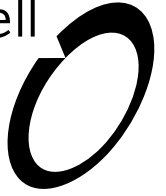


**Appendix G – Landscape and Visual Effects Assessment prepared
by Boffa Miskell**



Boffa Miskell



Lockerbie Estate Subdivision Plan Change



Landscape and Visual Effects Assessment

Prepared for Lockerbie Estate Limited

6 September 2021



Document Quality Assurance

Bibliographic reference for citation: Boffa Miskell Limited 2021. <i>Lockerbie Estate Subdivision Plan Change: Landscape and Visual Effects Assessment</i> . Report prepared by Boffa Miskell Limited for Lockerbie Estate Limited.		
Prepared by:	Oliver May Senior Landscape Planner Boffa Miskell Limited	
Reviewed by:	Tom Lines Principal NIZLA Registered Landscape Architect Boffa Miskell Limited	
Status: FINAL	Revision / version: [0]	Issue date: 6 September 2021
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Template revision: 20180621 0000

File ref: 20210215_PPC_LVA_FINAL_OMa_20210906docx.docx

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1.0 Introduction

1.1 Scope and purpose of the report

Boffa Miskell Limited (BML) has been engaged by Lockerbie Estate Limited to undertake a Landscape and Visual Effects Assessment (LVA) for a proposed Private Plan Change (PPC) of a 77.8 ha area of land to the north west of Morrinsville (otherwise referred to as 'The Site' in this report). The Site is zoned Rural with a Future Residential Policy Area (FRPA) overlay in the Matamata Piako District Plan¹.

The PPC proposes to rezone The Site to a residential zone and medium density residential zone. The overall design will include a mixture of larger residential sections, medium density sections and provisions that will enable two storey duplex or terraced housing. A proposed open/green space precinct with an integrated walking and cycling network is also proposed through the site.

The plan change area is an extension of the existing Lockerbie Estate development to the south of the site. The features of the existing development that are relevant in the plan change assessment include:

- the locations of a large QEII protected park and linkage reserve that have been designed to give open space connectivity into the plan change area
- Council funded playground
- Café and Childcare consented within a neighbourhood centre
- A proposed 3,500sqm retail site
- 8HA retirement village and proposed aged care facility
- A mixture of housing density that has trended towards greater utilisation of medium density style product through the wide use of the Council infill provisions.

The following Landscape and Visual Assessment assesses the landscape and visual effects of the proposed zoning change on the immediate and surrounding environment character. This assessment recognises the potential for land to use change from rural to urban as signalled by the FRPA.

This assessment:

- Briefly describes The Site and its landscape setting, recognising that a number of other documents supporting the plan change set out comprehensive descriptions of both;
- Analyses the proposed plan change outcomes in the context of the future urban expansion of Morrinsville;
- Describes the nature of the plan change and the ways in which landscape attributes and visual amenity are provide for;

¹ Refer to Figure 4 of the Graphic Supplement.

- Sets out an assessment of the potential landscape and visual effects in respect of the plan change; and
- Provides design recommendations for plan change provisions and future resource consent applications to ensure future development meets the outcomes sought in the plan change.

Maven Consultants were engaged to produce a Development Area Plan that sets out the proposed zoning framework. That zoning framework has then been developed into and Development Standards² for The Site by Bloxam Burnett & Olliver.

1.2 Project background

Boffa Miskell have prepared an indicative landscape strategy for stages one, two and three of the Lockerbie Estate development and have led the master planning exercise for the proposed retirement village at Lockerbie Estate in collaboration with Archistudio Architects. Boffa Miskell have also been instrumental in the master planning, landscape design and Landscape and Visual Assessment as part of the consenting process for the retirement village within the residential development currently under construction. Boffa Miskell are well placed to prepare the LVEA and provide guidance on the plan change due to the ongoing input and collaboration with this development area.

1.3 Assessment Process

This Landscape Effects Assessment (LEA) has been undertaken with reference to Te Tangi a te Manu, Aotearoa New Zealand Landscape Assessment Guidelines³. These guidelines have been developed to relate to the Aotearoa New Zealand environmental planning context and align with te ao Māori and te ao Pākehā concepts of landscape. A full methodology is outlined in **Appendix 1** of this report. In summary, the effects ratings are based upon a seven-point scale which ranges from very low to very high.

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.

² Full documents and plans are available in the AEE provided by BBO

³ 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', [Final Draft subject to final editing, graphic design, illustrations, approved by Tuia Pito Ora/NZILA 5 May 2021]

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.

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.

To determine the level of landscape and visual effects, both the sensitivity of the landscape or viewing audience and level of change resulting from a proposed development are considered. The sensitivities of the viewing audiences to visual change vary, however residential and recreational viewing audiences are generally considered to be more sensitive to change, while travelling and working viewing audiences are less sensitive. When assessing the potential effects arising from a plan change the assessment should consider the nature of maximised potential future development enabled by the provisions of the plan change. In this respect the present owner of the land is not a consideration as the zoning follows the land independent of ownership and the intentions of a particular landowner.

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:

- Matamata Piako District Plan
- Proposal Drawings including proposed Development Area Plan (Maven Consultants)
- Development Standards document (Bloxam Burnett & Olliver)
- Aerial Photography and existing contours (Google, Matamata Piako District Council)

The desktop study was also undertaken to determine likely viewing audiences, landscape character types, prominent ridge lines and landform and the landscape context of the surrounding area. The information collected was used to inform The Site visit to The Site and the surrounding area, on the 3rd February 2021. Representative photographs were taken from publicly accessible viewpoints representing both private residential and public viewing audiences.

2.0 The Site and its Landscape Setting

The Site comprises some 77.8ha to the north west of Morrinsville in the Matamata Piako District across three lots. The northern boundary of The Site is defined by Taukoro Road, rural zoned land along the eastern boundary, residential zoned land being developed as part of the Lockerbie Estate residential development to the south and the western boundary abuts Studholme Street (Refer Figure 1: Site Context and Figure 2: Site Location in the Graphic Supplement). The Site is zoned rural with a FRPA overlay, anticipating the future urban growth and development of Morrinsville. Studholme Street is zoned as Rural Residential and the south of The Site is a large residential zone which extends the established residential core of Morrinsville (Plate 1).



Plate 1: District Plan zoning within the context of The Site (extracted from Appendix 2: Graphic Supplement)

As noted above, The Site is set within the context of a gently undulating rural landscape to the north of the Morrinsville township within a landscape broadly characterised as Central Hill

Country as classified in the Waikato Regional Landscape Assessment⁴ which describes the area as:

The Central Hill Country comprises the southern section of the Hunua Range, the Hapuakohe Range, Mangakawa and Hangawera, and the hills around Te Miro and Maungatautari. These hills and ranges vary in elevation from around 400m to nearly 800m and are comprised of sedimentary and volcanic rock. The hill country comprises rolling and steep landforms, with a mix of pasture, some mature bush in the gullies and along the higher tops, with pine plantations in places. There are also other exotic tree groups on the lower slopes.

There are a number of quarries on the lower hill slopes which are quite visible. Morrinsville is located in the centre of this area; the railway lines from Hamilton, Paeroa and Rotorua meet at Morrinsville, and the Hamilton-Paeroa main highway passes through the town. The main primary industries of the area, which is one of the most intensively farmed areas in New Zealand, are dairy farming and fat-lamb production.

Significant population growth has been experienced in many of the small rural towns in this area such as Morrinsville, Waihi and Matamata for example. This puts pressure on the amount of residential land available. The demand for more residential development not only poses a threat to the rural landscape through rural residential development but also potentially compromises the future use of good quality lands and soils.

The landscape is broadly characterised by a mixture of undulating landform with widely distributed steep knolls and the expanding township of Morrinsville. The residential areas of Morrinsville lay across a gentler rolling landform with a generally south facing aspect. Pastoral fields are divided into medium to large geometric enclosures. The topography has a generally sloping landform with areas of rolling hills and steep undulations with few areas of flat land (see Photo 1 below and Figure 3 Elevation Plan – Graphic Supplement). Mount Hangawera lies to the north of The Site, Kaimai Range to the east and the Pakaroa Range to the south, the open nature of the landscape allows for long views out of The Site towards these distance landforms.



Photo 1: Undulating landform of geometric fields bordered by hedgerows, Mount Hangawera is in the far distance.

⁴ Waikato Regional Landscape Assessment, February 2010. Technical Report # 1636162, page 25

The Morrinsville residential settlement sits between the Piako River (to the east) and the Morrinsville Stream (to the west). The Maungahaumia Stream branches from the Piako River and extends into the northern boundary of The Site across Taukoro Road. Industrial and business land uses are located to the south west of the town centred around State Highway 26. The southern extents of the town is defined by the East Coast Main Trunk and Waitoa Branch rail lines.

Vegetation across the landscape is predominantly pastoral grassland separated by deciduous exotic hedgerow species with infrequent lengths of mature exotic trees, which define field boundaries (see Photo 2 below). Mature trees are rare within the farmland, however shelter belts of trees do appear intermittently in proximate rural residential lots and farmsteads. Mature vegetation in riparian habitats along stream corridors are characteristic in the landscape but uncommon. Shelter belts and stands of trees are also apparent surrounding rural dwellings and farmsteads. Vegetation within The Site is broadly reflective of the patterns and land use found in the wider landscape and predominantly comprises open pastoral grassland and hedgerows.



Photo 2: Open pastoral farmland bordered by post and wire fencing and hedgerows, the QEII protected exotic trees can be seen in the background along the ridgeline.

Within The Site and the immediate context, built form comprises predominantly individual residential dwellings, agricultural storage structures (shed and barns), agricultural production buildings and a care facility to the west. To the south and south east of The Site residential development is expanding north towards Taukoro Road to form a new rural urban interface (see Photo 3 below). To the south of The Site, a resource consent has been granted⁵ for residential development of the Lockerbie Estate up to the extent of the residential zoned land.

⁵ Land use and subdivision consent reference 101.2019.11988 & 102.2019.11988



Photo 3: Residential properties along the north western extent of Morrinsville accessed from Pinehurst Crescent and Augusta Place.

The western extent of The Site boundary includes the property at 182 Studholme Street property, which is run as a dairy farm (see Photo 4 below). This property extends to Studholme Street to the west and Taukoro Road to the north.



Photo 4: View looking south from Taukoro Road towards the property at 182 Studholme Street .

There are no outstanding natural landscapes or features (ONL or ONF), significant indigenous vegetation areas (SEA) or notable trees identified within The Site. However, a linear band of London plane (*platanus × acerifolia*) and common oak (*quercus robur*) trees with a QEII protective covenant are present in the southern portion of the wider Lockerbie Estate to the south. The streams within the site have a reduced sensitivity to change due to the heavily modified nature of the open pasture and the lack of native riparian vegetation. The most apparent land use within The Site and wider landscape to the north is pastoral farming and

dairying. The south of The Site predominantly characterised by residential development including established housing and newer lots in the Lockerbie Estate residential development and Parkwood Residential development to the south east.

In summary, The Site is characterised by its gently undulating landform, its low profile, open rural land use, stream branch through the northern boundary and location adjacent to the existing Morrinsville urban residential area. The Site does not have any features considered to be of high landscape value, however there are high value features within the wider landscape. Within its wider landscape context The Site is relatively unremarkable with qualities and attributes that are commonly found in the wider rural landscape. The Site is in a state of transition from rural to residential, a progression which is anticipated in the District Plan.

3.0 Statutory Context

3.1 The Resource Management Act

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 importance that must be recognised and provided for in achieving the purpose of the RMA. The protection of outstanding natural features and outstanding natural landscapes from inappropriate subdivision, use and development is identified as a matter of national importance in section 6(b). There are no outstanding natural features or landscapes within the Site, with the closest being part of Ngakuri a ruru block, Horrell Road (two sites), 2.3km to the north east of The Site. These will not be affected by the proposal.

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 Site is not located in the coastal environment.

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.

3.2 Matamata-Piako District Plan

The Site is zoned as Rural with a Future Residential Policy Area overlay (FRPA) in the District Plan. This overlay was added to the Matamata-Piako District Plan in the District Plan Review, Plan Change 47 - September 2017⁶. This zone overlay occurs to the immediate north of the Morrinsville township and covers all of the land subject to the plan change.

⁶https://www.mpdc.govt.nz/pdf/CouncilDocuments/Plans/DistrictPlan/ProposedPlanChanges/PPC47/Decision/Appendix_2_Changes_to_District_Plan.pdf

The FRPA is applied to identified potential areas for future residential development which should be protected from subdivision which may compromise the future intended use. This policy area has resolved to protect the land for the residential land use to extend the Morrinsville Township to the north. However, this land cannot be used for residential activity until The Site has been rezoned.

In requesting a plan change to change the zoning of The Site, a key consideration is whether the proposed zoning is the most appropriate way to achieve the purpose of the RMA (sections 74 and 32). One element of that consideration is assessing the whether the form of land use makes best practicable use of the land whilst avoiding adverse effects, particularly on land beyond The Site and whether the proposal would deliver on the opportunity for quality urbanisation and residential development opportunities sought by the Matamata Piako District Plan.

4.0 Proposed Plan Change

As outlined above The Site has been identified for future residential development through the FRPA overlay. Lockerbie Estates seek to release this development potential to re-zone the land to residential and doing so through the introduction of a Development Area Plan into the District Plan which outlines at a high level what the development of The Site may look like.

To achieve this the PPC proposes residential zones and a precinct with specific rules and overlays to provide for different forms and types of development outcomes (i.e. single houses, duplex and terraced dwelling opportunities, open space amenity and transport framework).

The Development Area Plan has been developed by Maven Consultants that provides the zoning framework for the site and has due regard to the existing natural features of The Site (refer to Plate 2 below). The plan change seeks to provide a range of zones that grade the height and density around the central sub collector roads and Open Space / Stormwater Reserve. The proposed range of development will reflect a diverse and compact growth for the expansion of the town.

The purpose of the plan change is to facilitate a functional extension to the Morrinsville township which respects the rural urban boundary to the north and east of The Site and prepares for connectivity to the future residential area to the east. The plan change will enable diversity of development within The Site in terms density, scale and form of built development. The residential zone and medium density residential zone change reflects the anticipated progression of Morrinsville and the need for a range of lot sizes and building types to facilitate a diverse range of development outcomes.



LOCKERBIE ESTATE LIMITED DEVELOPMENT AREA PLAN

Plate 2: PPC Development Area Plan

The Site analysis underpinning the Development Area Plan includes The Site's topography, perennial and ephemeral streams and relationships with The Site boundaries. The existing streams and riparian margins within The Site are a key driver for the allocation and distribution of sustainable stormwater reserve and open spaces.

The Development Area Plan provides a split linear open space and open space that follows the path of the Maungahaumia Stream branches in the north west of The Site, this also provides the framework for a proposed pedestrian network. The proposed street layout works with the existing topography and reflects the road layout within Morrinsville.

The proposed zones and precincts will contain a range of lot sizes (minimum lot sizes from 600m², 325m² and 150m²⁷, to provide an assortment of residential choices. A range of housing typologies are enabled by the plan change including single dwellings, duplex's and terraced dwellings. Along the rural facing perimeter of the site and the south eastern corner of The Site the proposed residential zone which has a 5m setback. This will provide a lower density interface to development which will provide an appropriate rural and residential interface.

Further detail for each of these typologies is provided within the Boffa Miskell Urban Design Assessment which accompanies the plan change application. Buildings heights will not exceed the 9m height limit consistent within the current district plan. Household recreational space is provided for each of the housing typologies, this private space is further supported by the generous distribution of open space throughout The Site and a reserve accessed from the proposed Werewere Street. An additional reserve is provided at the centre of the Lockerbie Medium Density Precinct to provide accessible open space around the more dense parts of the development.

Connectivity across The Site will be reinforced by strong north south pedestrian, cycle and vehicular routes which allow for the movement of people through the area. The split linear open space through The Site creates a strong spine through the development which allows for links to the Lockerbie Village development south. The internal collector road provides two accesses into Lockerbie Village, two accesses to Taukoro Road and a connection to Studholme Street. Provision has also been made to enable a future connections to rural zoned land to the east of The Site if this land is developed in the future.

5.0 Landscape Design and Planting

The Development Area Plan is a high level document that sets out the zoning and key transport connections. It does not include specific landscape and planting design which is a finer grained detail. It is envisioned through the future consenting process, that follow the rezoning and enable development, that the following landscape design recommendations are incorporated to ensure appropriate landscape an appropriate landscape framework if applied to enhance the rural interface and existing residential development:

- a. Retain the natural path of the of the perennial and ephemeral stream through The Site and incorporate them into the wider open space network;
- b. Appropriate boundary treatments to reflect adjacent land uses;
- c. Amenity planting to be integrated throughout the site, including along internal accessways, roadways, communal open spaces incorporating native and exotic that integrate with the wider residential network;
- d. Swales and wetland features;
- e. Communal open spaces; and
- f. Provide appropriate planting to soften the rural interface.

⁷ Average as minimum for three of more houses. 400m² for a duplex.

6.0 Visual Catchment and Viewing Audiences

To assist in determining the visual catchment and potential viewing audiences of future development within the plan change area, a Zone of Theoretical Visibility Analysis (ZTV) was undertaken (**refer Figure 6 - Zone of Theoretical Visibility in the Graphic Supplement**), in addition to a site visit to verify visibility and existing viewing audiences – noting that over time, the type of viewing audience may change over time as the wider context evolves. In consideration of the nature of the plan change, the 9m allowable height is likely to be concentrated within the core of The Site where the density is increased. The ZTV analysis utilises a grid of 9m high points to represent the maximum allowed heights of dwellings on The Site.

The ZTV analysis has been undertaken using a terrain only method of analysis (instead of in combination with existing vegetation and buildings), which conveys the theoretical visibility if the ground was bare. Whilst this does provide a good indication of the existing visibility, it is recognised that the context of The Site is evolving from a rural to urbanised environment and such vegetation associated with current land use is likely to be removed.

With the above methods considered, the following observations in respect of the visual catchment of The Site and its future urbanisation, have been made:

- ZTV analysis indicates that views are mostly contained within approximately 500m of The Site boundary. The largest viewing area of the proposal is from the rural zoned open farmland to the north of Taukoro Road. Rural-residential land to the west is indicated as having views of a small number of observable points, which are likely to be interrupted by vegetation. Views towards The Site from the south are generally limited and would be further prohibited by the intervening buildings and vegetation.
- The Site includes a low ridge (and multiple stormwater catchments) and is surrounded by comparatively low-lying agricultural land allowing for open views towards The Site from the north and north west.
- Intervening vegetation such as shelterbelts within the wider landscape will obscure many views of The Site for surrounding viewing audiences.
- Very distant views of The Site are attainable from elevated hill country area to the north, east and south of The Site. These views are in the context of a much wider, and more proximate area that overlooks the existing Morrinsville township.

The primary viewing audiences of The Site enabled by the proposed plan change have been identified as the following:

Viewing Audiences in the immediate vicinity

- Users of local roads such as Taukoro Road, Studholme Street and Morrinsville-Tahuna Road
- Visitors to and workers in the surrounding local businesses including the Rhoda Read Continuing Care Facility.
- Residents located at Studholme Street, Pinehurst Crescent and Taukoro Road

Viewing Audiences in the wider context

- Users of distant local roads such as Horrell Road
- Rural workers in surrounding local agricultural businesses north of Taukoro Road.
- Residents located on Hangawera Road, Cobham Drive, Stirling Drive and Horrell Road

As outlined above, a range of viewpoints representing the key viewing audiences have been selected (refer Figure 5 – Viewpoint Location Plan in the Graphic Supplement and Table 1 below) and are referred to in the visual effects assessment. The viewpoints have been selected as it is considered they address the key aspects of the visual catchment for the potential future development.

Table 1: Viewpoints Considered as Part of Visual Catchment Evaluation:

VP No.	Location	Distance from landholding (approx.)	Direction of View	Reason for selection	Nature of View: Open, Partial, Obscured
1	Hangawera Road	850m	East	Representative of the resident at 7 Hangawera Road.	Open
2	Morrinsville-Tahuna Road	680m	North East	Representative of road users on Morrinsville-Tahuna Road.	Open
3	Studholme Street	670m	North East	Representative of residential properties on Studholme Street	Partial / Obscured
4	Rhoda Read Continuing Care Centre	520m	East	Representative of workers and visitors to the care facility and adjacent residential properties.	Partial / Obscured
5	45 Taukoro Road	300m	South East	Representative of residential audience on Taukoro Road	Obscured
6	Cobham Road	550m	North East	Representative of residents on Stirling Drive and the northern end of Cobham Drive	Partial / Obscured
7	132 Taukoro Road	40m	South	Representative of residents and motorists on Taukoro Road	Open
8	Pinehurst Crescent	155m	West	Representative of views from the rear of properties on the northern side of Pinehurst Crescent.	Open
9	Horrell Road	1.6km	South West	Representative of views from residential properties and vehicle users on Horrell Road	Obscured

7.0 Assessment of Landscape and Visual Effects

Landscape and visual effects result from natural or induced change in the components, character or quality of landscape. When plan changes are proposed the inevitable consequence

is a transition of the landscape to a new form of land use with its consequent changed character and amenity.

When assessing the potential effects arising from a plan change the assessment should consider the nature of the maximised potential future development enabled by the provisions of the plan change.

7.1 Landscape Effects

The conversion of the 77.8.ha site from a rural land use to residential (urban form) development will lead to a change in the character of the landscape. A change from rural landscape to urbanise is however, signalled in the District Plan and is therefore largely anticipated for the future residential expansion of Morrinsville. This change is also already occurring on land immediately south, where the Lockerbie Estate is currently being constructed.

The proposal will also provide restoration and enhancement opportunities along the branch of the Maungahaumia Stream. The watercourse provides structure, form and an open space network across The Site and provides amenity for future adjacent residential properties. The proximity of the future intensive urban development to the relatively sensitive, small scale stream will include suitably managed riparian margins, stormwater treatment devices and open space.

Earthworks across The Site to establish the road network and future building platforms suitable for urban development and will consequently reduce the undulating nature of the topography. The entirety of The Site will ultimately undergo a level of modification as a result of preparing the land for suitable development, however the overall average levels of The Site will remain. The Site, the arranged open space and the main internal collector road will create a strong topographical spine linking into the Lockerbie Estate residential development to the south.

The extensive nature of proposed earthworks will result in very little vegetation within The Site being retained, although it is recognised that there is no vegetation identified as significant in terms of ecological value (SEA) or any notable trees.

Development of The Site enabled by the PPC will ultimately provide an enhanced level of soft landscape, including street trees, trees in parks and open space and wetlands associated with stormwater management and vegetation in residential gardens throughout The Site. This will be achieved by providing a strong network of streetscapes reinforced by urban trees and planting connecting to the linear open space with enhanced riparian margins running north to south through The Site.

The central split linear open space, will also help to manage the stormwater and will ultimately support the appropriate riparian vegetation which will reinforce and support people's movement through The Site. The proposed open space extends along part of the northern boundary with Taukoro Road, to the west of Werewere Street and will provide . The open space will be immediately bordered by medium density development, which will have a direct interface with the open space on two sides. The medium density residential precinct is contained within the pedestrian network loop providing amenity and passive surveillance. Towards the southern end of Werewere Street a large stormwater pond is nestled within a proposed reserve to provide hydrological management and amenity.

The proposed future height of the proposed buildings will be no greater than 9m in line with the expectations of the Matamata Piako's existing residential zone. Around the perimeter of the site along the interfaces with the adjacent rural zoned land, the larger lots within the residential zone present a graded transition between the rural and urban boundary.

The western boundary of The Site abuts Studholme Street and Rural Residential zoned land. Along this interface a proposed 5m building setback is applied to these lots to soften the transition from a residential to rural land use. It is recommended that proposed boundary treatments along these interfaces should reflect the transition to a rural land use and utilise established rural boundary treatments.

Land to the east of the site will continue to have a rural pastoral land use, although there is the potential for this land to be developed in the future to transition to a large lot residential use. It is considered to be suitable for this boundary to provide a 5m setback which is more generous than the 1.5m setback prescribed in the District Plan. A specific performance standard to achieve this increased setback is proposed in the plan change, being a 5m side or rear boundary setback.

The potential development outcomes and associated cascading increase in density are considered to be broadly in line with the expectations of the residential zoning for The Site and caters for the housing choice needs of the growing population. The proposed landscape integration through streetscape and pedestrian walkways / cycleways link the linear open space, to the surrounding local area, through structured vegetation. This provides a legible and appropriate transition through The Site.

The proposed urban form will be appropriately transitioned at the rural to urban boundary and the new developed edge of Morrinsville. Within the context of the FPRA and residential zone framework, the proposed plan change will be in keeping with the proposed future vision for the landscape and the transition from a rural to residential land use.

7.2 Visual Amenity Effects

Visual effects relate to the amenity values of a landscape including the “natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes”⁸.

The specific nature of the visual effects will depend on the future more detailed masterplanning and design of specific development proposals. Each proposal will require resource consent and be subject to a range of assessment criteria, including those which address visual amenity and interface outcomes. Future resource consents for subdivision, earthworks, the establishment of infrastructure and for residential development will provide opportunities for the comprehensive review of proposals.

7.2.1 Views from the immediate vicinity

Views within the immediate vicinity include surrounding local roads and visitors and workers of surrounding local businesses which are considered in the assessment against the expectations of the District Plan and specifically the FRPA overlay. These views towards The Site vary dependent on proximity to The Site, intervening mature vegetation, built form and rising landform. Surrounding roads with views into The Site include Morrinsville-Tahuna Road (VP2), Studholme Street (VP3) and Taukoro Road (VP5 and VP7). A work places with views of The Site includes the Rhoda Read Continuing Care Centre (VP4).

Short distance partially open views are available from the Taukoro Road, along Morrinsville-Tahuna Road, Studholme Street, Taukoro Road and the Rhoda Read Continuing Care Centre.

⁸ Resource Management Act, 1991, Part 1, Interpretation – amenity values

Motorists have views which are similarly contained by vegetation in the immediate vicinity, glimpsed views are available intermittently over The Site as vehicles travel perpendicular to the site's southern boundary. As a result of the proposed development, road users of Taukoro Road will predominantly experience short distance open views of residential lots with front gardens. These users will also experience short distance views of the open space which will likely have structured planting along the frontage.

Residential viewing audiences in the immediate context of the site will have a higher sensitivity to change and there will ultimately be a loss of rural outlook for these residents. Residential audiences accessed from Taukoro Road are generally set back from the road with some intervening vegetation between properties and their boundaries. Residential viewing audiences to the east on Pinehurst Crescent (VP8) generally have a north south orientation and have afforded oblique views towards The Site across rising landform.

Residential audiences accessed from Studholme Street to the south west, experience views towards The Site over rising landform and with Stage 3 and the Retirement Village of the wider Lockerbie Estate residential development in the foreground. As a result of the development, a small number of properties accessed from Taukoro Road will experience filtered views of the residential properties along the northern site boundary. Glimpsed views of the medium density residential form will be possible beyond the initial line of larger lot residences, the medium density housing will be partially broken up by vegetation within the reserve. Short distance views towards the development will benefit from vegetation being proposed within the front gardens fronting on to Taukoro Road to break up the proposed residential forms.

A small number of residential audiences on the northern aspect of Pinehurst Crescent will experience oblique views of the eastern extents of the development. The proposed residential properties along this eastern boundary will comprise lots of at least 600m² in size and contain a 5m setback – together these key moves will provide a sympathetic interface with the rural boundary, reducing visual effects.

Commercial occupants and visitors of surrounding business and road users are considered to have a lower sensitivity to such landscape change. Those audiences located at Rhoda Read Continuing Care Facility will experience short distance views of the proposed adjacent residential zoned land. Glimpsed views of the medium density housing will be available over the top of residential landform in the foreground. Views north from the Rhoda Read Care Centre will comprise short distance views of a reserve.

Photographs of these viewpoints are provided in the Graphic Supplement attached to this report (**Appendix 2 – Graphic Supplement**).

Viewing audiences in the immediate vicinity are broadly anticipated to view residential development within The Site, notwithstanding that this change in land use from rural to urban will ultimately result in high level of change. The Development Area Plan proposes higher density development towards the centre of The Site, maintaining appropriate interfaces with the rural surroundings. The more spacious residential typologies have been designated around the perimeter of The Site where there is a rural interface. Views towards The Site from the south will predominantly be from the northern extents of the Lockerbie Estate residential development currently under construction.

This change in land use is anticipated by the FRPA overlay, and furthermore viewing audiences to the south are within an existing urban residential context. Due to the widespread nature of the surrounding rural land, there are few residential lots that are able to obtain views of The Site. With this in mind, although the proposal will indicate a clearly noticeable change in the land use, this will be in keeping with anticipated future development outcomes for the land. It is therefore considered that the potential adverse effects on established residential viewing audiences in the

immediate vicinity of The Site will be **low** for the majority of audiences. It is considered that a small number of residential audiences, due to the oblique angle of view, on Pinehurst Crescent within proximity to the eastern site boundary have the potential to experience **moderate-low** effects. Commercial occupants and visitors will observe adverse visual effects to a **low** level, this is particularly given the anticipated level of visual change within the locality

7.2.2 Views from the wider context

Wider contextual views of The Site include those from Horrell Road (VP9), Hangawera Road (VP1), Cobham Drive and Stirling Drive (VP6). Audiences with the highest sensitivity to change are those residential viewing audiences on Hangawera Road which have an elevated view towards The Site from a rural setting. Residential audiences on Cobham Drive and Stirling Drive are similarly sensitive but are adjacent to the southern extents of the Lockerbie Residential development, which will limit direct views towards The Site due to intervening built form associated with the residential development.

Potential viewing audiences to the north, accessed via Taukoro Road, may extend up to approximately 1km from The Site boundary, due to the lack of intervening landform and vegetation in places. The properties are widely distributed across the area and are relatively well contained by linear bands of vegetation and vegetation surrounding properties.

Photographs of these viewpoints are provided in the Graphic Supplement attached to this report (**Appendix – Graphic Supplement**).

Wider context views are defined as views which include The Site within the context of the wider area. These views are more obtainable to the north and north west, where there is less intervening landform and built up urban form. An example of these viewpoints are VP1, VP6 and VP9, the setting of these views predominantly contain open views undulating rural landform. Intermittent and fleeting views are available from surrounding and approaching roads due to undulating landform and intervening vegetation.

Existing long distance views from pastoral land to the north of The Site are representative of rural workers. This audience generally experiences heavily filtered and intermittent views towards The Site, due to intervening linear bands of vegetation and shelter belts of trees. This existing vegetation will partially filter and in places screen views of the proposal, with only glimpsed views of buildings being available. The land use change enabled by the plan change is not expected to be dominant in views available from these audiences, due to the affordability of other views and the wider rural outlook.

The long distance viewing audiences on Horrell Road (VP9) are not expected to experience direct views of The Site due to mature vegetation and rising ridgeline formation. Residential and vehicular audiences from this area are not expected to experience visual effect of the PPC.

Elevated panoramic views from the property at 7 Hangawera Road (VP1) encompasses rural landform with the expanding urban area of Morrinsville. The far distance back drop of the view comprises the Kaimai Ranges. Medium and large industrial farm buildings are observed in the middle distance. The Site will be visible beyond the Morrinsville-Tahuna Road and mature vegetation along field boundaries in the foreground. In the context of the wider view, the proposed residential form will appear as a visual extension to the Morrinsville township. The larger residential lots proposed along Studholme Street will provide an appropriate visual transition between the rural landscape and the proposed urban landscape.

To the south east and west of The Site, the range of views is further reduced due to the addition of built form and the topography generally sloping away from The Site. Existing views from

residential properties along Stirling Drive and the end of Cobham Drive comprise open views north towards The Site and screened views due to rising landform and intervening vegetation. As a result of the proposal these audiences will experience glimpsed views of The Site from a small number of vantage points. To the south west of the site views from the back of properties accessed from Goodwin Avenue will have glimpsed oblique views across rising agricultural land towards the development. Most of the audiences to the south and south east of The Site will experience short distance views of residential properties of stages one, two and three of the Lockerbie Residential development, which will screen and filter views of proposed development.

From more distant viewpoints, it is expected that there will be a large reduction in the visibility and legibility of the proposal. Where views are available, it is considered that the proposal will be seen in the wider context of the Morrinsville township and urban environs. In respect of the above analysis adverse visual effects on residential, worker and transient audiences are expected to range from **very low** to **low**.

8.0 Recommendations

The overall design for the proposed development incorporates rural characteristics, a mix of residential outcomes with a central green spine. These characteristics are reflected in the provision of open space and stormwater retention with reserves particularly and the wider connections and interface with the rural zone.

The objective of the following mitigation and design control measures are to ensure that future development within the site occurs in such a way that landscape and visual effects are managed.

Mitigation and Design Control Measures

Rural facing boundaries

- The proposed a 5m building setback along the rural boundary, to provide a graded rural to urban transition.
- Vegetation planting and design along the rural boundary, to help to improve the rural and urban interface.
- Consideration of a post and wire fence boundary treatment along the eastern boundary of the site.
- Appropriate boundary treatments are proposed to interface with adjacent rural land.

Collector Road

- Large specimen tree planting requirement along the corridor

Landscape Plan

It is recommended that concept landscape plans are provided as part of the resource consenting process, including the following:

- Design approach
- Street Tree and amenity planting
- Boundary treatments including planting and fencing
- Open space design
- Cycleway and pedestrian network
- Stormwater reserve design

9.0 Conclusions

The Site is well positioned to accommodate the built form, and a range of densities and the resulting diversity of the development anticipated. The plan change works with the future expansion of the Morrinsville township to the north, while preserving and enhancing the landscape qualities of The Site.

Whilst The Site does not contain features of significant values (such as SEA's of notable trees), the Maungahaumia Stream branch will form an important feature and asset within the landscape, reflected in the open space and future pedestrian corridor. The open space linkages have also been designed to enable accessibility and permeability across The Site with links with the residential area to the south, as well as future proofing potential connections to rural land to the east.

Views from the wider context will have limited visual connectivity with The Site. The limited number of audiences that will observe The Site will experience partially screened and glimpsed views of the proposal. Where views are available from the immediate context, this audience will view the proposal as an extension of the Morrinsville Township. The proposed Development Area Plan and Development Standards have been developed to provide a diverse range of residential typologies, open space and connectivity.

It is considered that the future built form of the development will respond to and maintain a connection to natural landscape attributes of The Site and the wider context. This integration and sensitive response to the receiving environment will lead to the creation of a quality mixed built environment with diverse and structured open space provisions. Resulting in a diverse community that provides a range of residential and leisure opportunities and consistent with the aspirations of the future residential expansion of the Matamata Piako District Plan and expansion of Morrinsville.

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 Te Tangi a te Manu⁹, Aotearoa New Zealand Landscape Assessment Guidelines . These guidelines have been developed to relate to the Aotearoa New Zealand environmental planning context and align with te ao Māori and te ao Pākehā concepts of landscape.

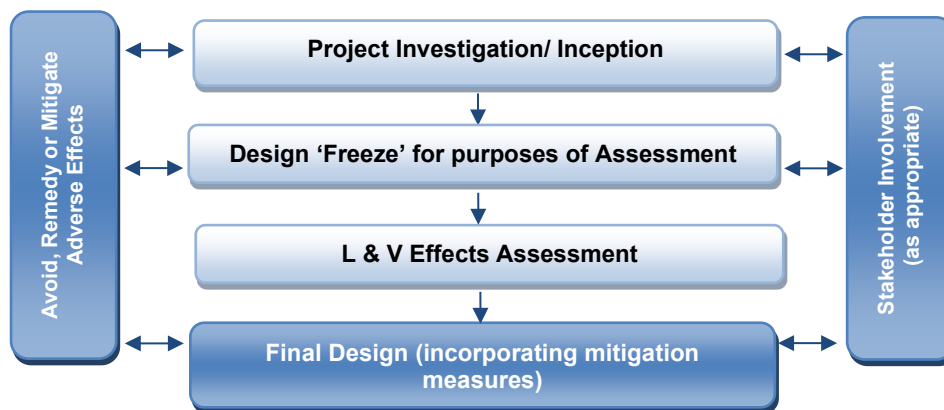


Figure 1: Design feedback loop

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

⁹ 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', [Final Draft subject to final editing, graphic design, illustrations, approved by Tuia Pito Ora/NZILA 5 May 2021]

of an individual area of landscape or landscape 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 (ONF/L).	The landscape lacks any important biophysical, sensory or shared and recognised attributes. The landscape is of low or local importance.
Magnitude	Size or scale	Total loss or addition of key features or elements.	The majority of key features or elements are retained.

		Major changes in the key characteristics of the landscape, including significant aesthetic or perceptual elements.	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.

Zone of Theoretical Visibility

As an initial step in the visual analysis, a Zone of Theoretical Visibility (ZTV) mapping exercise was undertaken of The Site in its context to determine the likely extent of visibility in the wider landscape. ZTV mapping represents the area that a development may theoretically be seen – that is, it may not actually be visible in reality due to localised screening from intervening vegetation, buildings or other structures. In addition, TV mapping does not convey the nature or magnitude of visual impacts, for example whether visibility will result in positive or negative effects and whether these will be significant

'Zone of Theoretical Visibility' (ZTV) is based on a Digital Terrain Model (DTM) overlaid on a map base. It is also known as a Zone of Visual Influence (ZVI), Visual Envelope Map (VEM) or Viewshed Map. The term ZTV is preferred for its emphasis of two key factors that are often misunderstood:

- Visibility maps represent where a development may be seen theoretically – that is, it may not actually be visible in reality, for example due to localised screening from intervening vegetation, buildings or other structures which is not represented by the DTM; and
- the maps indicate potential visibility only – that is, the areas within which there may be a line of sight. They do not convey the nature or magnitude of visual impacts, for example whether visibility will result in positive or negative effects and whether these will be significant or not.

ZTVs are calculated by computer, using any one of a number of available software packages and based upon a DTM that represents topography. The resulting ZTV is usually produced as an overlay upon a base map, representing theoretical visibility within a defined study area.

As the ZTV mapping is based entirely on 'bare ground' topographic data, it does not take into account the screening, unless LIDAR based vegetation data is used to generate the DTM. In addition, the level of reliability of the contour information will influence the accuracy of the mapping. ZTV mapping does however take into account factors relating to the curvature of the earth and light refraction. ZTV is helpful where to focus field work but it should be remembered that while ZTV is a useful assessment tool, is important to recognise its limitations.

For this project, the following parameters were used:

Location of target points: [9m in height e.g.: Grid (minimum separation of 50m)]

Nature of target points: [Existing ground levels derived from council Lidar data for the surrounding area and proposed earthworks within The Site]
 Observer Eye Height: 2.0m
 Coefficient of Earth Curvature and Refraction: 0.07
 Base Spheroid used for computation: WGS 84
 Following the ZTV analysis, field work is used to determine the actual extent of visibility of The Site, including the selection of representative viewpoints from public areas. This stage is also used to identify the potential 'viewing audience' e.g. residential, visitors, recreation users, and other groups of viewers who can see The Site. During fieldwork, photographs are taken to represent views from available viewing audiences.

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 NZILA¹⁰.

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:

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.	Viewpoint is not typically recognised or valued by the community.	Acknowledged viewshafts, Lookouts

¹⁰ Best Practice Guide: Visual Simulations BPG 10.2, NZILA

Contributing Factors		Higher	Lower	Examples
Magnitude of Change	Size or scale	High visitor numbers. 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.	Infrequent visitor numbers. 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

Appendix 2: Graphic Supplement

LOCKERBIE ESTATE, MORRINSVILLE

GRAPHIC SUPPLEMENT

SEPTEMBER 2021



Lockerbie Estate Subdivision Plan

CHange



Contents

PART A - FIGURES

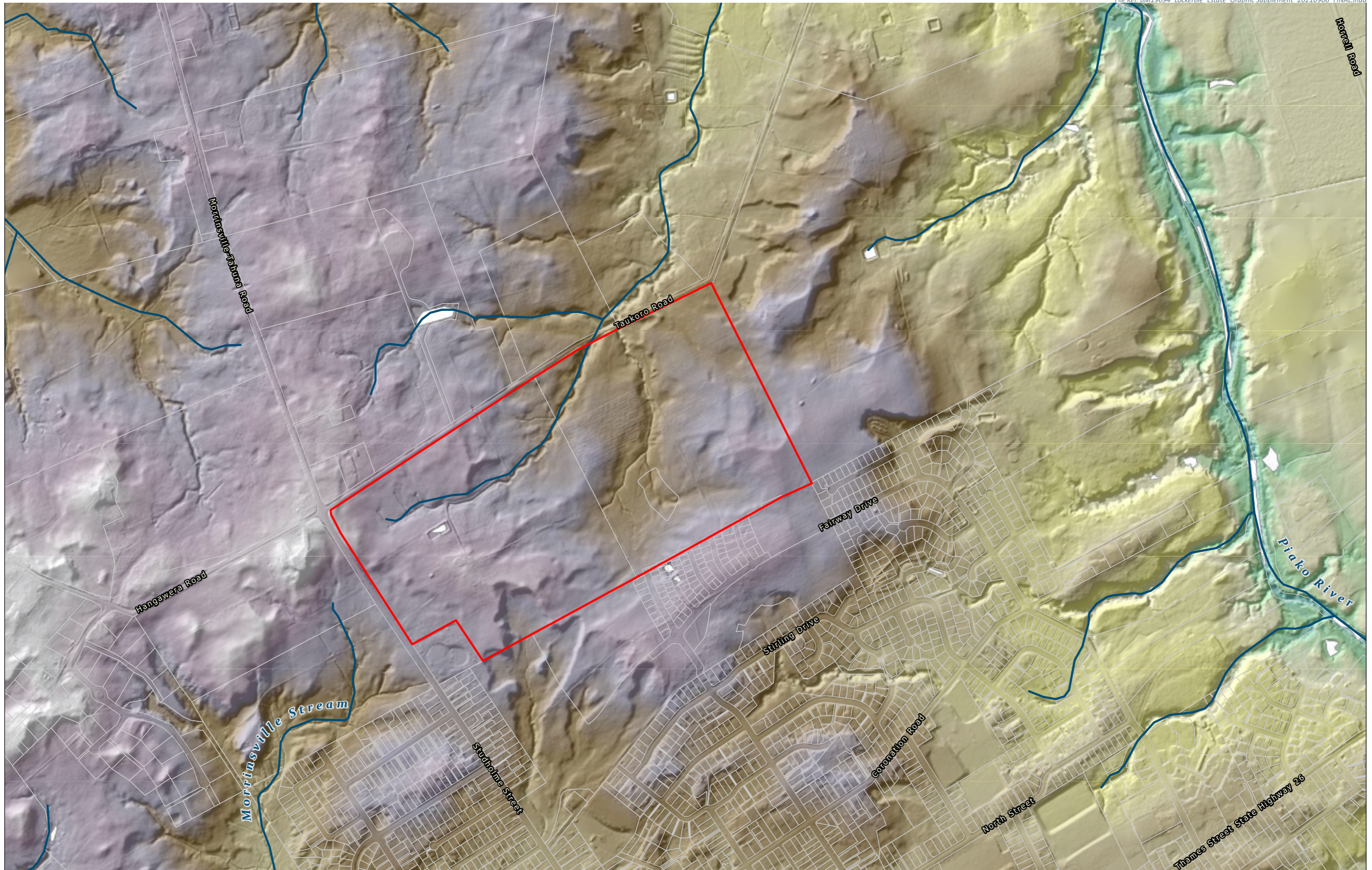
- FIGURE 1: Landscape Context
- FIGURE 2: Site Location Plan
- FIGURE 3: Elevation Plan
- FIGURE 4: Existing Zoning Plan
- FIGURE 5: Viewpoint Location Plan
- FIGURE 6: ZTV

PART B - VIEWPOINT CONTEXT PHOTOS

- VP1: Representative of residential audience on Hangawera Road
- VP2: Representative of residential audience on Morrinsville - Tahuna Road
- VP3: Representative of residential audience on Studholme Street
- VP4: Representative of workers at Rhoda Read Continuing Care Centre and
- VP5: Representative of residential audience at 45 Taukoro Road
- VP6: Representative of residential audience on Cobham Drive and Stirling Drive
- VP7: Representative of residential audience at 132 Taukoro Road
- VP8: Representative of residential audience on Pinehurst Crescent
- VP9: Representative of car users on Horrell Road

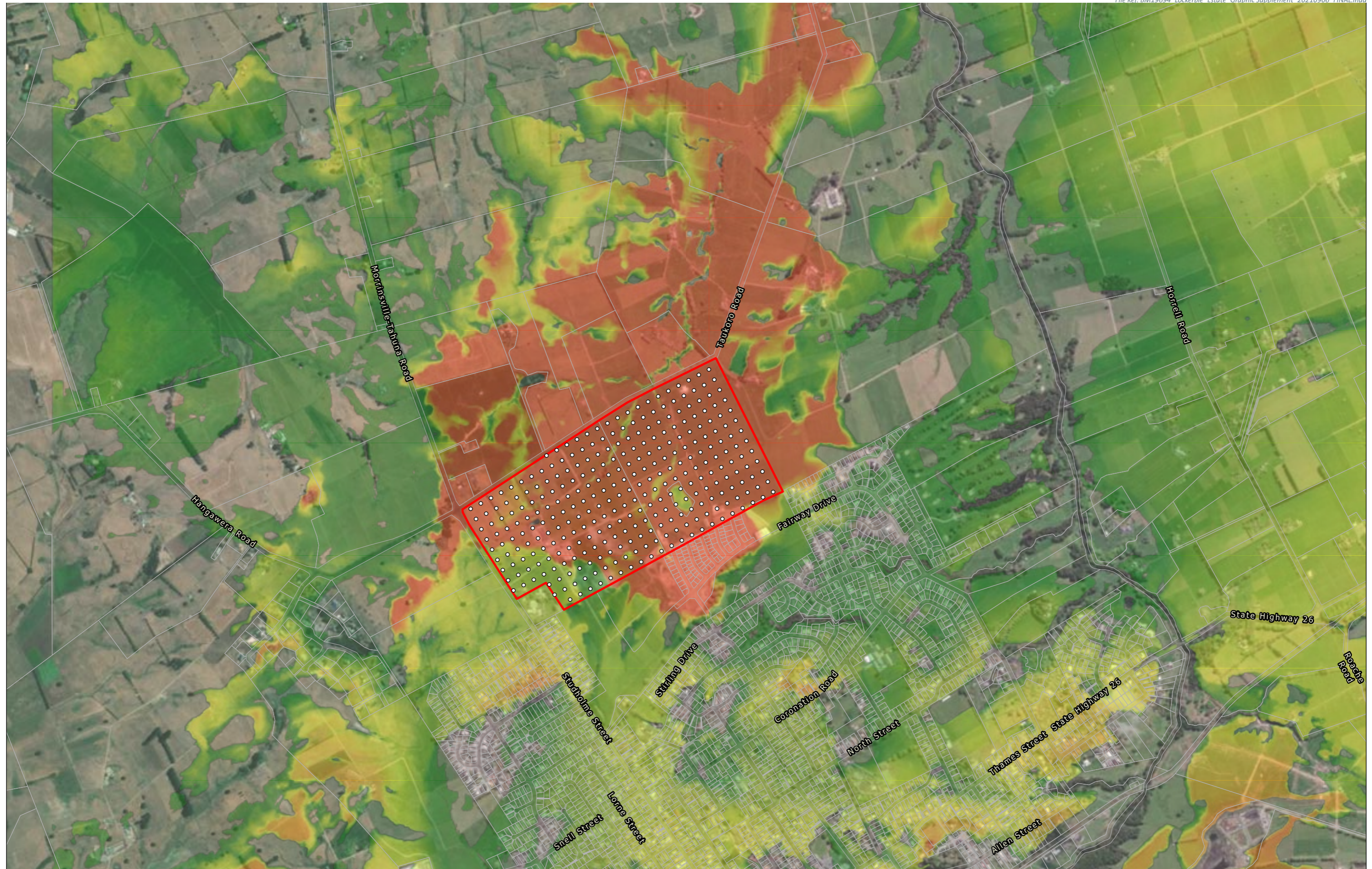






























About Boffa Miskell

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