the considerations above; no building, layouts or design has been developed. Given the unspecified design of the area, a height limit for each of these areas has been outlined and included in the ODP. This forms the basis for assumption of visual changes in this assessment, in order to assess the proposed Plan Change.
19. Generally, the 'Height Control Zones' have been designed to integrate with the surrounds. The highest structures (outlined as up to 55m) have been concentrated in the southwest area that immediately adjoins the developing IPort site / Business 2A Zone.
20. Landscape and buffer areas have been concentrated on the north and east boundaries alongside the rural-residential areas. Landscaping would be developed in these areas, for screening, softening and integration¹. Primarily, the key means to achieve this will be through the ODP, with the eventual development of a detailed landscape plan.

3.0 The Receiving Environment

Character Context

21. The environment is located within the Canterbury Plains approximately 12km west of Christchurch in an industrial-rural fringe area in the Selwyn District. The landscape is distinctly characterised by this juxtaposition. The site sits immediately between these two landscapes, on the fringe of the industrial Port and LPC sites.

¹ See Mitigation section.



22. The wider rural environment is marked by large flat rectangular paddock patterns segregated by roads, irrigation, channels, swales and/or shelterbelts. This is punctuated by rural residential dwellings, and rural structures such as sheds, as well as supporting infrastructure such as power poles, stormwater systems, minor substations and ancillary features that service the wider rural and Canterbury area.
23. The industrial landscape counteracts this outer rural area. The landscape is made up of existing and expanding industrial, retail and residential blocks. The area is experiencing rapid growth post-earthquake in Christchurch and many of these developments are currently in construction and dynamic. The area contains both large and medium density sites, with the specific buildings, forms and structures depending on the land-use. A number of larger warehouses and industrial facilities lie north of the State Highway linked to the west of the subject site. Ancillary signage, lights, infrastructure and supporting features are also present typical of an industrial environment.
24. The area is heavily associated with movement and transport networks. The landscape contains the key State Highway 1 network running through wider Canterbury to wider areas of the South Island. The major South Island rail network traverses parallel to this network.
25. The closest settlement in the area is the town of Rolleston which lies approximately 1.8km to the south. The nearest subdivision is a residential area, contained by bunding and fences along the State Highway to the north. The Rolleston suburban area is expanding, with larger areas of retail and commercial areas developing to support the residential growth occurring.
26. Overall, the landscape context is especially dynamic; given a) the fringe nature of the landscape, with intersecting land uses and characteristics, b) the rapidly developing future land-uses and expansion, and c) the strong network corridors traversing through the area.

Localised Landscape

27. The landscape to the north is open paddocks and pasture land for farming and rural activities. These are typical Canterbury Plains geometric regular paddocks, delineated by farm fencing and shelterbelts.
28. Vegetation in the area is mostly exotic tree stands, shelterbelts, small pockets of woodland areas and feature planting around rural residential areas. One woodland area lies immediately on the northwestern boundary adjacent to the site, made up predominantly of *Pinus radiata* trees. This woodland is within the IPort development site.
29. The area contains several important movement network corridors in the vicinity. Between the State Highway and Jones Road is the main Canterbury rail corridor, and the Rolleston train station in the near vicinity. There is a busy intersection located at the juncture of SH1, the entrance to Rolleston and Hoskyns Road (access to Maddisons Road).
30. The area is bustling, with industrial developments. There are several large format retail areas on the corner of Jones Road and Roskyns Road. The site is located immediately adjacent to and intersecting with, two key developing areas: IPort and LPC Port. These two sites form important contextual features; for visual impact, context and for the future of the landscape character. These areas details are:



- a) The site is bordered to the west by IPort the industrial and logistics park located on 122 hectares of industrial-zoned land. The development is to support agribusiness and freight movements through the Canterbury region.
- b) To the south is the proposed LPC Midland Port site, which is a transport node for storage for *'receiving, storing and consolidating containers and as a distribution point where containers are transferred between trucks and trains'*².

DPMA / Plan Change Site

- 31. The proposed plan change site is an open flat area, divided into approximately six large paddocks. The coverage is mostly exotic grassland or dug out earth for crops.
- 32. The site is largely a flat and open environment. Mildly undulating terrain exists in the north west area of the site. Vegetation on the site is limited, apart from the mature shelterbelt hedging. The entirety of the southern and the western boundaries are demarked by tall and well-established shelterbelts, running unbroken along each site border. Portions of less established shelterbelts runs along the eastern boundary, starting approximately 175m back from Maddisons Road. The heights of these shelterbelts range from approximately 12 – 15m.
- 33. The built features are minimal, made up of a small collection of farming sheds to the north of the site, approximately 90 metres south of Maddisons Road. The buildings are open style farmsheds, a small silo and another enclosed corrugated shed. There are several rows of established shelterbelts containing these farm sheds.
- 34. Bordering the site is open, wire farm fencing. The site has one split, unsealed vehicle crossing off Maddisons Road. The access is demarked by open steel frame wire gates for entry to the farm sheds and presumably stock control. Other infrastructure is limited, only present in the form of timber power poles traversing across the west of the site.

4.0 Policy Framework

Existing Zone Attributes

- 35. The key objectives are outlined in the Selwyn District Plan, within the Rural Volume, Part B, in the matters outlined by:

Objective B3.4.1

The District's rural area is a pleasant place to live and work in.

Objective B3.4.2

A variety of activities are provided for in the rural area, while maintaining rural character and avoiding reverse sensitivity effects.

- 36. The policies regarding operation and activities in the area outline:

² As per LPC Website



Policy B3.4.1	<i>Recognise the Rural zone as an area where a variety of activities occur and maintain environmental standards that allows for primary production and other business activities to operate.</i>
Policy B3.4.5	<i>Enable the continued and enhanced operation, innovation and development of established dairy plant sites for the purposes of administration, processing, testing, storage, handling, packaging and distribution of milk and dairy products, related by-products and ancillary activities within specifically identified Dairy Processing Management Areas within the Rural (Outer Plains) Zone <u>and adjacent the Business 2A Zone at Rolleston</u>, whilst ensuring the integrated management of effects on the environment at the boundary of the Management Areas through ODPs. The establishment of non-dairy processing related industrial activities shall be avoided.</i>

37. The policy recognises the Rural zone as an area where a variety of dairy type activities occur, and to maintain environmental standards that allows for this primary production / other business activities to operate. The Plan Change would allow for a range of activities. The scale of the activity is outside that which is usually anticipated in a rural area. Predominantly, rural activities relate to structures such as haysheds, silos and other ancillary storage structures and sheds. The Plan Change would allow for more extensive activities relating to typically rural industrial type activities and associated structures such as larger warehouses, storage tanks, drystack and boilers and other ancillary requirements for dairy processing. The proximity to a highly built up area of industry and business reflects that of a mixed environment, making this more intensive activity able to be absorbed into a rural environment.
38. The policy relating to amenity values outlines:

Policy B3.4.3	<i>Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area.</i>
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The amenity of the area is not high, given the lack of wide open, pleasant and / or undisturbed areas³. The area interfaces with a business and industrial area where these values are already adapted. Mitigation, in the form of ODP controls and landscaping, will also act to maintain rural amenity values and integration into the wider landscape character, as far as practicable.

39. The policy relating to buildings outlines:

Policy B3.4.7	<i>Avoid high rise buildings or highly reflective utility structures.</i>
	<i>Explanation and Reasons:</i>
	<i>...An exemption is also made for buildings essential for the processing, packaging and distribution of milk and dairy products, related by-products and waste materials. The scale of dairy production requires large facilities and a Dairy Processing Management Area has been created to recognise sites already established as dairy factories and to enable efficiencies in the dairy industry to be achieved...</i>

³ See landscape character and amenity sections for further details.



Policy B3.4.10

Ensure signs and noticeboards are designed and positioned to avoid: restricting people's visibility along roads; impeding access to or past sites; nuisance effects from sound effects, moving parts, glare or reflectivity; [or] large structures protruding above rooftops.

The exemption outlines buildings that are specifically for dairy management processing (under a potential DPMA). The DP notes the Inner Plains location may be inappropriate for this use, but the proposed subject site is likely to be able to be absorbed given the adjoining industrial zone; reflected by the proposed planning report amended wording. Conditions / mitigation can be applied to avoid overly reflective structures⁴ and appropriate and suitable signage requirements.

40. The policies regarding setbacks and surrounding areas outlines:

Policy B3.4.17

Ensure buildings and trees do not excessively shade adjoining properties.

Policy B3.4.18

Ensure buildings are setback a sufficient distance from property boundaries to:
(a) Enable boundary trees and hedges to be maintained;
(b) Maintain privacy and outlook for houses on small allotments; and
(c) Encourage a sense of distance between buildings and between buildings and road boundaries where practical.

41. The buildings will be predominantly higher than any other in the vicinity. However, it is likely shading to existing dwellings will be minimal as given the control of locations of higher buildings. Distance has been considered. The highest built forms in the ODP have been concentrated in the southwest of the site, away from rural-residential properties in the north east. This also moves the higher buildings into the internal areas adjacent to IPort and LPC sites and away from the key local roads; Maddisons Road etc. Buildings that are above 25m will be at least 200 metres away from any rural residential dwelling. The closest dwelling is 100 metres from the north east property boundary on Maddison Road, and there will be no buildings located over 25m located close to this area. This would also minimise impact upon privacy and outlook, though some visual changes are likely to be evident from a distance. The ODP outlines the retention of sections of shelter belts (hedging) to further increase the offset from adjoining properties.

5.0 Assessment of Landscape and Visual Effects

Landscape Character

42. The landscape character is mixed. The rural nature, characterised by the open, expansive pastoral use punctuated by roads, fences and shelterbelts, is located immediately adjacent to the highly developing industrial and business areas. Generally, the industrial use represents the key visual attributes in the west and south, and the rural area is representative to the (wider) north.

⁴ See mitigation section.



43. The rural character is already diminished due to the built-up and developing urban industrial nature of these areas. These are concentrated around the vicinity of the main intersection of State Highway 1, Hoskyns Road and the entrance to the township; Rolleston Drive.
44. Overall the landscape, given its movement towards industrial areas of agribusiness and rural support sites, will largely be appropriate for the DPMA site. This indicates the development can be suitably absorbed into the landscape character over the long-term.

Physical Nature

45. The environment is modified and/or built-up. A rural area is not natural but altered; adapted for stock grazing or crops. Any occurring physical changes will not be to an undisturbed landscape. The nature of the DPMA will, however, increase the physical modifications and require a higher degree of earthworks and therefore change across the site, as compared to the current rural environment. The development will likely require a high-level of servicing and support for its functioning.
46. The physical landscape, given that it is modified farmland with minimal areas of existing vegetation or waterways, has a low to moderate sensitivity to change. The key to ensure low physical effects will be the treatment of features such as runoff, built forms construction measures and long-term functionalities that may have tangible potential [physical] adverse effects. A development that supports low environmental impacts is key in mitigating any cumulative or long-term effects of the physical changes.

Amenity Values

47. Amenity as defined under the Act as “*appreciation of [its] pleasantness, aesthetic coherence and cultural and recreational attributes*”. The aim of maintaining amenity values is to ensure that the DPMA sits as seamlessly and harmoniously into its surroundings as possible.
48. Amenity is mostly derived from the surrounding rural landscapes with primary production areas and a more pleasant outlook on to the distant Plains or geographical features to the north. What existing rural amenity there is, has even now been diminished by the presence of the highway, the industrial areas, developing areas and the heavily built out township and surrounding spaces related to Rolleston. The DMPA will add to the built form of the area versus the spaciousness which would be achieved through retaining open paddocks. However, comparative to the other industrial and business developments in the immediate area, this is likely to have a small impact on the already adapted amenity of the landscape.
49. The resulting impact of the DPMA includes a loss of rural open space. The DPMA will be densely built out, thus reducing the site appearance of expansiveness. The protection of some open spaces on the periphery of the site will act to retain some rural character. This will be of a limited extent, as there is a comparatively minor amount of open space to built form. The addition of built forms and large structures will inevitably detract from views to open spaces and will change the existing amenity. The site being immediately adjacent to future development area mitigates this, as it can be absorbed (into the built-up area) rather than take away from the wider rural plains i.e. fringe effect.



50. The impact of the adjacent existing and future industrial and business areas (particularly the IPort and the LPC Midland Port) is key. Firstly, it impacts the current perception of the area, and secondly it adapts the landscape to be able to 'hold' or absorb changes. The mix of land uses and juxtaposition of existing and future developments means the existing landscape coherency and readability is currently very low.
51. Regarding 'naturalness' in the area; there is very little in the area that is non-modified or not built-up in nature. The area lacks any large areas of open spaces unbroken by features, built forms or roading or transport corridor infrastructure. Similarly, no outstanding features or landscapes are present in the vicinity of the site.
52. Aesthetics are mixed, providing no overriding main descriptive appearance or common thread that is unique to the area. Given the nature of various developments over differing eras and times, the result has been mixed built forms of all materiality, of industrial, residential and rural character. No evident overarching design aesthetic or cohesive appearance exists in the wider area. Amenity in the context of the area is predominately low, or in the least highly inconsistent.
53. The DMPA would be more industrial in appearance than the usual rural aesthetic. The built forms of these environments are typically represented by rural farmsheds, woolsheds, haystacks reaching upwards of 12 -2m heights, and sporadically located across open associated environments, such as paddocks, stock and grazing yards. Currently warehouses, farm sheds and other buildings both rural and industrial are largely in the order of two – three story (generally 15-20m). The ODP outlines a height ranging from 12m to 25m to 30m to 55m height limits in areas within the site. These types of heights are not evident in the existing landscape and will adapt the visual amenity. There are anticipated building heights within the IPort and the storage containers at LPCs Midland Port, which will become more evident over time. The height limit in these locations, as specified for the Business 2A Zone, is 15m for a building and 25m for a structure⁵. The surrounding existing and developing heights will mitigate some of the height differential.

Perceptual and Associative Values

54. The area is dynamic, expanding and evolving, meaning the landscape will be *more susceptible and adaptable to change*. The industrial and large-scale developments emerging and existing in the area, offsets any alterations at the Plan Change site. The association is one of growth and change, meaning any new elements would be easier to absorb.
55. The business zone off Hoskyns Road, the Rolleston intersection and the IPort and LPC are key features that would create perception that large scale industrial features (such as drystocks) are expected in this type of landscape. This diminishes the risk that the DPMA would be out of place or unforeseen.
56. The SDC plan acknowledge sites established for dairy processing activities in the Rural Outer Plains to "*enable the continued and enhanced operation, innovation and development of established dairy plant sites*"⁶. Dairying plants and associations are expected in the Rural landscape, albeit in the Rural Outer Plains at present. An

⁵ A structure being less than 10m² in area. Township Volume, Rule 16.6.2.

⁶ Selwyn District Plan, Rural Volume, Part B, Policy B3.4.5



amendment to Policy B3.4.5 of the Rural Volume is proposed to recognise the proposed DPMA adjacent the Business 2A Zone. The built forms are widely recognisable to a rural environment given their silo like form and would be appreciated as functioning rural and rural industrial elements. Though the scale of the buildings could be considerably larger and more dominant than other rural buildings in the vicinity.

57. The overriding character is diverse, intersecting the areas rural and industrial aesthetics and characteristics. There is a distinct transitional area where the character changes from industrial / commercial to rural; and the DPMA lies within this transitional area. A DPMA is *a suitable land use appropriate for this bridged area* given its connection to both the surrounding rural area and the required proximity to key connection corridors and industrial infrastructure. The DPMA features directly link to the environment in which it is located, and would also aesthetically align with both the agribusiness, and similarly the rural landscape.
58. Association to similar facilities in the area offsets the potential effects as the activity is correlated with the landscape. There is an association of existing rural and industrial activities. Additionally, there are two DMPAs in the wider vicinity, albeit they are located approximately 25km away from the subject site. These are not within the direct view spectrum but do form part of the wider landscape fabric i.e. a known entity. Comparatively, these sites are much larger, at 680 and 187 hectares, to the 27-hectare site of this proposal.

Key Viewsheds and Audiences

59. Due to the potential height limits outlined in the ODP, the visual range for viewing audiences is large and varied. Views are generally from either business sites, residential or rural-residential dwellings or from roads. The visual audiences can be grouped into:

a) Those within the immediate surrounding areas, with direct or indirect views onto the subject site or some or all of the buildings associated with a potential DPMA:

- i) Rural-residential dwellings off Maddison Road and off surrounding local roads in the vicinity including Jones Road, Weedons Ross Road and Hoskyns Road.
- ii) Residential dwellings in Rolleston.
- iii) Transient users along local road, specifically SH1 and Maddisons Road, including railway users.
- iv) Recreational user groups, specifically Weedons Reserve.
- v) Industrial users in existing development areas to west and south.

b) Those at wider and distant surrounding areas, with potential views to the subject site and/or (likely +35m – 55m height) buildings associated with the DPMA:

- i) Rural and residential groups to the north including West Melton and surrounds.
- ii) Rural and residential properties to the east including Templeton, Prebbleton and wider Christchurch.



- iii) Recreation, rural and residential groups at the Port Hills, Tai Tapu and other hilly areas to the south.

Visibility Analysis and Influences

- 60. The structures associated with a DPMA are likely to be highly visible given two factors; their height and their bulk. Visibility, however, does not necessarily directly relate to an adverse effect, if the structures can be suitably placed, absorbed and deemed appropriate for their location. The proposed potential additional height and bulk will provide a clear visual counterpoint to the lower levels of the surrounding rural residential backdrop. At a maximum potential height of up to 55 metres, these structures will be very visible. To the south the built-up nature of the business and industrial areas will significantly offset this as large structures, buildings, warehouses and the shipping containers of the LPC site will act to counterbalance the height of the DPMA elements.
- 61. The prominence of the DMPA features would also diminish with distance. Distance, when paired with atmospheric and other conditional factors (cloud etc.) is a mitigating factor. Foreground views, such as vegetation or other buildings, would additionally screen and interrupt direct views.
- 62. Many audiences are in transit, translating to short-term viewing. This is namely those traversing down the state highway, the local and arterial route roads and railways, as well as the surrounding rural roads linking through to the south or inland areas. Also, the short-term temporary views from those visitors, employees, or other, of the business and industrial areas in the vicinity. Broadly speaking, the visual impact of transient views is generally lowered, given it is at a temporal scale i.e. only for a 'passing time'. There are a broad range of travellers going through SH1, being both visitors, locals and tourists, so the viewing audiences from these locations could be very broad.

Visual Impacts

Rural-residential dwellings; Maddisons Road area⁷

- 63. There are rural-residential dwellings in the vicinity, located mainly to the north / north-east. There are approximately 18 – 20 dwellings within 1km of the subject site. The area in closest proximity is concentrated to the west in a small 'pocket' of lifestyle / rural residential dwellings to the north east of the site off Maddisons Road. There are approximately 14 dwellings which are located off the intersection of Weedons Ross Road (721 through to 810 Maddisons Road) the closest being approximately 160 metres from the eastern boundary. Wyndom Aviation site is directly north across from the site, which is setback and relatively screened from the street.
- 64. There is a (new) house being built directly across the road from the subject site. As the house is newly established, there is no existing buffering or screening in place⁸ along the southern boundary that would prevent direct views. Some low-level earth bunding to the

⁷ And other local roads as listed.

⁸ As observed at the most recent site visit January 2020.



south of the house, has been established presumably to create future buffering from the road.

65. Very few of the other rural residential dwellings have direct views onto the site. Many of these properties have established landscaping, trees and fencing preventing any wide sweeping views. However, the introduction of 35 – 55m vertical heights may be dominant and protrude over and above some of this vegetation or screening, resulting in a visual change.
66. Views across rural landscapes, meaning open expansive pasture areas, are only evident to the north. Views south already have evident interruptions to the skyline with existing buildings. Effectively the open space has been already been disrupted due to the prominent structures of the LPC and Industrial IPort. However, it is of note that areas of the LPC and Iport are largely screened from this residential area by tree stands and shelterbelts, some vegetation of which are within the subject site.
67. Existing mitigating factors for the proposed DPMA include:
 - i) The backdrop of the built-up areas being the industrial areas; though the containers and buildings are mostly screened via existing vegetation.
 - ii) Rural residential existing landscaping and gardens that act to screen direct views out to the wider rural landscape, paired with the orientation and internal setback, typical of rural-residential houses.
68. The visual impact, resulting from the introduction of height and bulk of built forms, for rural residential properties down Maddisons Road, would be **moderate – high**. The visual impact on the properties directly across or adjacent to the site are likely to be **high**, prior to any established screening or buffering. Landscaping mitigation would screen and soften the northern and eastern boundaries of the site, so it is likely that any impact **could be reduced over time**. For other wider rural-residential areas, the impact is likely to be lessened as changes are offset by foreground rural ‘open’ areas and distance, resulting in a **moderate** impact.

Residential dwellings; Rolleston

69. Rolleston is bordered in the north by a large timber fence, earth bunding and thick planting. This was formed at the time of establishing the residential subdivision, in order to contain, encompass the town and provide acoustic screening for residential dwellings. The importance of this, is that it has resulted in a well-established separation and thick screening from areas, and subsequently views, to the north. Additionally, the landscape of Rolleston is very flat with no real contrast in elevation, further limiting views to the north.
70. The introduction of a much larger (built form) height could interrupt the skyline. Like the rural residential properties, visible built form (at heights +35m) could extrude upwards beyond the existing screening. However, this will be experienced at distance, as the closest dwelling is at least 1.3 km⁹ away, as well as being viewed across substantial vegetation and other buildings and the LPC site.

⁹ As demarked from the southern boundary of the site.



71. The foreground is already very highly developed. The nature of the industrial area is built-up with large warehouses, specifically, the areas of 4x high 'stacked' shipping containers at the LPC site, and the large warehouses at the IPort site. For any direct or indirect views to the DPMA elements, these will be experienced in the context of the already highly modified and developed industrial area (as outlined in the landscape character and amenity assessment).
72. Views to adjacent geographical features are limited from Rolleston. The nature of the Rolleston development is inward facing and not out towards the wider northern rural landscape. Views to the distant hills and South Island mountain range(s) is not particularly evident as the orientation of most dwellings and commercial / retail spaces are centrally focused. As a result, horizon / skyline interruptions are unlikely as views to the north are very minimal.
73. Existing potential mitigating factors include:
- i) The future development areas and the industrial character of the area immediately adjacent acts to 'absorb' any changes.
 - ii) The highly evident development of buildings and ancillary features adjacent to the site and within Rolleston. The large scale of shipping containers at LPC; acting as a break / screen.
 - iii) The dynamic landscape that is being highly modified and developing.
 - iv) The orientation of dwellings / Rolleston being largely internalised and not outwards towards the north.
 - v) Well established screening, vegetation, earth bunding and fencing along the border of Rolleston.
74. Given the range of existing mitigating factors, the visual effects are **low-moderate**.

Local Roads; SH1 etc.¹⁰

75. There are many roads in the vicinity of the works. Roads bordering the site area, are Jones Road (Main South Road), Maddisons Road, Weedons Ross Road, and Hoskyns Road. Other major roads in the vicinity include the key State Highway 1, Rolleston Drive, Newtons Road, West Melton Road, Railway Road and Wards Road.
76. Traversing either west to east, or vice versa, down SH1, views to the site will be evident (within 1.5km at closest) to the receptor. Speeds along this road are up to 100km in areas, meaning any visibility would be fleeting while moving at considerable speeds. There is a 'pause point' at the intersection at the entrance to Rolleston township. However, there are many built elements, such as the railway tracks and associated infrastructure, the industrial area and the IPort, that act to counteract any visual impact from this intersection.
77. The new motorway changes are currently underway adding to the dynamic nature of the changing landscape. The new overbridge located to the south of Rolleston, traverses at a

¹⁰ As outlined in the following sections



higher elevation to that of the existing flat motorway meaning elevated views down onto the site could be evident. When moving at speed across the overbridge, these will be experienced for only a short time.

78. Views to the wider hills and Southern Alps mountains are evident, particularly on clear days. The distant geographical features form part of the experience of the Canterbury Plains. Visual interruption in the form of dominant built forms would act to interrupt these views and reduce scenic value. Positively, the DPMA subject site is 'attached' to an adjacent industrial area, meaning any built forms will be associated with the industrial area, rather than standing out distinctly on the horizon line in the middle of flat open rural environment. The adjacent business industrial area can effectively absorb the proposed building height as the area will form one 'break' in the wider landscape. This is generally preferred to the DPMA standing out as a solo element, amongst an uninterrupted landscape.
79. Any removal of sections of shelter belts along the southern boundary to allow for the rail siding and access, may mean direct views through to buildings, meaning the potential for more obvious and direct views through to the site. The ODP outlines sections that could be removed and views adjacent to these areas would have views through to the subject site.
80. Existing potential mitigating factors includes:
 - i) The speed at which views are experienced, mostly upwards of 80km.
 - ii) The existing built-up infrastructure in the area that would offset DPMA built forms.
 - iii) The containers at LPC are a large dominant visual element, particularly from the State Highway. These also form a backdrop to the north and the south from surrounding local roads.
 - iv) Tall established shelter belts along the boundaries of the site.
 - v) Transient views, and exposure to the (potential) view is temporary only. This generally lessens the impact, compared to the permanent 'fixed' nature of views from dwellings.
81. Experienced at speed and temporarily, the DPMA is likely to be able to be absorbed into the character of the industrial area adjacent. The effects upon road users are **moderate**.

Recreational area; Weedons Reserve

82. The Weedons Reserve is situated off the intersection of Weedons Ross Road and Maddisons Road. It contains a golf course, clubrooms, playground, a dog park and a tennis court amongst several other pocket park areas that are ancillary to the larger golf course.
83. Weedons School is located at 135 Weedons Ross Road across from the Reserve, as well as a cemetery located at 179, at the intersection of Maddisons Road. Limited visual impacts are anticipated for these sites, given existing surrounding vegetation and their nature i.e. limited / temporary use only. For the purposes of this assessment, given they are adjacent to and within 1km of the site, have been included in the spectrum of recreational uses (though not typically outlined as such).



84. The existing potential mitigating factors includes:
- i) The landscape is very well screened with vegetation and large tree copses to the west. The views to the site are likely to be very minimal, if any.
 - ii) The user groups are only party to any apparent pocketed views for a limited time¹¹.
 - iii) The landscape is not pristine and does not rely on wider associated rural landscape values to enhance the recreational use i.e. views out to the wider surrounds and / or rural landscape do not make up the 'pleasantness' of the reserve.
85. The recreational areas are used by a limited scope of groups, that are temporary audiences only. The anticipated effects on these areas are **low**.

Industrial Areas

86. The nature of the visual audience at the industrial area is transient, being staff, employees and visitors that will be exposed to views for the short term. This is paired with the expectation of industrial features within the area. Effectively, receptors are already within a highly developed landscape being largely visually cluttered, and built-up. The visual amenity is already minimal, such is the nature of the existing and future industrial area.
87. The existing potential mitigating factors includes:
- iv) The landscape is modified and is industrial in nature.
 - v) Viewing audience is transient, only experiencing views for a short period of time.
88. The nature of the industrial area, being modified developed and highly built out, means any visual impact to this area is significantly reduced, and the likely visual effects would be **low**.

Potential Visual Impacts on Wider Areas

89. For rural-residential areas further north the retention of existing large areas of rural landscape and open paddocks will buffer the site. Some height / built form may protrude upwards and be visible to some dwellings in the wider area, but distance, existing vegetation and offset in the form of surrounding buildings, will largely mitigate this.
90. Areas in Christchurch with views to the site will be limited given the generally flat and low-lying nature of the town. Skirting areas such as Hornby and Prebbleton could be exposed to broken views. This is likely to be minimal given the nature of the flat landscape i.e. these areas are located on the same ground plane, and at the same level, as the subject. The residential / commercial / industrial activities at Templeton also act to buffer the site. Views from Templeton will be very limited in scope give the distance – upwards of 7km – and the expansive landscapes in the fore and mid ground buffering the site.
91. Views from the very far north parts of the Malvern Hills, specifically that have recreational areas such as the walks, hikes and ski fields, could occur. Again, distance and offset from one another will be largely mitigating. Views to the (closer) Darfield Fonterra Dairy site will

¹¹ This could pertain to several hours depending on use; i.e. school room or golf course could be for more extended hours.



be more evident in the foreground. Cumulative effects could occur; where a broad spectrum of these larger dairy management plants could be visible at once i.e. Fonterra and (potentially) the subject site.

92. Views from the wider Port Hills areas to the south will be limited. The orientation of occupied areas is north and there could be oblique views to the wider Canterbury Plains from sections of the hills in Tai Tapu and Landsdowne. Distance will be a major mitigating factor being almost 20 kilometres away from the subject site.
93. The existing potential mitigating factors includes:
 - i) Distance, at a minimum will be upwards of 7 kilometres.
 - ii) Flat landscape that means views 'down' are not readily available and any existing vertical elements screen potential views or at the very least break up views.
 - iii) The existing built-up infrastructure, Templeton, and other ancillary towns, in immediately surrounding areas.
 - iv) Multitude of various breaks, interruptions, and various screening in the foreground and mid ground.

6.0 Design and Mitigation

94. The ODP layout has been pre-emptively developed with regard to possible areas for mitigation and with built forms situated in order to lessen any potential adverse effects, i.e. the overall higher height limits are concentrated closer to the adjacent IPort and LPC sites so that the DPMA built forms can be better absorbed.
95. Landscaping is appropriate for the site and is recommended to ensure an integration to the surrounding environment. For the most part the key for landscaping is screening. Furthermore, the inclusion of planting meets the requirements of the District Plan; supporting 'increasing general biodiversity in the rural environment'.
96. Landscaping does not provide immediate screening as any vegetative planting will take time to establish. Therefore, the design and implementation of any landscaping is encouraged as soon as practicable to establish boundary screening prior to the future development of the DMPA. This aligns with a more considerate approach for a comprehensive landscape development that evolves interactively rather than as a reaction to built development. This will give time for the planting to establish and mature, to be at a suitable scale and height for effective medium – long term mitigation.
97. The ODP aims to provide for a well-balanced density at the site. This would mean grouping of buildings where possible rather than spreading out of forms; this considered and legible design through appropriate dispersion or grouping is supported i.e. streamlining.
98. Protection of the existing landscaping, specifically along external boundaries, is recommended where possible in order to maintain visual coherence and character. This will also provide existing screening, when the development of the DPMA occurs. It is recommended that a focus on the retention of the shelterbelts along the southeast



boundary, which provides a visual break between the adjacent site and the wider road corridor (State Highway). This is notwithstanding the removal required for the proposed rail and road links necessary for the proposal.

Recommendations

- a) An adoption of a landscape plan for the site which would:
 - i) Outline landscape plant palettes as well as species and heights.
 - ii) Plant palettes that would reflect existing and future vegetative patterns present in the area, to allow for integration to surrounding landscapes i.e. the new planting at the IPort development includes streetscape planting of rows of Totara trees and native areas of vegetation on bunding, and the rural existing shelterbelts and mature trees.
 - iii) At least 20m wide roadside buffering area with earth bunding to be included along the Maddisons Road boundary.
 - iv) Have a concentration of new planting along the northern and eastern boundaries alongside the rural residential areas.
 - v) Retention of shelterbelts along the external boundary of the site, where possible. Where access for vehicle and rail siding is required, the cut back of shelterbelts be minimised as much as possible.
 - vi) Counterbalance the bulk of the DPMA (elements) with vegetation i.e. planting that would be of a sufficient height to screen.
- b) Avoid building domination by managing placement and location (height limits and controls in the ODP). The SDP Policy B3.4.7 outlines avoidance of highly reflective structures. An LRV (Light Reflectivity Value) outline and colour scheme spectrum on buildings should be considered for reflectivity limits and blending to surrounding areas i.e. no bright, intrusive colours.
- c) Apply the intentions of the ODP.

7.0 Summary

- 99. Landscape character is varied, given the mix of environments and land uses. The subject site is on a fringe area, bridging between business, residential and rural environments, additionally influenced by the strong presence of the state highway road and the rail corridors.
- 100. Amenity values are limited to some areas of rural open space, over all being low due to the complex nature of the intercepting land uses; agribusiness, rural, residential and transport corridors. The area is not pristine or unmodified. Perceptive and associative values of the place are an actively developing and dynamic landscape that is partial to change. This acts to absorb any landscape adaptations at the DPMA site.



101. Visibility is potentially very high. The visual audience could be very extensive given the height and bulk of the proposed DPMA, and the extended visual range that this pertains to. The effects are likely to be varied, depending on where the visual receptor is located, and the type of audience are i.e. transient or fixed. Fixed views are limited to the residential and rural residential areas sparsely located in close vicinity to the subject site.
102. The potential adverse visual effects are likely to be highest on rural residential areas to the north / east on Maddisons. Higher effects in the short term are likely to be lessened over time with the establishment of landscaping and buffering along boundaries. Mitigation, such as landscaping and built form controls, could further alleviate any potential visual impacts.
103. Future development and the immediately adjacent IPort and LPC sites act as a major offsetting element. A DPMA is a suitable land use, that can be appropriately absorbed, with mitigation, into this landscape. This is predominantly given the DPMA connection to both the surrounding rural area, the transport corridors and the expanding industrial area.