

Ruakaka Travel Centre


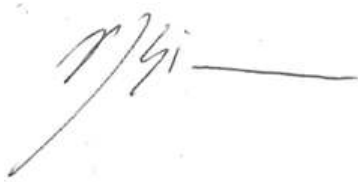
Landscape and Visual Effects Assessment
Prepared for Ruakaka Developments Ltd

28 September 2020



Boffa Miskell

Document Quality Assurance

Bibliographic reference for citation: Boffa Miskell Limited 2020. <i>Ruakaka Travel Centre: Landscape and Visual Effects Assessment</i> . Report prepared by Boffa Miskell Limited for Ruakaka Developments Limited.		
Prepared by:	Julia Wick Associate Principal / Registered Landscape Architect Boffa Miskell Limited	
Reviewed by:	Rhys Girvan Senior Principal / Registered Landscape Architect Boffa Miskell Limited	
Status: FINAL	Revision / version: [1]	Issue date: 28 September 2020
Use and Reliance This report has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. Boffa Miskell does not accept any liability or responsibility in relation to the use of this report contrary to the above, or to any person other than the Client. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate, without independent verification, unless otherwise indicated. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.		

Template revision: 20200416 0000

File ref: BM19339_RuakakaTravelCentre_LVEA_FINAL.docx

CONTENTS

1.0	Introduction	1
2.0	Landscape and Visual Assessment Methodology	1
2.1	Methodology – Guidance	1
2.2	Methodology – Effects Rating	2
2.3	Methodology – Approach	3
2.4	Visual Simulations	3
2.5	Night Visual Survey	3
2.6	Visual Simulations (Night)	4
3.0	Site and Landscape Context	5
3.1	Context and Character	5
3.2	The Site	10
4.0	The Proposal	13
5.0	Statutory Planning Context	17
5.1	Resource Management Act (RMA and other higher order documents)	17
5.2	Northland Regional Policy Statement (NRPS) (2016)	18
5.3	Operative Whangarei District Plan	18
6.0	Visibility Analysis	19
6.1	Viewpoints	19
7.0	Assessment of Effects	20
7.1	Landscape Effects	21
7.2	Visual Effect	22
7.3	Lighting Effects	24
7.4	Effects in relation to Statutory Provisions	25
8.0	Conclusions	27

Appendices

Appendix 1: Landscape and Visual Effects Assessment Methodology

Appendix 2: Visual Impact Table

Appendix 3: Supporting Graphics + Simulations – Attached separately

Figures

Figure 1: Wider Site Context Plan. Refer Appendix 3, Figure 1.	5
Figure 2: Site Photo. View toward site from Marsden Point Road, Ruakaka. Lower hill slopes around Heatherlea Drive are within the midground and the ridgeline of Ruakākā Forest in the distance.	7
Figure 3: Site Photo. View towards site from Heatherlea Drive. View in distance towards Whangarei Head and Marsden Point.	7
Figure 4: Environments Map extract from the Whangarei District Plan. Refer Appendix 3, Figure 4 for more detail.	8
Figure 5: Site Photo: View from SH1 (GAS) Station towards site.	9
Figure 6: Site Photo: Night view from Heatherlea Drive towards site.	9
Figure 7: Site Context. Refer Appendix 3, Figure 2	10
Figure 8: View from SH1 Looking south. Site to left of image.	11
Figure 9: Site Photo. View towards site from SH15A.	12
Figure 10: Precedent Image: Example of Pylon Signage.	14
Figure 11: Proposed Earthworks Isopatch plan by Bluebarn Consultants.....	15
Figure 12: Context Masterplan Boffa Miskell Resource Consent Package.....	16
Figure 13: Tree Planting strategy Boffa Miskell Resource Consent Package.....	17

1.0 Introduction

Boffa Miskell Limited ('BML') has been engaged by Ruakaka Developments Limited ('the applicant') to undertake a Landscape and Visual Effects Assessment (LVEA) for a proposed traveller's centre development located on the north-eastern corner of the junction of State Highway 1 (SH1) and State Highway 15A (SH15A) (One Tree Point Road), Ruakaka (otherwise referred to as 'The Site' in this report).

This assessment has considered the proposal in the context of the existing environment, the zoning and potential future use of the land surrounding the Site and the relevant planning framework. Within the Whangarei District Plan (WDP) the Site is located within the Rural Production Environment (RPE) where the proposal is a Discretionary Activity¹, a full planning assessment is undertaken in the application AEE². It is understood the applicant is seeking limited notification of the application under Section 95 of the RMA, to the residents within elevated homes on the western side of SH1 and the New Zealand Transport Agency (NZTA).

The potential effects are considered in respect of the form, scale, massing of the proposal and its relationship with the immediate context of streetscape, residential properties and wider landscape context. The Landscape and Visual Amenity Effects Assessment is set out under the following headings;

- Landscape and Visual Assessment Methodology;
- Site and Landscape Context;
- The proposal;
- Statutory Context;
- Visibility & Viewing Audience;
- Assessment of Effects; and
- Conclusion.

2.0 Landscape and Visual Assessment Methodology

2.1 Methodology – Guidance

This assessment has been undertaken with reference to a number of nationally and internationally recognised guidance documents. These include the Quality Planning Landscape Guidance Note³ with its signposts to examples of best practice (including: the UK guidelines for landscape and visual impact assessment⁴).

¹ Refer Whangarei District Plan – Rural Production Environment (RPE) (2.3 (1) commercial and industrial activities are a discretionary activity.

² Refer Tattico; 'Resource Consent Application and Assessment of Environment Effects' Dated April 2020.

³ <https://www.qualityplanning.org.nz/node/802>

⁴ Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, 2013

2.2 Methodology – Effects Rating

This assessment has been undertaken with reference to a number of nationally and internationally recognised guidance documents. These include the Quality Planning Landscape Guidance Note with its signposts to examples of best practice (including: the UK guidelines for landscape and visual impact assessment).

A full methodology of this assessment is included as **Appendix 1**. In summary, the assessment of the level of effects identified within this assessment is based upon a seven-point scale which includes very low; low; moderate-low; moderate; moderate-high; high; and very high ratings.

The effects covered in this assessment include:

- Landscape character and amenity effects derived from changes in the physical landscape, which may give rise to changes in its character and how this is experienced. This may in turn affect the perceived value ascribed to the landscape.
- Visual effects relating to the changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes, and to the overall effects with respect to visual amenity.

Landscape and visual effects result from natural or induced change in the components, character or quality of a landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, activities or facilities into the landscape.

The nature of landscape and visual effects generated by any particular project can therefore be:

- positive (beneficial), contributing to the visual character and quality of the environment;
- negative (adverse), detracting from existing character and quality of environment; or
- neutral (benign), with essentially no effect on existing character or quality of environment.

The degree to which landscape and visual effects are generated by a proposal depends on a number of factors, these include:

- The degree to which the proposal contrasts, or is consistent, with the qualities of the surrounding landscape.
- The proportion of the proposal that is visible, determined by the observer's position relative to the objects viewed.
- The distance and foreground context within which the proposal is viewed.
- The area or extent of visual catchment from which the proposal is visible.
- The number of viewers, their location and situation (static or moving) in relation to the view.
- The backdrop and context within which the proposal is viewed.
- The predictable and likely known future character of the locality.
- The quality of the resultant landscape, its aesthetic values and contribution to the wider landscape character to the area.

To determine the level of landscape and visual effects, both the sensitivity of the landscape or viewing audience and magnitude of change resulting from a proposed development are considered. The sensitivities of the viewing audiences to visual change vary, however residents and people engaged in recreational activity reliant on its setting are generally considered to be more sensitive to change, while people travelling and working through a landscape are generally less sensitive.

Change in a landscape does not, of itself, necessarily constitute an adverse landscape or visual effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways. These changes are both natural and human induced. What is important is the management of landscape change so that significant adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use.

2.3 Methodology – Approach

Prior to conducting the assessment, a desktop study was completed which included a review of the relevant information relating to the landscape and visual aspects of the proposal. This information included:

- Resource Management Act 1991 ('RMA')
- Whangarei District Plan (Operative 2007)
- Whangarei District Landscape Assessment (1995)⁵
- Project Drawings (Buchan Group Holdings)
- Aerial Photography (Whangarei District GIS Viewer)

Following the desktop study, in order to further understand the receiving environment a site visit was undertaken on 02 June 2020. The purpose of the Site visit is to understand and evaluate the existing baseline as part of determining the physical and sensory impacts the project would have on the Site and on the broader landscape, in addition to the identification of the project's viewing audiences.

To determine the visual catchment and viewing audience of the proposal, a study of aerial photography including land use, landform and vegetation patterns was undertaken, in addition to the site visit. Those private properties which are likely to be affected have been visually surveyed from nearby publicly accessible locations where possible, with further reference to aerial imagery to understand the nature of these potential viewing audiences.

2.4 Visual Simulations

A series of visual simulations illustrating the proposal immediately after construction have been prepared to provide a greater understanding of the project and its extent of visibility within the visual catchment (refer to **Appendix 3**).

Viewpoints are selected to provide representative views from a variety of viewing audiences located at a range of viewing distances and locations. Visual simulations are prepared in accordance with the NZILA Best Practice Guideline for Visual Simulations⁶. All simulations have been modelled with the landscape planting shown at 5 years growth from implementation.

It should however be noted that the visual simulations do not depict "real life views". Rather they are a tool which illustrates a view of a proposed activity from a viewpoint as depicted in a photograph – not as it would appear in the field with the human eye. Therefore, visual simulations are not solely relied on to determine the level of visual effects but rather to assist in the assessment of visual effects.

2.5 Night Visual Survey

During this site visit, a night visual survey was also undertaken. This enabled a greater understanding of the existing night environment in order to better understand the existing sources of lighting with the context of the surrounding area. The survey was undertaken on the night of the 2nd June 2020 on a cloudless night, which limited the occurrence of artificial sky glow in the night sky. It is noted that:

- a) The site visit, and photography, was undertaken with a partial moon present which would have provided a degree of natural illumination to the area throughout the night;

⁵ Refer LA4; 'Whangarei District Landscape Assessment', Dated 1995

⁶ http://www.nzila.co.nz/media/53263/vissim_bpg102_lowfinal.pdf

- b) Photography of the site, for visual simulations and reference photos occurred during the hours of 6:00pm and 7:00pm, and these conditions have informed this assessment
- c) If the night lighting conditions changed through other variables, all light sources would be relative in the image. For example, if there was low cloud up lit by the existing built environment, a small effect would be anticipated with the proposed lighting strategy within the site.

2.6 Visual Simulations (Night)

Boffa Miskell have worked with IDP lighting specialists to produce a technically accurate representations of the proposal at night from one predetermined viewpoint location. A 3D lighting model and lighting specification were obtained from IDP to assist in recording the lighting information into the visual simulations.

The viewpoint selected for this night time assessment is viewpoint 10 (from Heatherlea Drive). This viewpoint was used in the day-time visual assessment and is considered to represent where some of the greatest night time lighting effects would be generated. This viewpoint represents the most sensitive viewing audiences (being residents), is orientated towards the most lit areas of the proposal and illustrates distant high elevation views.

The visualisation has been produced in accordance with the NZILA Best Practice Guidelines for Visual Simulations (BPG 10.2) and adhere to Boffa Miskell's internal Visualisation Guidelines. It is however noted that while NZILA BPG does not provide method on the preparation of night time visual simulations.

3.0 Site and Landscape Context

3.1 Context and Character

Refer Appendix 3: Figure 1, Wider Site Context



Figure 1: Wider Site Context Plan. Refer Appendix 3, Figure 1.

The Site is located within the rural area 29km to the south east of Whangarei and 1.5km to the west of the Ruakaka seaside settlement. The broad characteristics of the local area principally consist of open rural pasture with single trees, shelter belts and strands of riparian vegetation.

The Whangarei District Landscape assessment (1995) undertaken by LA4 Landscape Architects identified key characteristics of the area. The assessment identified the Site within the T27 unit. Described as 'South East – Coastal Flats' key characteristics are;

- Coastal flats that are largely comprised of sand in their seaward extent and richer alluvial material in their inland reach.
- Dominated by rectilinear patterns of paddocks, that brings a controlled production atmosphere to the landscape.
- Shelterbelts logically follow these alignments but are too sporadic to be considered a dominant feature.

Accordingly, the landscape has a broken appearance, ranging from expansive open areas to more intimate spaces. Housing is prominent in units and tends to be rather poorly integrated. The assessment identified a

sensitivity rating⁷ of 4, with none of the units in this category assessed as being of outstanding or significant status⁸.

Built form in the surrounding area is typically associated with farming and rural lifestyle dwellings and associated utility buildings. There are some small low-density clusters and scattered individual dwellings and buildings throughout the area. As well as residential dwellings there are a number of buildings and industries located within the wider area that support a broad mix of activities, these include ; North Port, Marsden Point Oil Refinery and Marsden Cove Marina (7.5km to the north east), One Tree Point, Takahiwai beaches and communities within the wider context and Ruakaka School and Signature Homes Depot (1km along SH1 to the south east) and the GAS, Bay Bream Superette and Tyre Depot to the more immediate context. Electricity pylons and powerlines run across the foothills and coastal flat land in a north south direction. There are no identified public walkways, public space or open spaces adjacent the Site or in the immediate surrounding area.

The Ruakaka settlement is located 1.5km to the east of the Site. This settlement is defined by a long surf-beach overlooking Bream Bay. The residential development forms a ribbon of development along Marsden Point Road and adjoins the southern side of the Ruakaka Estuary, with the town centre and racecourse to the northern side of the Estuary. To the immediate west of Ruakaka, between the town centre and the Site the land is zoned Future Environment⁹.

The Site and surrounding area is predominately flat, with the land gradually dropping away to the east and north towards the Ruakaka Estuary. The topographical difference is most noticeable to the south west of the Site with the land rising approximately MASL¹⁰ 40m to 60m around Heatherlea Drive. This forms the undulating foothills before rising up MASL 260m to the sharper ridgeline of the Ruakākā Forest. When viewed from the east this ridgeline forms a distant westerly backdrop to the Site (refer Figure 2 below). There are several rural residential properties located on Heatherlea Drive within the Future Living 1 Environment of the WDP. These elevated predominately single storey properties are principally orientated with views to the north east across the Site and out towards Whangarei Heads, Taranga and Marotere Islands in the distance¹¹ (Refer figure 3 below).

⁷ Sensitivity Ratings were allocated to each unit based on accumulation of rating for five identified variables. Sensitivity ratings were between 1 – 7. 1-2 representing no Sensitivity / low sensitivity and 6-7 representing extreme sensitivity and therefore rated as outstanding under Part 6 RMA.

⁸ LA4; 'Whangarei District Landscape Assessment', Dated 1995; Page 34.

⁹ This land is recognised as Future Living 1 Environment. While only an indication of potential future use of the land, this primarily provides for relatively intensive residential activity with a minimum net site size per residential unit of 500m². A height limit of 8m applies and a maximum building coverage of 35%.

¹⁰ MASL Metres Above Sea Level

¹¹ Approximately 12km to the north east of the site.



Figure 2: Site Photo. View toward site from Marsden Point Road, Ruakaka. Lower hill slopes around Heatherlea Drive are within the midground and the ridgeline of Ruakākā Forest in the distance.



Figure 3: Site Photo. View towards site from Heatherlea Drive. View in distance towards Whangarei Head and Marsden Point.

The surrounding area predominantly consists of pasture with individual trees, shelter belts and riparian planting. The dominant native species in the area is totara (*Podocarpus totara*) with some kahikatea (*Dacrycarpus dacrydioides*), and other natives. Poplar (*Salicaceae sp.*) and macrocarpa (*Cupressus macrocarpa*) and pine (*Pinus radiata*) are common exotic trees.

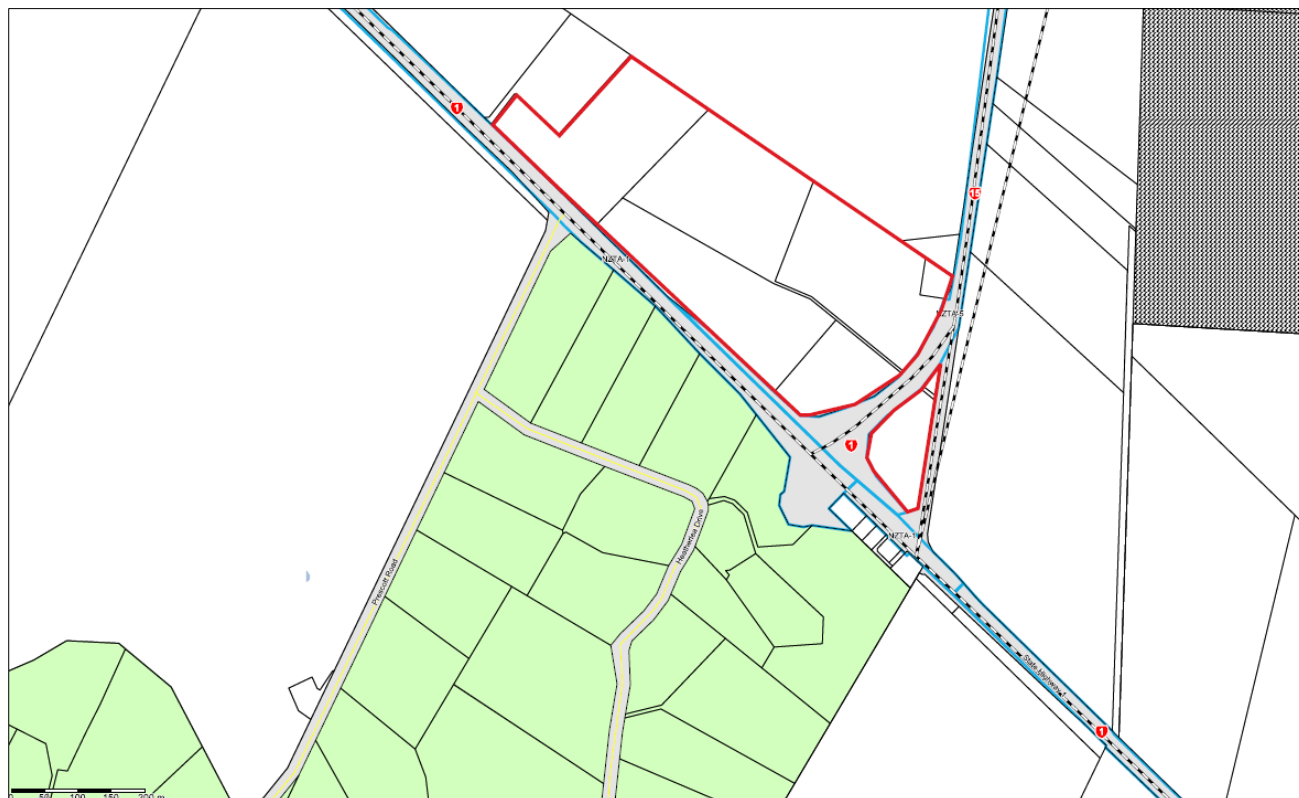


Figure 4: Environments Map extract from the Whangarei District Plan. Refer Appendix 3, Figure 4 for more detail.

As described above the surrounding environment supports a variety of land uses including, rural residential, business, transport corridors as well as buildings and industries located in the wider area such as Marsden Point Refinery. During times of darkness, the receiving environment continues to reflect lighting levels associated with these land uses. Lighting within the receiving environment include visible light sources creating elements of glare, such as streetlights, security lights and illuminated business signage. This is particularly evident around the G.A.S station on the corner of SH1 and SH15 and distant views towards Marsden Point Refinery and North Port. (Refer Figure 5 and 6 below).



Figure 5: Site Photo: View from SH1 (GAS) Station towards site.



Figure 6: Site Photo: Night view from Heatherlea Drive towards site.

3.2 The Site

Refer Appendix 3, Figure 2, Site Context

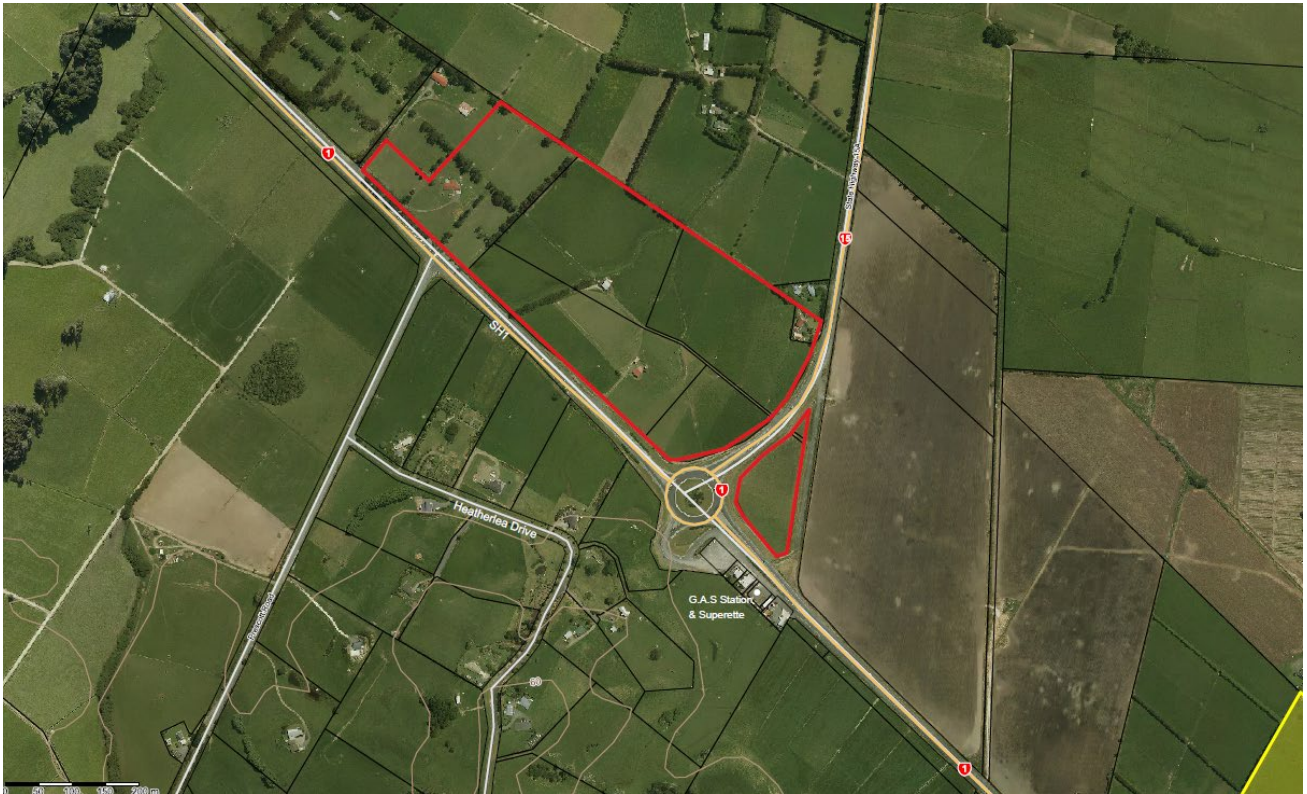


Figure 7: Site Context. Refer Appendix 3, Figure 2

The Site is identified as Rural Environment under the WDP (Refer Appendix 3: Figure 4). The Site is approximately 17ha in size and is made up of six titles. A small part of the Site has been severed from the majority of the property by a road connecting State Highway 1 and State Highway 15A (via a round-a-bout).



Figure 8: View from SH1 Looking south. Site to left of image.

The Site is currently two existing farms that are used for dry stock grazing and has been used as this historically. There are two dwellings on the Site with associated sheds and ancillary buildings. The Site is fully contained with post and wire fencing.

The Site adjoins rural land to the north and is bound by SH1 to the south and SH15A to the east. Current access to the Site is from SH15A via an informal vehicle access.



Figure 9: Site Photo. View towards site from SH15A.

The topography of the Site reflects the broader characteristics of the area whereby it is predominately flat, with some small ridges and gullies with a gentle fall from the north-eastern corner to the south-western corner.

The Site is currently managed as pasture, with the only other vegetation being shelter belts (to the north) and some exotic vegetation associated with the existing farm buildings. A stream flows through the centre of the Site which essentially forms a dug channel from a culvert under State Highway 1 integrating in with a stream to the north. This stream is currently open pasture on both of its margins.

4.0 The Proposal

Refer Appendix 3: Figure 3, Architectural Site Plan (and other plans prepared by Buchan Group).

The proposal is to construct a traveller's service centre which will provide refuelling facilities, food and beverage outlets, a convenience store, a rest area for drivers and parking for campervans and motorhomes. The proposal aims to provide services and amenities for all users particularly the tourist market. The Assessment of Environmental Effects (AEE)¹² addresses the proposal in detail, however the key elements relevant to landscape and visual assessment are as follows;

- A proposed restaurant (Quick Service Facility / QSR) (offering seating and drive through options);
- A main building at approximately 8.4m in height¹³ and 75m long. This building will have an 800m² café; an 800m² convenience store and additional 400m² of retail space;
- A picnic and play area. Located to the north of the main building and in close proximity to the north of the general food and beverage area;
- A 300m² fuel kiosk building with fuel service station. This will include eight inline truck / vehicle refuelling stations and be covered with a canopy (9.85m high and 32.3m x 14.5m in area).
- Associated visitor parking (151 including 9 accessible) and manoeuvring / loading areas;
- Coach pick-up and drop-off area;
- Refuse collection area;
- Wetlands area;
- On-site service centre (100m²) for 24hour security / manager accommodation;
- Access to the Site will be provided by a new southbound off-ramp from SH1. Vehicles will exit the Site from SH15A;
- Long-stay and short-stay rest area including public toilets and gravel truck parking area;
- Pylon signage is proposed at the SH15 ingress point from the adjacent state highway network. This pylon signage will be lit at night and representative of pylon signage associated with service centre (refer image example figure 12 below). Signage is also proposed to the buildings;
- Lighting. The lighting strategy for the site comprises of LED downlights within the carpark. These will be facing into the complex for user safety. Further lighting will also be incorporated into the signage (soft LED lighting), and feature lighting to building and entry areas. There will be no flood lighting in the development; A 3D lighting model and lighting specifications were obtained from LDP consultants to assist in recording the lighting information into the visual simulations. In summary, the lighting has been restricted to the lighting requirements for the safe operation of the facility.
- In total 25% of the 17ha site will accommodate the proposed travellers centre with the remainder of the landholding to remain pastoral farming (for low intensity dry stock).

Building heights: The proposed development will be limited to single level (with the exception of the 100m² two-bedroom residential unit to be occupied by the site manager). The heights of the buildings vary, from 5.15m (service station kiosk) to 9.85m (service station canopies). Rooftop plant will sit above the café and retail facilities to a height of 10.6m above the new ground level.

The architectural design approach has been to develop a strong but simple framework with various forms and articulation to the variety of activities proposed. The proposed design draw references from existing and

¹² Refer Tattico; 'Resource Consent Application and Assessment of Environment Effects' Dated April 2020.

¹³ Rooftop plant will sit above the café and retail facilities to a height of 10.6m.

historical cues from the immediate and wider region. The mass of the main building is broken down through the use of canopies and glazing to create a sense of lightness and transparency to the façade. Changes in depth, voids and materiality of the façade will respond and define each of the activities. Building materials will be a combination of precast concrete and timber panels¹⁴.

The QSR and Fuel operators will be corporate brands. The form and articulation in the design of their facilities will be encouraged.



Figure 10: Precedent Image: Example of Pylon Signage.

Earthworks

(Refer Earthworks Isopatch Plan prepared by Bluebarn Ltd Drawing: C-211)

Earthworks will be required to provide suitable levels for the development. As the majority of the Site is identified as a flood susceptible area (Refer Whangarei District Council GIS viewer) significant land recontouring is required. A total of 58,250m³ of earthworks are proposed (28,500m³ cut and 29,750m³ fill). This proposes to lift (+1.2m max) the area of the Site to accommodate the travellers centre and lower (-0.6m max) the farm part of the Site. The existing stream on Site will be significantly enhanced and the constraints in relation to the existing culverts and flooding on the west of State Highway 1 will be removed. The proposal does not seek to construct retaining walls as part of the earthworks process.

¹⁴ Architectural Design Statements Buchan Group



Figure 11: Proposed Earthworks Isopatch plan by Bluebarn Consultants.

Vegetation removal

The vegetation on Site is currently pasture with some exotic species and would result in no loss of significant vegetation.

Amenity / Mitigation Planting

Refer Boffa Miskell, Resource Consent Package for Resource Consent (Dated March 2020) and figures 12+13 below.

A comprehensive landscape plan has been developed by Boffa Miskell. This includes treatments to all Site boundaries and amenity planting within the complex to assist with effectively integrating the development within the surrounding environment. Key components include;

- Amenity and Mitigation planting:** Taking cues from the surrounding landscape context the landscape design references the rural character of tree lined paddocks through specimen tree planting bordering SH1 and SH15. The proposed development will have a 30-65m planted frontage to SH1 and SH15A interface. This planted frontage helps create a visual buffer looking into the service centre and includes a mix of Puriri, Kauri Trees, nikau palms and totara trees with an understory of largely native grass and flax species. The use of Puriri and totara trees are continued through the truck parking area (north) to provide significant shade, while through the carpark evergreen Kowhai trees are utilised for their quick growth habit and ability to add greenery within the car park area and break up the mass of hard space. An amenity planting mix of mostly native species is used through other areas of the car park and bordering the north eastern neighbouring property which continues the theme of grass and flax planting. A 2m tall planted bund is located between the site and north eastern property. The

landscape planting has been designed to ensure that any parking and manoeuvring areas are screened from SH15A / SH1. It also provides for a buffer to the neighbour at 63 One Tree Point Road and contributes to the amenity of the area.

- Stormwater mitigation: Raingardens incorporated into the carpark. These will be planted with native species to assist with the filtration of runoff water but also soften and break up the large expanse of carpark hard surface.
- Stream restoration: The proposal includes provision to reinforce the health of a stream within the paddock to the north of the service centre. Using native naturally occurring riparian species such as *Apodasmia similis*, *Phormium tenax* and *Cordyline australis*, planting has been designed to help restore the habitat and assist with treating rural run off. The stream will also be fenced to protect from grazing livestock.



Figure 12: Context Masterplan Boffa Miskell Resource Consent Package



Figure 13: Tree Planting strategy Boffa Miskell Resource Consent Package

5.0 Statutory Planning Context

5.1 Resource Management Act (RMA and other higher order documents

Part 2 of the RMA sets out the purpose and principles of the Act. Section 5 states that the purpose of the RMA is to promote the sustainable management of natural and physical resources.

Section 6 sets out the matters of national importance that must be recognised and provided for in achieving the purpose of the RMA, including the protection of outstanding natural features and outstanding natural landscapes from inappropriate subdivision, use and development (Section 6(b)). There are no outstanding natural features or landscapes previously identified or considered likely to occur within the Site or its immediate vicinity.

Another matter of national importance is the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins and the protection of them from inappropriate subdivision, use and development as identified in section 6(a). The proposed development area features a central stream that flows through the centre of the Site that is dug in a channel from a culvert under SH1. Given this modified rural context, any natural character which remains in association with this stream will be low and unlikely to generate any significant effects.

Section 7 identifies a range of matters that shall be given particular regard to in achieving the purpose of the RMA. Section 7(c) in relation to the maintenance and enhancement of amenity values is particularly relevant to this project. This is considered in this report in relation to potential effects on views and visual amenity.

5.2 Northland Regional Policy Statement (NRPS) (2016)

The key issues, objectives and policies from the NRPS for this proposal are those relating to regional form, infrastructure, economic development, social wellbeing, and environmental protection including natural character, features and landscapes¹⁵. As identified above, no outstanding natural landscape, features or areas of natural character are identified within the NRPS maps.

5.3 Operative Whangarei District Plan

Within the Whangarei District Plan, the site is zoned Rural Production Environment (RPE), this proposal requires resource consent for a discretionary activity¹⁶. In terms of landscape and visual effects, Key objectives and policies comprise:

Chapter 5: Amenity Values Objectives and Policies

- Objective 5.3.1 intends for the characteristic amenity values of each Environment are maintained and, where appropriate enhanced;
- Policy 5.4.1 seeks to ensure that activities do not produce, beyond the boundaries of the site, adverse effects that are not compatible with the amenity values characteristics of the surrounding and / or adjacent environment;
- Objective 5.3.3 seeks to ensure that activities that demand a high level of amenity do not unduly compromise other land uses;
- Objective 5.3.5 seeks to ensure that the actual or potential effects of Subdivision use and development is appropriately controlled, and those activities located and designed, are to be compatible with existing and identified future patterns of development and levels of amenity in the surrounding environment;
- Policy 5.4.7 intends for the intensity and design of the development to ensure that subdivision and development do not unduly compromise the outlook and privacy of adjoining properties and should be compatible with the character and amenity of the surrounding environment;
- Policy 5.4.8 sites are encouraged to present frontage to the street and enhance the overall character of the streetscape;
- Policy 5.4.10 Seeks to retain trees and vegetation that contribute to the amenity values of the environment; and
- Policy 5.4.11 Signs. Need to ensure signs are located, designed and of a scale that avoids remedies or mitigates adverse effects on amenity values of the surrounding environment.

Based on the statutory planning provisions set out above, the key landscape and visual considerations which can be identified are summarised as follows:

- The Site forms part of the Rural Environment within which development should seek to maintain rural amenity and character;
- It is a requirement to ensure that land development does not detract from the amenity values or qualities of the local environment; and
- The site is not part of any Amenity Landscape Area or Outstanding Landscape Area.

¹⁵ In this instance Issue 2.8 – Natural character, features / landscape and historic heritage and the importance of maintaining and protecting the region's significant natural features and landscapes.

¹⁶ Environment Rural Production – RPE 2.3 – Discretionary Activities (1) Commercial and industrial activities are a discretionary activity

6.0 Visibility Analysis

To determine the likely visual catchment and viewing audience of the proposal, a study of aerial photography including land use, landform and vegetation patterns was undertaken.

The main locations where views of the proposed development are available include;

- SH1 and SH15A to the north, south and south east of the Site. Passing traffic will likely have clear view towards the new development. This would include cyclists on these roads (there are no public footpaths in the vicinity);
- Customers and employees of the G.A.S station, Bream Bay Superette and Tyre Business at 2612-2614 SH1; and
- Houses to the south of SH1 on Heatherlea Drive. In particular, residential addresses 33,41,43,62,67 Heatherlea Drive who would likely experience open elevated views over SH1 towards the Site.

6.1 Viewpoints

Based on the desktop analysis a number of potential viewpoints were identified. These viewpoints were then visited to verify the visibility of the proposed development and to take photos to assist with this assessment. These viewpoints are depicted on **Figure 6, Appendix 3: Graphic Supplement**. Of the eleven viewpoints, three were selected to prepare visual simulations.

Table 1: Visual Assessment Viewpoints (Refer also Appendix 3, Graphic Supplement. Figure 6: Viewpoint Location Map).

VP No.	Location	Direction of View	Distance from project (approx.)	Reason for Selection	Visual Simulation (Yes / No)
1	View from western shoulder of SH1 (approximately driveway of no. 2654)	North	600m	Representative of views attainable by users travelling north along SH1.	No
2	SH1 (offramp at the G.A.S service station)	North	270m	Representative of views attainable by users travelling north along SH1 and users of the G.A.S Station and superette.	Yes
3	View from eastern shoulder of SH1 (Adjacent Site)	South east	Adjacent site (Stream restoration)	Representative of views attainable by users travelling south along SH1.	No
4	Corner of Prescott Road and SH1	South east	140m	Representative of views attainable at the corner of Prescott Road / SH1	No

5	View from SH15A Opposite 39 Port Marsden Highway	west	130m	Representative of views attainable by users travelling along SH15A.	No
6	View from SH15A Opposite 63 Port Marsden Highway	West	230m	Representative of views attainable by users travelling along SH15A.	No
7	View from 161 Marsden Point Road	South West	1.5km	Representative of longer distance views, by users at Ruakaka and residential catchment at Ruakaka.	No
8	View from outside 19 Heatherlea Drive towards site	east	230m	Representative of elevated residential catchment at Heatherlea Drive	No
9	View from road outside 39 Heatherlea Drive towards site	east	250m	Representative of elevated residential catchment at Heatherlea Drive	Yes
10	View from road outside 39 Heatherlea Drive towards site (night)	east	250m	Representative of elevated residential catchment at Heatherlea Drive (Night view).	Yes
11	SH1 (offramp at the G.A.S service station) Night	North	270m	Representative of views attainable by users travelling north along SH1 and users of the G.A.S Station and superette at night.	Yes

7.0 Assessment of Effects

Landscape and visual impacts result from natural or induced change in the components, character or quality of the landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, facilities or activities. All these impacts are assessed to determine their effects on character and quality, amenity as well as on public and private views.

In this study, the assessment of potential effects is based on a combination of the landscape's sensitivity and visibility together with the nature and scale of the development proposal.

Particular effects considered relate to the following:

- Landscape and Character Effects;

- Visual Amenity Effects from public and private locations; and
- Effects in relation to statutory provisions.

7.1 Landscape Effects

7.1.1 Rural Landscape Character Effects

Landscape effects derive from the changes in the physical landscape, which may give rise to changes in its character and how this is experienced. Change in a landscape does not, of itself, necessarily constitute an adverse landscape or visual effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways, these changes are both natural and human induced. When managing landscape change it is important that adverse effects are avoided or sufficiently mitigated to ameliorate adverse effects. The aim is to provide a high amenity environment through appropriate design outcomes, including planting that can integrate development within the landscape and maintain or enhance the current levels of amenity experienced.

The introduction of a commercial scale development into a Rural Environment will inevitably generate localised change in anticipated character. The following assessment considered the wider and localised landscape character and attributes that may be affected by the proposed development.

The key changes to the landscape character of this area are derived from the following physical attributes:

- Landform;
- Vegetation Patterns; and
- Building Patterns.

As detailed in Section 3.0 above the character of the local landscape includes existing rural uses as well as commercial development such as SH1 / SH15A intersection, the GAS station, Bream Bay Superette and Tyre Business at 2612-2614 SH1. Furthermore, a large area of land to the east of the Site is located within Future Living 1 Environment. While only an indication of potential future use of the land, this primarily provides for relatively intensive residential activity with a minimum net site size per residential unit of 500m² and it is anticipated that this will be more intensively developed over time, with the urban edge of Ruakura settlement creeping towards SH1.

Given the current and future development anticipated under the WDP, the sensitivity to change is lower with an increasing peri-urban character. With a large proportion of the Site currently open and managed as pasture, it is acknowledged that the proposed development does not retain this aspect which remains consistent with wider rural areas. It does however provide for a high level of amenity and strong landscape setting that is in keeping with the surrounding and anticipated patterns of development. With the above in mind it is considered that the proposal will have a **moderate-low** adverse landscape character effect on the surrounding landscape when compared to what is permitted in the WDP.

7.1.2 Physical Landscape Effects

Vegetation removal / revegetation (refer Boffa Miskell Resource consent package and planting plan)

The vegetation on site is currently pastoral grass with some exotic species. No significant vegetation will be removed as part of the proposed works.

A proposed landscape plan has been prepared as part of the development proposal. This planting will consist of different boundary and site treatments with both mixed and exotic plant species. Once established it is considered that this planting will provide a consistent and high amenity edge treatment to the development.

Planting will assist with screening / reducing visibility of parts of the development such as the service lanes and some buildings. It will also provide a high level of onsite amenity for users of the space. The applicant is further committed to undertaking significant stream restoration and replanting to the north of the site. Including the full fencing off of this stream from adjacent livestock. Overall it is considered that the vegetation works on site will be a **moderate positive** effect.

Earthworks

Earthworks will be required to provide suitable levels for the development. Due to flooding constraints the total volume of earthworks is proposed 58,250m³ (28,500m³ cut and 29,750m³ fill). This proposes to lift (+1.2m max) the area of the site to accommodate the travellers centre and lower (-0.6m max) the farm part of the site.

Overall, whilst there will be some changes to the existing topography on Site, it is likely that earthworks to provide a flat platform within a floodplain for any development would require a comparable volume. Whilst raising the height of the land, the overall general shape (flat topography and stream) will be retained. During construction it is anticipated that there will be some temporary **moderate to moderate-high adverse effects** at the local scale with this level of change to the Site beyond that usual or anticipated within the environment. Once the development and associated planting becomes established and integrates built form within a wider open space setting any adverse effect will reduce to **moderate-low** and no more than minor.

Streamworks

As part of the proposed works the central stream through the Site will be substantially enhanced. Constraints with existing culverts are removed and an improved system will be developed to assist in managing flooding west of State Highway 1. This will include the establishment of a new onsite stormwater pond / on-site detention pond to manage the anticipated stormwater generated by the proposed development.

The stream on site will be fenced off from the development and include planting to the riparian margins. These works will ensure physical separation of the sensitive stream environment from any grazing livestock and will result in improvements to water quality and ecology. Overall it is considered that this will have **moderate-high positive** on-site effects and a net improvement in any low levels of natural character which currently occur.

Based on the above analysis, any adverse landscape effects of the proposal are considered to be **moderate-low** (minor) with some beneficial effects resulting from the proposed planting and stream works.

7.2 Visual Effect

Visual effects relate to the amenity values of a landscape including the “natural and physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes”¹⁷.

Visual effects result from changes to specific views and the visual amenity experienced by people. The magnitude (or level) of change must be considered in relation to the sensitivity of the viewing audience, when evaluating the significance of an effect. The sensitivity may be influenced by a number of factors, which include but are not limited to: the number of people who may see the proposal; the reason for a viewing audience being at the viewpoint or looking at the view; the existing character and values of the view, the viewing distance and the duration when the proposal may be seen.

The following assessment refers to **Appendix 3** Figures to understand the existing Site and visual simulation scenarios from select viewpoints.

Visual amenity effects are influenced by a number of factors including the nature of the proposal, the landscape absorption capability and the character of the site and the surrounding area. Visual amenity effects

¹⁷ Resource Management Act 1991

are also dependent on distance between the viewer and the proposal, the complexity of the intervening landscape and the nature of the view.

The principal elements of the proposal that will give rise to landscape and visual effects are:

- Additional built form on site – away from the ‘typical rural character’; and
- Earthworks.

Three visual simulations were prepared as part of this assessment these are included with a series of annotated site photographs to provide further information on site context and assist with the below assessment (refer **Appendix 3**).

During construction, the construction process will disrupt the landform and land-cover in localised areas and result in temporary effects visible from the surrounding area. Machinery and equipment will also be present on Site to undertake this installation.

7.2.1 Effects from public vantage points

Views from surrounding road network (SH1 and SH15)(Refer viewpoints 1-6)

Road users travelling south along SH1 will experience transient views of the development. The roadside vegetation and orientation of the road will visually screen many of the views towards the Site. Once the viewer is south of Prescott Road intersection, past the shelterbelt trees, and in closer proximity to the Site, they will have clear views of the proposed development and accessway (Refer VP3). Similarly, for users travelling north on SH1 due to direction of the road and roadside vegetation /shelterbelts views of the Site will be obscured until approximately 600m south of the roundabout intersection (Refer VP1).

Once the viewer is within visual proximity of the Site, they will experience views of the proposed development set behind the boundary planting. During construction these views will be open into the Site, however once the boundary planting has sufficiently established only the tallest of the buildings and roadside signage will be seen. The proposed planting will effectively ‘ground’ and integrate the development into the surrounding area and provide a sense of visual separation from the surrounding road network. When viewed it is anticipated the built development will be seen in the context of the existing GAS / Service centre to the south of the intersection to the south of the site. The development would not be an uncommon entity adjacent a key intersection on SH1.

Similarly, road users travelling west of SH15A will view the Site from approximately number 1226 SH15A when travelling west (Refer VP 5 & VP6). The principal focus of views in this location is towards the foothills of the Ruakaka forest and elevated landform to the west. Motorists and cyclists will be able to experience fleeting views of the proposed development and views will be at an oblique angle. Again, the proposed boundary treatment will assist in visually grounding the development and creating a high amenity interface with the road.

The sensitivity of this viewing audience is lower with visual exposure being restricted in view and time. The magnitude of visual change will be slightly higher as the development will represent an obvious change from open pasture to built-up development in a wider per-urban setting. However, it is considered this is generally in keeping with the surrounding built character and existing environment and will increasingly become softened beyond substantial planted landscape setbacks. Once established the high-quality planting and locating the built form towards the centre of the site, any adverse visual effects of the proposed development from the road are therefore assessed as **low**.

From the G.A.S Station to the south (Refer VP 2 and VP11)

Users and workers of the G.A.S station and superette to the south of the Site at present have unobstructed views to the north across the SH15A / SH1 intersection and then across the Site. When the development is viewed it will be seen in context of the surrounding built form and beyond the road. As the boundary planting establishes the Site will be gradually screened. Given the existing uses on Site the magnitude of visual change and sensitivity of this viewing audience is considered to be low. Initially, temporary adverse effects

during construction are considered to be moderate with the Site undergoing an obvious transformation from open areas of pasture as earthworks and subsequent built form is established in the immediate context of this existing development. Once established the effects of the proposed development are assessed as **low**.

7.2.2 Visual Effects from Private Houses

An assessment of the visual prominence of the proposal from a number of houses that are within close proximity of the Site was undertaken. This assessment assigned a degree of effects, based on the following: visibility and proximity to the site, the apparent orientation of the house and the nature of the view, including any existing or proposed vegetation that might provide full or partial screening of views. The assessment is based on observations from public roads and the use of aerial photos. These are tabled in **Appendix 2**.

The visual effects table includes an assessment of fifteen private houses. Of these fifteen it was noted that five houses received open unobstructed views over the Site. The remainder of the houses all received either partial, glimpsed or no views as existing vegetation and topography assisted in curtailing views to varying degrees.

Of those properties assessed, the properties which are anticipated to receive visual effects will be those properties that are elevated over the Site with clear open views over the site, towards Ruakaka and Whangarei heads.

Of these houses which are likely to receive the highest visual effects towards the development (26, 33, 41, 43, 62 and 67 Heatherlea Drive) the view is from an elevated position out over the site with little to no intervening vegetation. Whilst onsite amenity planting within the proposal will assist with breaking up the development and expanse of carpark hard surfacing, when seen the views will predominately change from open rural pasture to more built development.

As the viewing audiences would consist of residents it is considered that they have a high sensitivity to visual change. The magnitude of visual change within this location would be moderate, given the proximity to site and the open views.

Overall whilst some of the houses will receive visual effects that are within the **low** (adverse) category. There are six properties where the effects are considered to be **moderate** to **moderate-low** adverse.

7.3 Lighting Effects

As identified above there are a number of viewing audiences located within the context of the site, and these viewing audiences would experience views from a variety of locations and distances. During periods of darkness, people with views towards the site would experience some form of night lighting within the surrounding context. Sources of light include those from nearby industrial land uses (Marsden Point, North Port, GAS Station and superette), residential properties (both internal lights and exterior lights such as security lighting), as well as lighting from the street network.

A review of the proposal drawings, lighting strategy and visual simulations confirms that majority of the lighting will be visible from several locations including;

- Views from the surrounding road network, SH1 and SH15a;
- Elevated residential properties on Heatherlea Drive; and
- Users and workers at the GAS / Superette on the corner of SH1 / SH15A.

Vehicles operating on the site would result in some additional light spill, particularly from headlights as they move around the site. It is however noted that these lights from vehicles would often be seen within the context of SH1 / SH15A and anticipated within the area.

Viewing audiences from the surrounding road network and businesses immediate across the intersection would have the opportunity to view the proposal. During construction, and immediately following completion

these views will be open into the Site, however once the boundary planting has sufficiently established only the tallest of the buildings and roadside signage will be seen. Furthermore, the sensitivity of this viewing audience is lower with visual exposure being restricted in view and time. The magnitude of visual change to lighting is also low given the amount of on road side lighting and surrounding lighting for businesses.

Given the amount of surrounding lighting in the immediate area (Refer VP10) it is considered that these viewing audiences to the north and south would experience a very low magnitude of change to their views, and that this change would result in **low** adverse visual effects if all proposal lighting was illuminated.

Near distant residential views from locations to the west of the site (such as those accessed off Heatherlea Drive) would have more elevated views of the development, with proposed onsite vegetation screening little of the proposed building and lit components. It is considered that this viewing audience has a higher sensitivity to visual change given their residential context. As represented in VP10 views from these residents included a number of illuminated elements including North Port, Marsden Point, SH1 Street lighting and the development on the corner of SH15 and SH1. However, the proposed development represents an obvious change in the quantity of lighting seen, Visual effects for those properties with clear open views of the site are considered to be **moderate-low**.

7.4 Effects in relation to Statutory Provisions

An assessment against the relevant landscape provisions within the site, as summarised in section 5.0, is set out below. In assessing the proposal against the provisions of the Whangarei District Plan, the following are considered most relevant. Commentary on the design response is provided in the following table along with the policies which are paraphrased;

Northland Regional Policy Statement		
Issue 2.8	Issue 2.8 identifies the importance of maintaining and protecting the region's significant natural features and landscapes.	<ul style="list-style-type: none"> The application is not within any identified significant natural landscapes and does not contain any significant natural features.
Whangarei District Plan		
Objective 5.3.1	The characteristic amenity values of each Environment are maintained and, where appropriate enhanced	<ul style="list-style-type: none"> The effects on the amenity values and character of the Rural Environment have been considered in section 7.1.1 of this report. The introduction of a commercial scale development into an existing open rural environment will generate localised change in accordance with the surrounding anticipated peri-urban character (as per the WDP). It also provides for a high-quality amenity landscape that is in keeping with the surrounding and anticipated patterns of development. The comprehensive landscape plan provides an attractive, high vegetated edge to all sides of the development. The stream will be comprehensively replanted and fenced to ensure an enhanced landscape outcome overtime. A large proportion of the site will remain in pasture through use for rural activities.
Policy 5.4.1	seeks to ensure that activities do not produce, beyond the boundaries of the site, adverse effects that are not compatible with the amenity values characteristics of the surrounding and / or adjacent environment	

Objective 5.3.3	Seeks to ensure that activities that demand a high level of amenity do not unduly compromise other land uses	<ul style="list-style-type: none"> The comprehensive landscape plan provides an attractive, highly vegetated edge to all sides of the development. Specimen trees and layered planting provides for a high level for the surrounding environment and for the users of the site. A large proportion of the site will remain in pasture with rural activities.
Objective 5.3.5	Seeks to ensure that the actual or potential effects of Subdivision use and development is appropriately controlled, and those activities located and designed, are to be compatible with existing and identified future patterns of development and levels of amenity in the surrounding environment	<ul style="list-style-type: none"> It is acknowledged that the proposed service centre is not a rural activity and with rural character. The onsite planting and architectural design does provide for a high level of amenity. The sensitive design ensures that outlook and privacy from adjoining sites are maintained through the careful location of the activity within the centre of the site, and comprehensive landscaping to the edges.
Policy 5.4.7	intends for the intensity and design of the development to ensure that subdivision and development do not unduly compromise the outlook and privacy of adjoining properties and should be compatible with the character and amenity of the surrounding environment;	
Policy 5.4.8	sites are encouraged to present frontage to the street and enhance the overall character of the streetscape;	<ul style="list-style-type: none"> As described previously the comprehensive landscape design will contribute positively to the overall character of the streetscape and present a high-quality frontage to SH1 / SH15A.
Policy 5.4.10	Seeks to retain trees and vegetation that contribute to the amenity values of the environment	<ul style="list-style-type: none"> There is little established vegetation on Site that is of any merit. The onsite vegetation is predominately made up of pasture with some exotic tree species. The proposed landscape plan proposes a mixed of native tree species that will contribute to the surrounding environment together with the stream and wetland planting to the north it is considered to have a positive contribution to the amenity values of the environment.
Policy 5.4.11 Signs	Need to ensure signs are located, designed and of a scale that avoids remedies or mitigates adverse effects on amenity values of the surrounding environment	<ul style="list-style-type: none"> Two pylon signs are proposed; one to each vehicle ingress point to the site (SH1 and SH15) <p>Overall the signage is considered to be acceptable from a landscape and visual perspective as;</p> <ul style="list-style-type: none"> Proposed signage will not be flashing or reflective. The signage will be illuminated however this will be low/soft LED lighting and back lit. The scale of the signage is in keeping with the scale of the proposed buildings and

		<p>does not detract from the architecture. Due to the simple 'lettering' on the signage it does not result in visual clutter and reduces the overall visual impact (e.g. the signage is not incorporated into billboards with multicoloured backdrops and images).</p> <ul style="list-style-type: none"> • The proposed signage will not detract from views of significant natural or cultural landscapes.
--	--	--

The Whangarei District plan (WDP) seeks to retain and preserve the rural character of the rural environment. Whilst the development seeks a change in character this is anticipated under the WDP and consistent with a peri-urban character surrounding the Site. In this context, the proposal seeks to provide a high amenity development that is in keeping with the pattern of development within the surrounding area. Site boundaries to the surrounding road networks are well considered and provide for an appropriate high level of amenity and sufficient level of screening of the development. There is potential for **low** adverse effect when considering the policy context and mitigation measures proposed.

8.0 Conclusions

The proposed development is located within a Rural Environment zone and has taken account of the objectives and policies of the WDP which relate to the area.

The proposed redevelopment of the Site will generate moderate-low adverse (minor) effects on the landform of the Site through proposed earthworks which are progressively integrated through planting and open space provisions. Vegetation effects are considered to be beneficial through the provision of on-site amenity planting and works associated with the stream.

In considering the change in character within the Site, whilst the development will seek a change in open pastoral character to a more built character at the local scale, the proposal seeks to provide a high amenity development that is generally in keeping with the pattern of peri-urban development within the surrounding area. Once established, effects on landscape character would be moderate-low adverse (minor).

The main viewing audiences of the proposed development have been identified and assessed using a series of viewpoints and photographs to illustrate representative views. The principal viewpoints from which the Site is visible are limited to include; users of SH1 and SH15A and residential on Heatherlea Drive.

When viewed it is anticipated the proposed development will represent a visual change from an open pastoral area to a more apparent built development within a transitional peri-urban setting. This development will be seen in the context of an existing mix of wider rural uses as well as commercial development and a changing residential context which characterises the surrounding area.

Whilst some temporary moderate adverse visual effects will be inevitable during construction within the Site, once established, low (less than minor) adverse visual effects are anticipated for the public viewing audiences on SH1, SH15A and surrounding context, due to the high-quality planting, architectural treatment of the built form and locating the built form towards the centre of the site.

It is acknowledged that the proposal changes the current open landscape setting, particularly for those immediate neighbours identified. Overall there are six properties where the effects are considered to be moderate to moderate-low adverse (Minor). For the remainder of the residential views within the wider context, adverse visual effects will be generally low (less than minor).

Appendix 1: Landscape and Visual Effects Assessment Methodology

11 February 2019

Introduction

The Boffa Miskell Ltd Landscape and Visual Effects Assessment (LVA) process provides a framework for assessing and identifying the nature and level of likely effects that may result from a proposed development. Such effects can occur in relation to changes to physical elements, the existing character of the landscape and the experience of it. In addition, the landscape assessment method may include an iterative design development processes, which includes stakeholder involvement. The outcome of any assessment approach should seek to avoid, remedy or mitigate adverse effects (see **Figure 1**). A separate assessment is required to assess changes in natural character in coastal areas and other waterbodies.

This outline of the landscape and visual effects assessment methodology has been undertaken with reference to the **Quality Planning Landscape Guidance Note**¹⁸ and its signposts to examples of best practice, which include the **UK guidelines for landscape and visual impact assessment**¹⁹ and the **New Zealand Landscape Institute Guidelines for Landscape Assessment**²⁰.

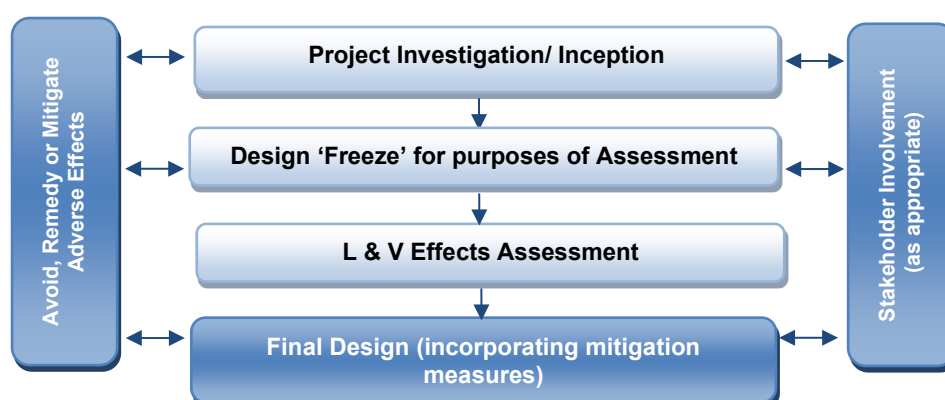


Figure 1: Design feedback loop

When undertaking a LVA, it is important that a **structured and consistent approach** is used to ensure that **findings are clear and objective**. Judgement should be based on skills and experience and be supported by explicit evidence and reasoned argument.

While landscape and visual effects assessments are closely related, they form separate procedures. The assessment of the potential effect on the landscape forms the first step in this process and is carried out as an effect on landscape elements, features and on landscape character. The assessment of visual effects considers how changes to the physical landscape affect the viewing audience. The types of effects can be summarised as follows:

Landscape effects: *Change in the physical landscape, which may affect its characteristics or qualities.*

Visual effects: *Change to views which may affect the visual amenity experienced by people.*

The policy context, existing landscape resource and locations from which a development or change is visible, all inform the 'baseline' for landscape and visual effects assessments. To assess effects, the landscape must first be **described**, including an understanding of the **key landscape characteristics and qualities**. This process, known as landscape characterisation, is the basic tool for understanding landscape character and may involve subdividing the landscape into character areas or types. The condition of the landscape (i.e. the state of an individual area of landscape or landscape

¹⁸ <http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape>

¹⁹ Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)

²⁰ Best Practice Note Landscape Assessment and Sustainable Management 10.1, NZILA

feature) should also be described together with, a judgement made on the value or importance of the potentially affected landscape.

Landscape Effects

Assessing landscape effects requires an understanding of the landscape resource and the magnitude of change which results from a proposed activity to determine the overall level of landscape effects.

Landscape Resource

Assessing the sensitivity of the landscape resource considers the key characteristics and qualities. This involves an understanding of both the ability of an area of landscape to absorb change and the value of the landscape.

Ability of an area to absorb change

This will vary upon the following factors:

- Physical elements such as topography / hydrology / soils / vegetation;
- Existing land use;
- The pattern and scale of the landscape;
- Visual enclosure / openness of views and distribution of the viewing audience;
- The zoning of the land and its associated anticipated level of development;
- The scope for mitigation, appropriate to the existing landscape.

The ability of an area of landscape to absorb change takes account of both the attributes of the receiving environment and the characteristics of the proposed development. It considers the ability of a specific type of change occurring without generating adverse effects and/or achievement of landscape planning policies and strategies.

The value of the Landscape

Landscape value derives from the importance that people and communities, including tangata whenua, attach to particular landscapes and landscape attributes. This may include the classification of Outstanding Natural Feature or Landscape (ONFL) (RMA s.6(b)) based on important biophysical, sensory/ aesthetic and associative landscape attributes, which have potential to be affected by a proposed development. A landscape can have value even if it is not recognised as being an ONFL.

Magnitude of Landscape Change

The magnitude of landscape change judges the amount of change that is likely to occur to areas of landscape, landscape features, or key landscape attributes. In undertaking this assessment, it is important that the size or scale of the change is considered within the geographical extent of the area influenced and the duration of change, including whether the change is reversible. In some situations, the loss /change or enhancement to existing landscape elements such as vegetation or earthworks should also be quantified.

When assessing the level of landscape effects, it is important to be clear about what factors have been considered when making professional judgements. This can include consideration of any benefits which result from a proposed development. **Table 1** below helps to explain this process. The tabulating of effects is only intended to inform overall judgements.

Contributing Factors		Higher	Lower
Landscape (sensitivity)	Ability to absorb change	The landscape context has limited existing landscape detractors which make it highly vulnerable to the type of change resulting from the proposed development.	The landscape context has many detractors and can easily accommodate the proposed development without undue consequences to landscape character.
	The value of the landscape	The landscape includes important biophysical, sensory and shared and recognised attributes. The landscape requires protection as a matter of national importance (ONFL).	The landscape lacks any important biophysical, sensory or shared and recognised attributes. The landscape is of low or local importance.
Magnitude of Change	Size or scale	Total loss or addition of key features or elements. Major changes in the key characteristics of the landscape, including significant aesthetic or perceptual elements.	The majority of key features or elements are retained. Key characteristics of the landscape remain intact with limited aesthetic or perceptual change apparent.
	Geographical extent	Wider landscape scale.	Site scale, immediate setting.
	Duration and reversibility	Permanent. Long term (over 10 years).	Reversible. Short Term (0-5 years).

Table 1: Determining the level of landscape effects

Visual Effects

To assess the visual effects of a proposed development on a landscape, a visual baseline must first be defined. The visual 'baseline' forms a technical exercise which identifies the area where the development may be visible, the potential viewing audience, and the key representative public viewpoints from which visual effects are assessed.

The viewing audience comprises the individuals or groups of people occupying or using the properties, roads, footpaths and public open spaces that lie within the visual envelope or 'zone of theoretical visibility (ZTV)' of the site and proposal. Where possible, computer modelling can assist to determine the theoretical extent of visibility together with field work to confirm this. Where appropriate, key representative viewpoints should be agreed with the relevant local authority.

The Sensitivity of the viewing audience

The sensitivity of the viewing audience is assessed in terms of assessing the likely response of the viewing audience to change and understanding the value attached to views.

Likely response of the viewing audience to change

Appraising the likely response of the viewing audience to change is determined by assessing the occupation or activity of people experiencing the view at particular locations and the extent to which their interest or activity may be focussed on views of the surrounding landscape. This relies on a landscape architect's judgement in respect of visual amenity and the reaction of people who may be affected by a proposal. This should also recognise that people more susceptible to change generally include: residents at home, people engaged in outdoor recreation whose attention or interest is likely to be focussed on the landscape and on particular views; visitors to heritage assets or other important visitor attractions; and communities where views contribute to the wider landscape setting.

Value attached to views

The value or importance attached to particular views may be determined with respect to its popularity or numbers of people affected or reference to planning instruments such as viewshafts or view corridors. Important viewpoints are also likely to appear in guide books or tourist maps and may include facilities provided for its enjoyment. There may also be references to this in literature or art, which also acknowledge a level of recognition and importance.

Magnitude of Visual Change

The assessment of visual effects also considers the potential magnitude of change which will result from views of a proposed development. This takes account of the size or scale of the effect, the geographical extent of views and the duration of visual change, which may distinguish between temporary (often associated with construction) and permanent effects where relevant. Preparation of any simulations of visual change to assist this process should be guided by best practice as identified by the NZILA²¹.

Visual Simulations

As part of the assessment process, visual simulations have been prepared in accordance with NZILA Best Practice Guide: Visual Simulations BPG 10.2²². This has entailed taking digital photographs from each of the identified viewpoints and recording their GPS locations. Preparation of visual simulations required the preparation of a 3D model of the proposed landform supplied by Buchan Group. The GPS coordinates for each viewpoint were also added to the model and using the same focal length parameters as that of the camera, an image of the 3D wire frame of the proposed landform was then generated for each viewpoint. This was then registered over the actual photograph, using known reference points to bring the two together. The surface of the proposed landform was then rendered to approximate the likely appearance of the Site.

When determining the overall level of visual effect, the nature of the viewing audience is considered together with the magnitude of change resulting from the proposed development. **Table 2** has been prepared to help guide this process:

²¹ Best Practice Guide: Visual Simulations BPG 10.2, NZILA

²² Best Practice Guide: Visual Simulations BPG 10.2, NZILA

Contributing Factors		Higher	Lower	Examples
The Viewing Audience (sensitivity)	Ability to absorb change	Views from dwellings and recreation areas where attention is typically focussed on the landscape.	Views from places of employment and other places where the focus is typically incidental to its landscape context. Views from transport corridors.	Dwellings, places of work, transport corridors, public tracks
	Value attached to views	Viewpoint is recognised by the community such as an important view shaft, identification on tourist maps or in art and literature. High visitor numbers.	Viewpoint is not typically recognised or valued by the community. Infrequent visitor numbers.	Acknowledged viewshafts, Lookouts
Magnitude of Change	Size or scale	Loss or addition of key features in the view. High degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Full view of the proposed development.	Most key features of views retained. Low degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Glimpse / no view of the proposed development.	- Higher contrast/ Lower contrast. - Open views, Partial views, Glimpse views (or filtered); No views (or obscured)
	Geographical extent	Front on views. Near distance views; Change visible across a wide area.	Oblique views. Long distance views. Small portion of change visible.	- Front or Oblique views. - Near distant, Middle distant and Long distant views
	Duration and reversibility	Permanent. Long term (over 15 years).	Transient / temporary. Short Term (0-5 years).	- Permanent (fixed), Transitory (moving)

Table 2: Determining the level of visual effects

Nature of Effects

In combination with assessing the level of effects, the landscape and visual effects assessment also considers the nature of effects in terms of whether this will be positive (beneficial) or negative (adverse) in the context within which it occurs. Neutral effects can also occur where landscape or visual change is benign.

It should also be noted that a change in a landscape does not, of itself, necessarily constitute an adverse landscape or visual effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways; these changes are both natural and human induced. What is important in managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use. The aim is to provide a high amenity environment through appropriate design outcomes.

This assessment of the nature effects can be further guided by **Table 3** set out below:

Nature of effect	Use and Definition
Adverse (negative):	The activity would be out of scale with the landscape or at odds with the local pattern and landform which results in a reduction in landscape and / or visual amenity values
Neutral (benign):	The activity would be consistent with (or blend in with) the scale, landform and pattern of the landscape maintaining existing landscape and / or visual amenity values
Beneficial (positive):	The activity would enhance the landscape and / or visual amenity through removal or restoration of existing degraded landscape activities and / or addition of positive elements or features

Table 3: Determining the Nature of Effects

Determining the Overall Level of Effects

The landscape and visual effects assessment concludes with an overall assessment of the likely level of landscape and visual effects. This step also takes account of the nature of effects and the effectiveness of any proposed mitigation. The process can be illustrated in Figure 2:



Figure 2: Assessment process

This step informs an overall judgement identifying what level of effects are likely to be generated as indicated in **Table 4** below. This table which can be used to guide the level of landscape and visual effects uses an adapted seven-point scale derived from NZILA's Best Practice Note.

Effect Rating	Use and Definition
Very High:	Total loss of key elements / features / characteristics, i.e. amounts to a complete change of landscape character and in views.
High:	Major modification or loss of most key elements / features / characteristics, i.e. little of the pre-development landscape character remains and a major change in views. <u>Concise Oxford English Dictionary Definition</u> <i>High: adjective- Great in amount, value, size, or intensity.</i>
Moderate- High:	Modifications of several key elements / features / characteristics of the baseline, i.e. the pre-development landscape character remains evident but materially changed and prominent in views.
Moderate:	Partial loss of or modification to key elements / features / characteristics of the baseline, i.e. new elements may be prominent in views but not necessarily uncharacteristic within the receiving landscape. <u>Concise Oxford English Dictionary Definition</u> <i>Moderate: adjective- average in amount, intensity, quality or degree</i>
Moderate - Low:	Minor loss of or modification to one or more key elements / features / characteristics, i.e. new elements are not prominent within views or uncharacteristic within the receiving landscape.
Low:	Little material loss of or modification to key elements / features / characteristics. i.e. modification or change is not uncharacteristic or prominent in views and absorbed within the receiving landscape. <u>Concise Oxford English Dictionary Definition</u> <i>Low: adjective- 1. Below average in amount, extent, or intensity.</i>
Very Low:	Negligible loss of or modification to key elements/ features/ characteristics of the baseline, i.e. approximating a 'no change' situation and a negligible change in views.

Table 4: Determining the overall level of landscape and visual effects

Determination of “minor”

Decision makers determining whether a resource consent application should be notified must also assess whether the effect on a person is less than minor²³ or an adverse effect on the environment is no more than minor²⁴. Likewise, when assessing a non-complying activity, consent can only be granted if the s104D 'gateway test' is satisfied. This test requires the decision maker to be assured that the adverse effects of the activity on the environment will be 'minor' or not be contrary to the objectives and policies of the relevant planning documents.

These assessments will generally involve a broader consideration of the effects of the activity, beyond the landscape and visual effects. Through this broader consideration, guidance may be sought on whether the likely effects on the landscape or effects on a person are considered in relation to 'minor'. It must also be stressed that more than minor effects on individual elements or viewpoints does not necessarily equate to more than minor effects on the wider landscape. In relation to this assessment, moderate-low level effects would generally equate to 'minor'.

The third row highlights the word 'significant' which has particular reference to the NZCPS and Policy 13 and Policy 15 and where on the effects-spectrum 'a significant' effect would be placed.

<u>Less than Minor</u>		<u>Minor</u>	<u>More than Minor</u>			
Very Low	Low	Moderate – Low	Moderate	Moderate-High	High	Very High
					Significant²⁵	

Table 5: Determining minor effects for notification determination and non-complying activities

²³ RMA, Section 95E

²⁴ RMA Section 95D

²⁵ To be used only about Policy 13(1)(b) and Policy 15(b) of the New Zealand Coastal Policy Statement (NZCPS), where the test is 'to avoid significant adverse effects'.

Appendix 2: Visual Impact Table

Visual Impact Table (Refer to figure 05 Appendix 3 for location of each house).				
ID	Address	Nature of View ²⁶ and distance ²⁷ to the nearest site boundary	Visual Effect	Notes
1	7 Heatherlea Drive	Glimpse view north-east towards site. Distance. 238m	Low	Single-storey house orientated with principal living and outdoor area to north away from site. Landscape to the eastern boundary and within neighbouring property at 17 Heatherlea Drive will assist with screening view of proposed development site. Dwelling set at a similar RL to proposed development. Views will be largely obscured by intervening vegetation and distance.
2	17 Heatherlea Drive	No dwelling - garden.	-	-
3	20 Heatherlea Drive	Kiwi Sheds – Business.	N/A	Business – not residential dwelling.
4	19 Heatherlea Drive	Partial view north towards site. 207m	Low	Single storey house orientated with principal living. outdoor to the north towards site. House at low position – not elevated above the site. Some intervening vegetation will screen views, Views still able to be obtained towards site. Proposed vegetation will assist with screening due to dwelling not being in elevated position.
5	22 Heatherlea Drive	No views of site. 412m	Very Low	No views towards site. House screened by intervening topography and vegetation.
6	26 Heatherlea Drive	Open elevated view of site. 276m	Moderate	Single storey house orientated with principal outdoor space to the north (fenced). Open views towards the site available. Dwelling is elevated RL30m with views towards Whangarei Heads and will have open unobstructed views out and over the site.
7	33 Heatherlea Drive	Open elevated views north over site. 157m	Moderate - low	Single storey house orientated with principal outdoor space to the north. On site vegetation screens views to the north west, but open views towards the

²⁶ Nature of view: No View; Glimpse View; Partial View (i.e. up to 50% of the Site visible) and Open View

²⁷ Measurement taken from GIS and is an estimate only. It is measured from edge of dwelling to the closest boundary of site.

				site available. Dwelling is elevated RL20m with views towards Whangarei Heads. Will have open views out and over the site.
8	39 Heatherlea Drive	No dwelling – Horse Paddock	-	-
9	41 Heatherlea Drive	Open elevated view of site. 235m	Moderate - low	Single storey house orientated with principal outdoor space to the north. Elevated views to north over the site. Dwelling is elevated at RL40 views towards Whangarei Heads.
10	43 Heatherlea Drive	Open elevated view of site. 287m	Moderate-low	Single storey house orientated with principal outdoor space to the north. On site boundary vegetation screens some views of the site / SH1. Elevated views to north over the site. Dwelling is elevated at RL40 views towards Whangarei Heads.
11	62 Heatherlea Drive	Partial View. Elevated view of site. 437m	Moderate - low	Single storey house orientated with principal outdoor space to the north. On site and intervening vegetation will screen some views towards site. Dwelling is elevated at RL60 views towards Whangarei Heads over site.
12	66 Heatherlea Drive	No views of site. 485m	-	No views towards site. House screened by intervening topography and vegetation.
13	67 Heatherlea Drive	Open view. Elevated 422m	Moderate-low	Single storey house orientated with principal outdoor space to the north. On site vegetation screens some views of site and SH1. Dwelling is elevated at RL60 views towards Whangarei Heads over site.
14	Shed.	-	-	-
15	81 Heatherlea Drive	No views of site. 640m	-	No views towards site. Site screened by intervening topography.

About Boffa Miskell

Boffa Miskell is a leading New Zealand professional services consultancy with offices in Auckland, Hamilton, Tauranga, Wellington, Christchurch, Dunedin and Queenstown. We work with a wide range of local and international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, cultural heritage, graphics and mapping. Over the past four decades we have built a reputation for professionalism, innovation and excellence. During this time we have been associated with a significant number of projects that have shaped New Zealand's environment.

www.boffamiskell.co.nz

Auckland
+64 9 358 2526

Hamilton
+64 7 960 0006

Tauranga
+65 7 571 5511

Wellington
+64 4 385 9315

Christchurch
+64 3 366 8891

Queenstown
+64 3 441 1670

Dunedin
+64 3 470 0460