VISUAL IMPACT ASSESSMENT REPORT - MAITLAND MHE

34 WYNDELLA ROAD, LOCHINVAR, NSW, 2321

WONNARUA COUNTRY

prepared for:

Commercial 7 Pty Ltd ATF Commercial 7 Investment Trust

terras landscape architects

Rev	Description	Initial	Date
G	UPDATED LANDSCAPE PLAN & PHOTOMONTAGES	ER / KH	08.04.2025
H	UPDATED LANDSCAPE PLAN & PHOTOMONTAGES	ER / KH	17.04.2025
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1. ASSESSMENT SUMMARY

Terras Landscape Architects has been commissioned by Commercial 7 Pty Ltd ATF Commercial 7 Investment Trust to prepare this report for the proposed manufactured home estate and associated civil and landscaping works, at 34 Wyndella Road, Lochinvar. This report has been prepared in accordance with the requirements of the Land and Environmental Court of New South Wales 'Policy: Use of Photomontages and Visualisation Tools,' for use in a legal proceedings. The criteria for the Visual Assessment has been detailed and viewpoint data sheets have been prepared using site photographs to allow the reader to gain a visual appreciation of the views from the identified significant viewing locations.

Additional descriptive text and information has been provided to support this investigation. This summary has been provided as a brief commentary on the findings of the visual assessment.

- The study area is located at 34 Wyndella Road, Lochinvar, within the Maitland Local Government Area (LGA), on the outskirts of the greater local context of the Lochinvar Urban Release Area as proposed by Maitland City Council.

- The site lies parallel, but is offset 350m, from the New England Highway which is a major road connecting to the Hunter Expressway. It provides a transport network through Lochinvar, to Greta at the north, and Rutherford at the south. The suburb of Windella is located to the immediate east, Rutherford, further east, and Lochinvar to the south and west.

- The site address comprises one parcel of land and is legally described as: Lot 225 DP246447. The project area is located on Wonnarua Country and managed by the Local Aboriginal Land Council of Mindaribba, within the Maitland Local Government Area. It is subject to the Maitland Development Control Plan 2011, and currently zoned RU2 Rural Landscape in the Maitland Local Environmental Plan 2011.

- The proposal seeks to redevelop the 10.78ha site, into a multi housing estate for an over 55's lifestyle in a three-staged release of lots and indoor and outdoor community facilities for residents.

- The surrounding land use is residential amongst rural landscape. Residential estates amongst the Lochinvar suburb and adjacent, Windella suburb, can be described as an evolving landscape character setting, as the viewed landscape shifts from a rural dominant landscape, to a rural-residential streetscape.

- The most prominent views afforded into the site will be for the existing residences at the end of Pennparc Drive, facing west, as they are located to the immediate boundary of the proposal. Screening vegetation to the boundary of residences on Pennparc Drive provide a visual buffer to the current rural landscape zone. The site plan has been adjusted to include a 30m treed buffer on the eastern boundary to provide a visual screen to the proposed development. Although this has provided a change in landscape character from a rural outlook to a reduction in the field of vision the outlook is natural and therefore the visual impact from this view is considered moderate. Other residential views afforded, are to residences on Simmental Street in Lochinvar Ridge Estate. Further to this, undulating terrain mitigates views north of Wyndella Road and Cecily Park Reserve.

- Filtered views travelling east and west along the New England Highway are afforded at intervals due to existing vegetation and built form in the foreground. However, when views of the proposal are afforded, they are viewed in the context of the rural landscape. The remaining views to the site are considered filtered due to the existing topography, development in the foreground and mid ground, and the height of the established street vegetation of the surrounding area.

- Due to local topography, existing vegetation, access and existing development, views to the site are generally limited to less then 1km except for distant views from Cantwell and Windermere Road. Physical accessibility was also restricted due to private property ownership. The proposed impact is expected to be mainly localised and decreases as distance from the site increases.

- This visual impact assessment has assessed visual change and influence for the overall scheme. A summary of these results can be found in the Viewpoint Summary.

- It is proposed that the works will be staged. Stage One works will include the built form of stage one but also the planted buffer to the southern and eastern boundary of the site. This is proposed to establish a vegetated screen in the initial works prior to construction of the rest of the development with particular regard to views from the New England Highway and views from residences of Pennparc Drive to the east of the site.

- The proposal will have an overall LOW-MODERATE visual impact. As expected, Viewpoints 2, 3 and 10 from Pennparc Drive residences and the New England Highway held MODERATE impact ratings.

It should be noted that the proposal is viewed within a changing landscape character setting, comprising a major road corridor beside developing housing estates and rural-residential development. In saying this, a medium visual quality rating has been applied to the site and surrounding areas due to the nature of the undulating and rural landscape. Proposed landscaping on site, particularly to the southern boundary, fronting the New England Highway interface, further south of site, will be critical in the addressing of visual impact from these viewpoints. The ability to provide mid storey screening to the boundaries is restricted by the Asset Protection Zone to the perimeter of the site.

2. INTRODUCTION

2.1. Objectives

The objectives of this report are as follows:

- To identify and describe the existing visual/landscape environment and to evaluate its current qualities including an assessment of visual quality.
- To identify viewsheds and to locate and/or identify typical viewpoints from which the impacted areas may be seen.
- To determine what the likely impacts the proposal may cause to the prevailing visual/landscape quality of the area and to make recommendations, where appropriate, to mitigate the visual impact of the proposed development if required.

2.2. Methodology

The methodology applied to this study involves systematically evaluating the visual environment pertaining to the site and using value judgements based on community responses to scenery. This identifies aspects that are more objective (such as the physical setting, character and visibility of a proposal), from more subjective aspects, such as the compatibility of the proposal within the setting.

Visual data collection involves an initial desktop study, followed by systematically evaluating the visual environment from relevant viewpoints through fieldwork to determine the actual potential for views to the site. Once a viewpoint has been identified, data is recorded both photographically (and when required, by survey) and as detailed notes.

The selection of viewpoints has generally been based on locations where potential for views of the proposed development would occur. Viewpoint selection criteria include: consideration of where views can be obtained from publicly frequented locations, such as major traffic corridors; prominent look-outs or locations of high scenic value; or, where members of the local community may be affected.

This field study assessment has been carried out following the steps noted below:

a) Desktop Analysis. Identifying key components of interest through extensive desktop analysis from a variety of sources. These resources range from relevant planning and environmental resources and written documents, to digital aerial photography, cadastral data, vegetation mapping and terrain modelling.

b) Field study. Carried out by a qualified landscape professional to gather primary, photographic resources of key components highlighted through desktop analysis. A collation of ground-truth data as gathered during the preliminary desktop assessment and any additional field study required that desktop analysis did not capture. Where weather or other reasons have prevented the capture of required information, a supplementary site visit has occurred to ensure correct and accurate data. Photographs are used to best capture the landscape character of the area, inform the reader of the representation of the view from each viewpoint, as well as provide baseline visual references for the production of photomontage and photographic simulations. It should be noted that photographic resources have been captured by Terras Landscape Architects, unless noted otherwise. Where a photomontage has been produced within this report, it has been founded upon survey data collected by a qualified surveyor, refer 2.3 Technical Methodology for Photos and Montages.

This written assessment has been carried out following the steps noted below:

1. Establish the site context and describe the site. A description of the site and its context.

2. Describe the visual environment. A description of the site's immediate and broader context as well as photos from surrounding landscape character areas to demonstrate the broader landscape setting and features.

3. Identify the visibility of the existing landscape catchment and any viewpoints. This includes a review of the existing visual environment/landscape setting of the locality and the preparation of a Visual Envelope Map (VEM) to explore the study locality. This requires the preparation of a viewpoint analysis using a representative number of viewpoints located within a reasonable distance of the site located within its visual catchment.

4. Assess the likely landscape and visual impacts with regards to visual access, visual quality, visual sensitivity and magnitude of change. A brief description of the proposal is included within this section followed by an assessment of the likely impacts based on a composite of the sensitivity of the view and the magnitude of the proposal being a combination of scale, size and character having regard to the proximity of the viewer.

5. Report illustration. Include illustrations such as photomontages and other three-dimensional (3D) imaging where necessary to clarify the landscape and visual changes and potential impacts to the site and surrounding viewpoints.

6. Summary and conclusion. Include a summary of the main findings of the report, and if appropriate, a discussion of the overall likely level of landscape and visual impact of the proposed development on the site and surrounding viewpoints.

The purpose of the above methodology is to reduce the amount of subjectivity entering into the impact assessment and to provide sufficient data to allow for third party verification of results as well as compliance with the requirements of any site-specific scenic quality guidelines.

2.3. Technical Methodology for Photos and Montages

The preparation of photomontages and visualisations tools when necessary, have been in accordance with the Technical Guidance and Best Practice (Landscape Institute 2019) resources. When preparing these visual resources, accuracy in all areas becomes a key factor to ensure validity of visual representation.

Depending on the type and application of visualisations data, varying levels of verification are required. The following visualisations included within this report have been prepared with reference to the Landscape Institute Technical Guidance Note "Visual Representation of Development Proposals - Table 2: Visualisation Types 1-4," 17 September 2019.

In saying such, the following methodology has been undertaken to ensure validity of each visually represented viewpoint:

1. A cylindrical, photo-stitched panorama has been prepared to establish landscape character and context of each viewpoint.

2. Within this panorama, an approximate extent of works line has been provided to convey the extent of built form in each viewpoint. ***Note: This does not represent what is visible from each viewpoint but merely the maximum proposed extent of works in the viewed landscape.***

Photomontages within this report have been produced using the following methodology:

3. An indicative outline of the extent of the baseline image used to develop the photomontage (shown on the following page to the photo-stitched panorama), if applicable. ***Note: Photo-stitched imagery, whilst it does consider peripheral visual experience, is not suitable for photomontage application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate representation of the focused scene of the viewpoint.***

4. A baseline image of the viewpoint to convey the current viewed landscape. Taken with a full frame sensor camera + 50mm fixed lens, to achieve 39.6° horizontal field of view. The photograph was captured using a tripod set to 1.6m. Weather, lighting, camera configuration and date of collection is included on each viewpoint page.

5. Where a photomontage has been produced within this report, it has been founded upon survey data collected by a qualified surveyor--details as noted below. This data is collected on site via the collection of a minimum, four survey points per viewpoint, to match the location and direction of the camera. This data is collected and then overlaid to the georeferenced site model to ensure accuracy of site-specific topographical data and used in conjunction with ELVIS point cloud data available, to cross-reference photomontages

"***The survey has been undertaken using a combination of GPS and Conventional techniques. The survey has also undertaken measurements to non-ideal surfaces reflectionlessly and utilised long range measuring techniques and therefore the survey could only be estimated as being accurate to 0.1m horizontally and 0.1m vertically.***" (Direct excerpt. DeWitt Consulting, Revision 2, "Notes")

SURVEYOR: DeWitt Consulting - Ellie Mead (Survey Assistant); Joseph Gaynor (Registered Surveyor); Reviewed by: John Wilson (Registered Surveyor)
FILE NAME & FORMAT: 15329-Coordinate template DXF deliverable rev 2.dxf
DATE: Received by Terras Landscape Architects 29.07.2024 (Revision 2)
NOTE: RAW baseline photos and individual panoramas were also captured by DeWitt Consulting - Marina Budisavljevic (Deputy Principal Town Planner)

6. A computer generated model is developed using the locational, geo and survey data collected. The configuration of each viewpoint is fine-tuned using 3D modelling program(s) to match the camera setting employed from the baseline images. Locational accuracy is a critical component to the validity and accuracy of photomontages data and has been collated using satellite imagery, GPS data, and/or survey points collected by a qualified surveyor, where noted. Dependent on the type of visualisation, the model is inputted into multiple software to convey vegetation, and fine-tuned to create an accurate represented of the viewpoint with the proposal.

Vegetation as modelled for all CGI photomontages, has been scaled in accordance with the estimated tree maturity projections, as outlined in the schedule on L015 Landscape Development Application, Revision M, Terras Landscape Architects, 17.04.2025. Where a species nominated on the landscape plan has not been available within the modelling software library, the absent species has been substituted for one that most resembles the design intent of the form, height and appearance of the nominated species.

7. The proposed development is then overlaid to the baseline image and produced as a massing model visualisation. Contrast, brightness, saturation and photo-editing may be required to colour match the CGI to correspond with the existing image as per LEC of NSW General Principles 7.3.

2.4. Terminology

The below meaning for the following terms shall apply to this report:

•Character a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, and often conveys a distinctive 'sense of place'. This term does not imply a level of value or importance.

•Landscape is an all-encompassing term that refers to areas of the earth's surface at various scales. It includes those landscapes that are: urban, peri-urban, rural, and natural; combining bio-physical elements with the cultural overlay of human use and values.

•Magnitude of change refers to the extent of change that will be experienced by receptors. This change may be adverse or beneficial. Factors that could be considered in assessing magnitude are: the proportion of the view / landscape affected; extent of the area over which the change occurs; the size and scale of the change; the rate and duration of the change; the level of contrast and compatibility.

•Mitigation measures to avoid, reduce and manage identified potential adverse impacts.

•The proposal/development site is that activity which has the potential to produce a visual impact either during the works or as a result of it.

•The sensitivity refers to the capacity of a landscape or view to accommodate change without losing valued attributes. Includes the value placed on a landscape or view by the community through planning scheme protection, and the type and number receivers.

•The subject site (referred to also as the site) is defined as the land area directly affected by the proposal within defined boundaries.

•The study area consists of the subject site plus the immediate surrounding land potentially affected by the proposal during its construction and operation phase.

•The study locality is the area of land within the regional visual catchment whereby the proposal can be readily recognised. Generally this is confined to a six-kilometre radius beyond which individual buildings are difficult to discern especially amongst other development where contrasts are low. Further, visual sensitivity generally declines significantly beyond this range due to the broad viewing range that can be had from vantage points. For this study the locality has been limited to the visual catchments that have distances less than a quarter-kilometer as views beyond this are extremely restricted.

•Values are any aspect of landscape or views that people consider to be important. Landscape and visual values may be reflected in local, state or federal planning regulations, other published documents or be established through community consultation and engagement, or as professionally assessed

•View refers to any sight, prospect or field of vision as seen from a place, and may be wide or narrow, partial or full, pleasant or unattractive, distinctive or nondescript, and may include background, mid ground and/or foreground elements or features.

•The viewpoint is the specific location of a view, typically used for assessment purposes.

•Viewshed refers to areas visible from a particular location (may be modelled or field-validated).

•Visual absorption capacity involves the potential for the physical attributes (landform, vegetation and built form) of a scene to absorb a particular change.

•Visual amenity is the attractiveness of a scene or view.

•The visual catchment involves areas visible from a combination of locations within a defined setting (may be modelled or field validated).

•The visual effect is the interaction between a proposal and the existing visual environment. It is often expressed as the level of visual contrast of the proposal against its setting or background in which it is viewed.

•Visual representation refers to the graphic representation of a proposal in context showing its likely appearance and scale.

3. THE SITE

3.1. Local Context

The subject site is located within the Maitland Local Government Area (LGA), Ward 4, within the suburb of Lochinvar. The area is characterised by residential area amongst the rural landscape. The suburb of Windella is located to the immediate east, Rutherford, further east, and Lochinvar to the south and west.

The Lochinvar Area Plan, within the Maitland DCP 2011 'F.9 - Lochinvar Urban Release Area,' outlines the future, desired character of the Lochinvar suburb within the Maitland region. The plan aims to highlight the urban development of the suburb by improving housing opportunity, transport networks and access to recreation. The site borders the Lochinvar Area Plan, west of site (Refer Figure 3).

The New England Highway runs through the precinct providing a key linkage to Hunter Expressway. The precinct plan proposes the widening of Wyndella Road, noted as a primary distributor road, during Stage 3, as well as an off-road share and commuter path.

The landscaping strategy of the area aims to soften the visual impact of built elements as well as "ensure key environmental areas such as waterways, vegetation, land resources, and areas of cultural significance and scenic value protected," whilst ensuring "cost-effective and resource efficient development to promote affordable housing." (Maitland DCP 2011 'F.9 - Lochinvar Urban Release Area').

The visual environment of the township of Lochinvar can be largely described as residential with a rural backdrop. Visually prominent buildings that contribute to this definition of rural character, such as:

- Airds outdoor clothing building
- St Helena homestead and cultural tree plantings
- All Saints College St Josephs Campus
- Stations of the Cross
- St Patricks Church
- Holy Trinity Church
- Davron Hill / Jacobs Hill / Winders hill / Summer Hill
- Greta Reserve

In conjunction with historic built form, the vegetation of the landscape is also valued in defining the visual environment of Lochinvar suburb. "The lack of significant stands of native vegetation is also considered a special feature of the landscape" (Maitland City Council, Lochinvar Structure Plan, October 2007 '3.9 - Visual Environment')..

The Lochinvar Structure Plan identifies key areas of visual sensitivity within the Lochinvar region (Figure 4) which are explored more in the Viewpoint Assessment section of this report.

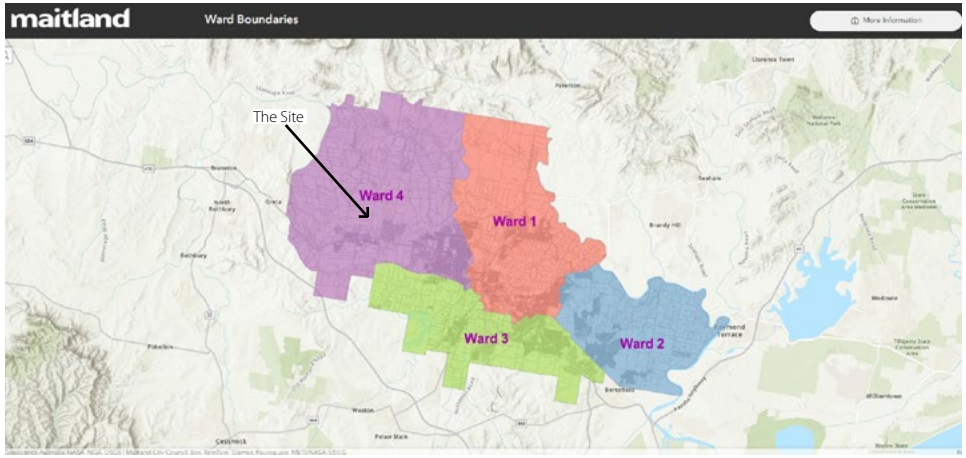

Figure 1 Maitland City Council Ward Boundaries (as per October 2023 revision)

Figure 2 Lochinvar Urban Release Area on aerial imagery

viewpoint data sheets

LOCHINVAR AREA PLAN

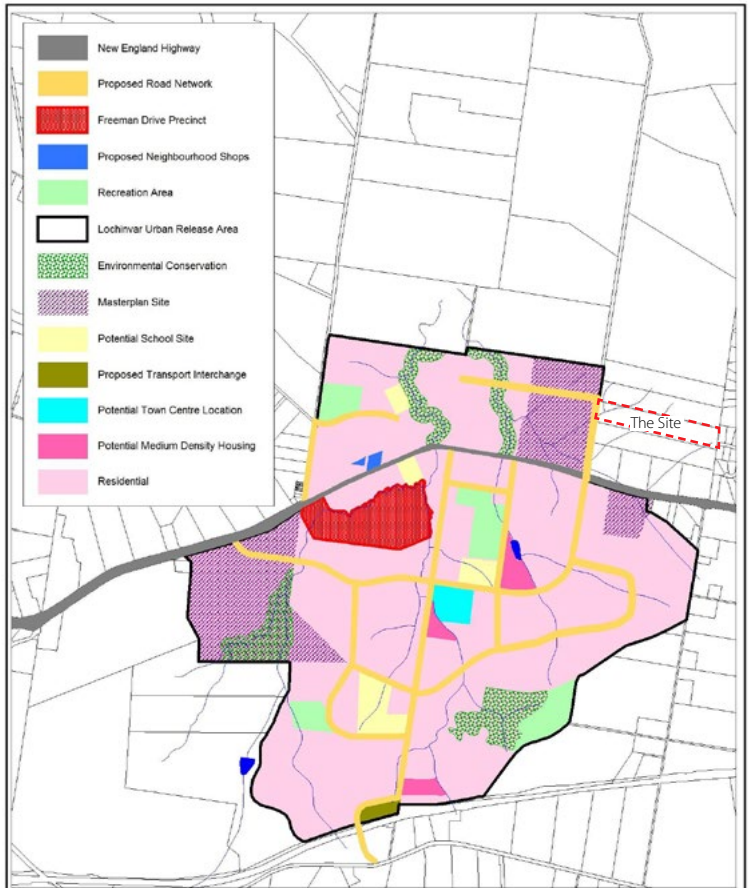

Figure 3 Lochinvar Area Plan, F.9 - Lochinvar Urban Release Area Maitland City Council DCP 2011

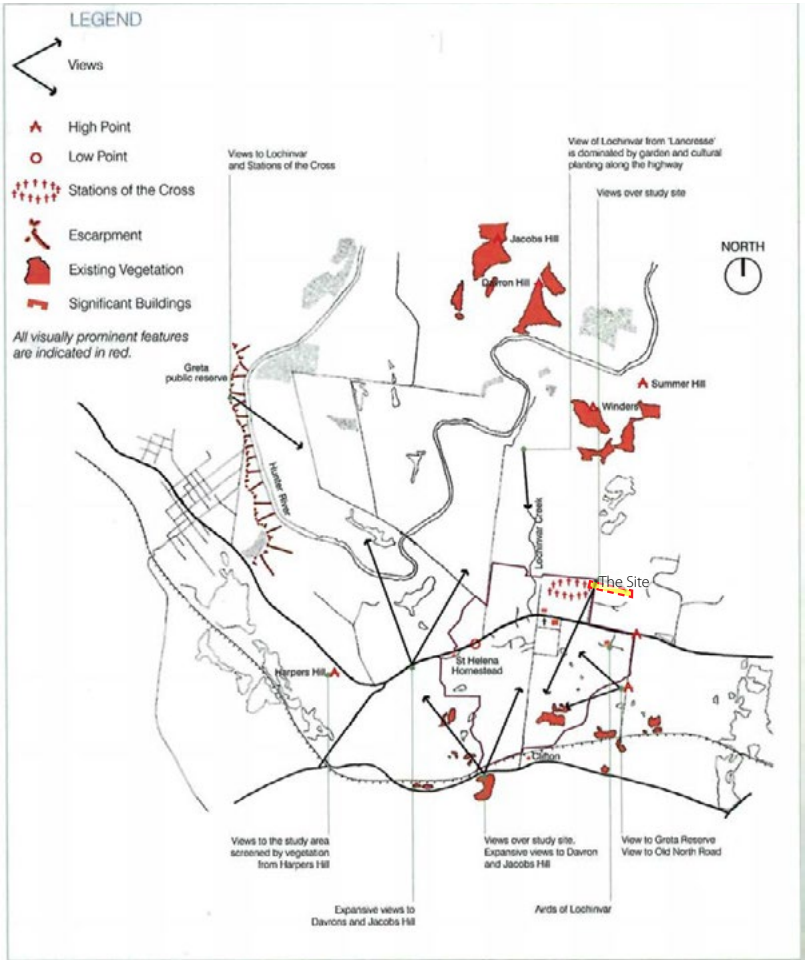

Figure 4 Visually prominant site features, from Lochinvar Structure Plan, October 2007

3.2. Site Context

The site address comprises one parcel of land and is legally described as: Lot 225 DP246447. The project area is located on Wonnarua Country and managed by the Local Aboriginal Land Council of Mindaribba, within the Maitland Local Government Area. It is subject to the Maitland Development Control Plan 2011, and currently zoned RU2 Rural Landscape in the Maitland Local Environmental Plan 2011.

The site lies parallel to, but is offset 350m, from the New England Highway which is a major road connecting to the Hunter Expressway. It provides a transport network through Lochinvar, to Greta at the north, and Rutherford at the south.

The surrounding land use is largely residential amongst environmental conservation and rural landscape. St Patricks Primary School and St Joseph's College west of site along the New England Highway, provide residential areas with education facilities within walking distance, amongst a rural backdrop. Established vegetation surrounding these sites provides minimal opportunity of views into and out-of, each school.

To the east, lies the Windella Ridge Estate, a large-lot residential area. South of the New England Highway, is the Lochinvar Ridge and Hereford Hill Estates. Currently, north and west of site, are rural lots with scattered residential and rural-related infrastructure. However, this area, directly west of site is zoned residential and included in the Lochinvar Urban Release Area plan and can be expected to include general residential development in the future.

Figure 5 Site location

the site

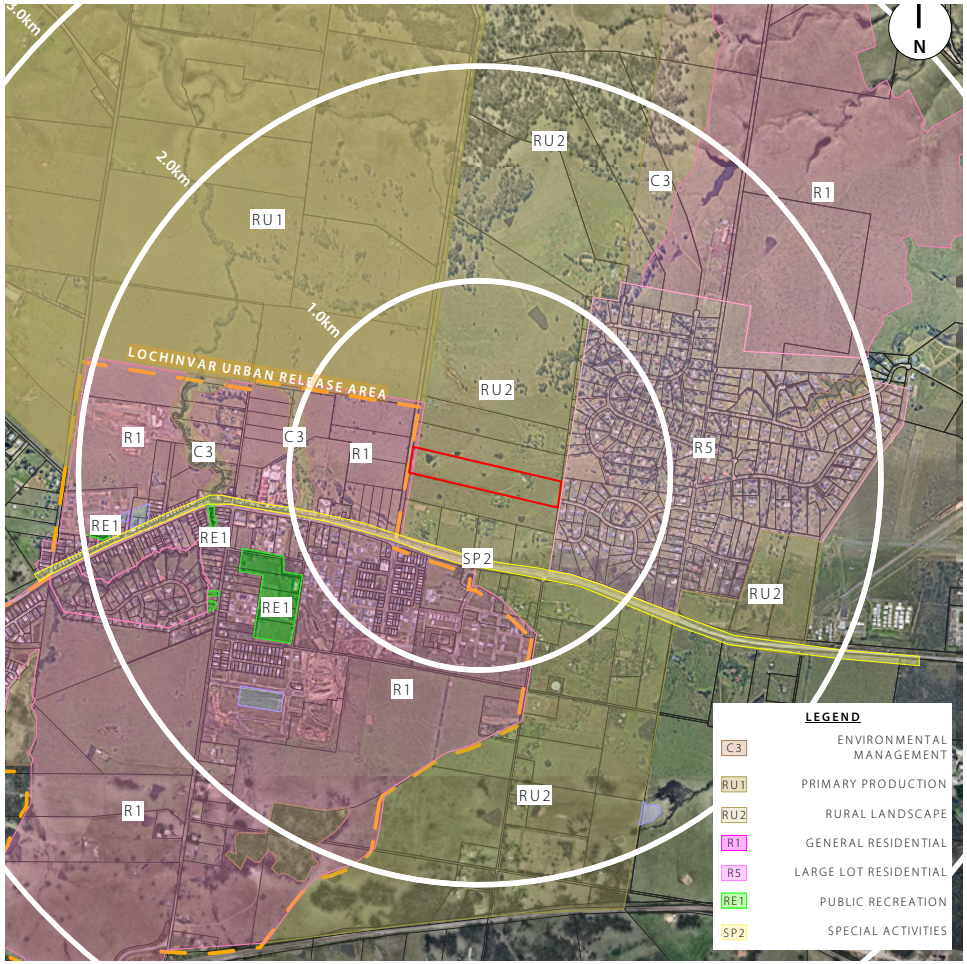

Figure 6 Land zoning diagram

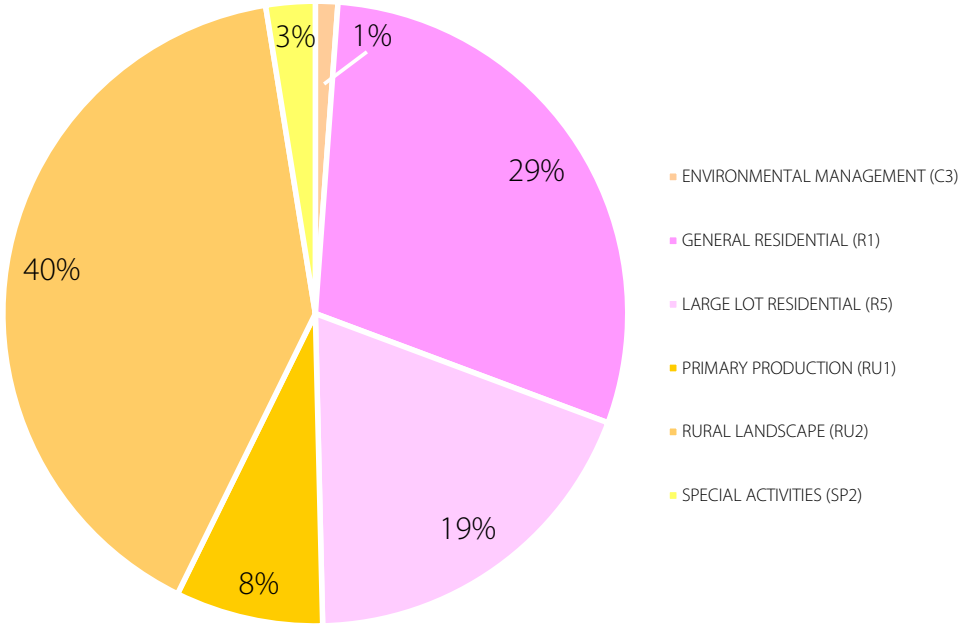

Figure 7 Proportional Percentage of Land Zoning Types Within 1km Radius

site description

3.3. Site Description

The study area occupies approximately 10.78 hectares at 34 Wyndella Road, Lochinvar, approximately 350m north of New England Highway, and on the western side of Wyndella Road. The site is currently a maintained, rural residential lot with scattered trees and dams.

The site is undulating, however, predominantly slopes from north to south, towards the New England Highway. There is minor, established vegetation to the eastern boundary adjoining Windella Ridge Estate which forms a partial visual screen to the west.

The site is currently accessible via the unsealed, Wyndella Road, to the western boundary of site. The New England Highway and Springfield Avenue signal light intersection lies approximately 350m south of the current entry point of site.

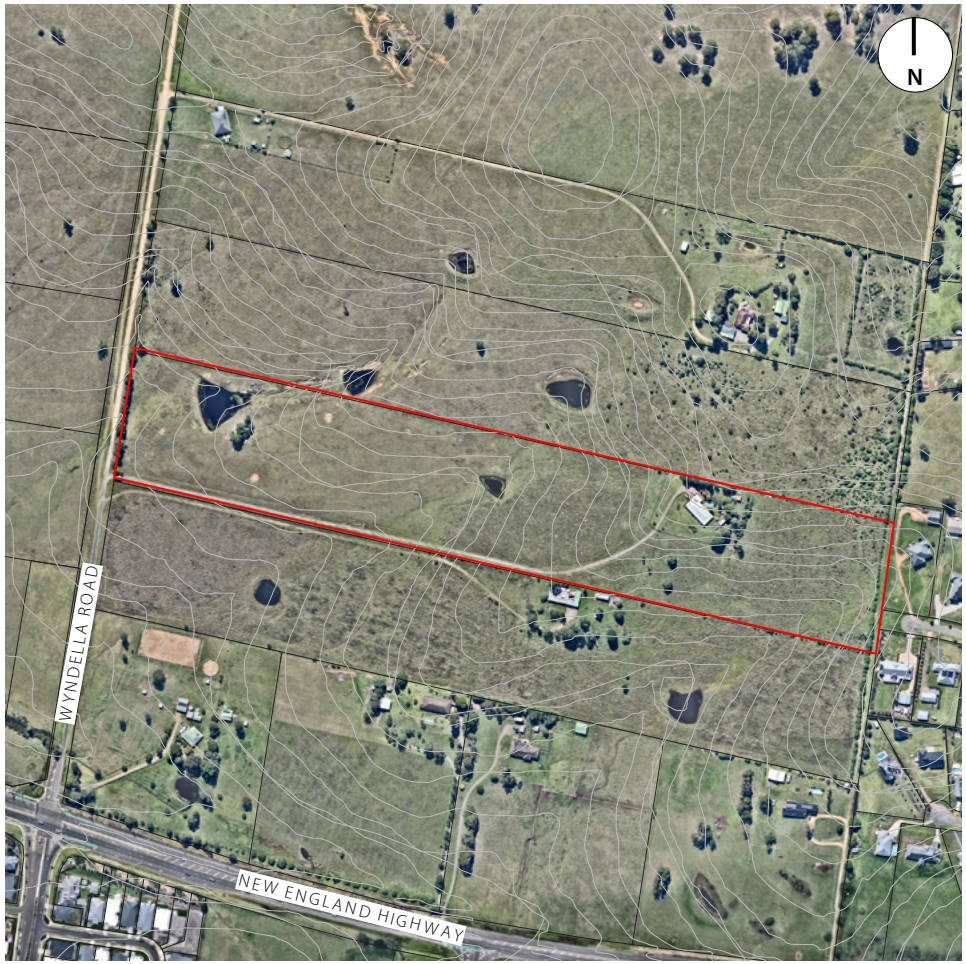

Figure 8 Site boundary

4. VISUAL ENVIRONMENT

4.1. Landscape Character Units

Landscape character may be defined as a distinct and recognisable pattern of elements, or characteristics in the landscape that make one landscape different from one another, rather than better or worse (The Countryside Commission & Scottish Natural Heritage, 2002). It is often created by the interaction of natural and human factors especially in urban areas where human activity tends to occur at its most intense. It is the degree and type of interaction between the two that will have a bearing on the visual quality of an area.

The location of the site features a mix of natural features, rural, residential and small-scale recreational areas, resulting in a rural-dominant landscape character. Vehicular traffic is dominant and pedestrian traffic is minimal outside of housing estates, where pedestrian pathways are not provided.

The introduction of several residential estates amongst the Lochinvar suburb and adjacent, Windella suburb, can be described as an evolving landscape character setting, as the viewed landscape shifts from a rural dominant landscape, to a rural-residential streetscape (Refer Image 1 & 2). The undulating landform and views to surrounding and distant, vegetated ridgelines and distant, open rural land, provides a key component to the rural residential setting.

The site proposed occurs on rural land that currently provides a visual break between the suburbs of Lochinvar and Windella. The landscape character of the area is changing as the residential development to the south of the New England Highway expands in alignment with its R1 General Residential zoning.

Five key landscape character units are identifiable within a 1000m radius of the site. These are:
1. Residential Areas
2. Rural
3. Major Road Corridor - New England Highway
4. Recreational Areas
5. Established & Protected Conservation Areas

These are discussed in greater detail on the following pages.

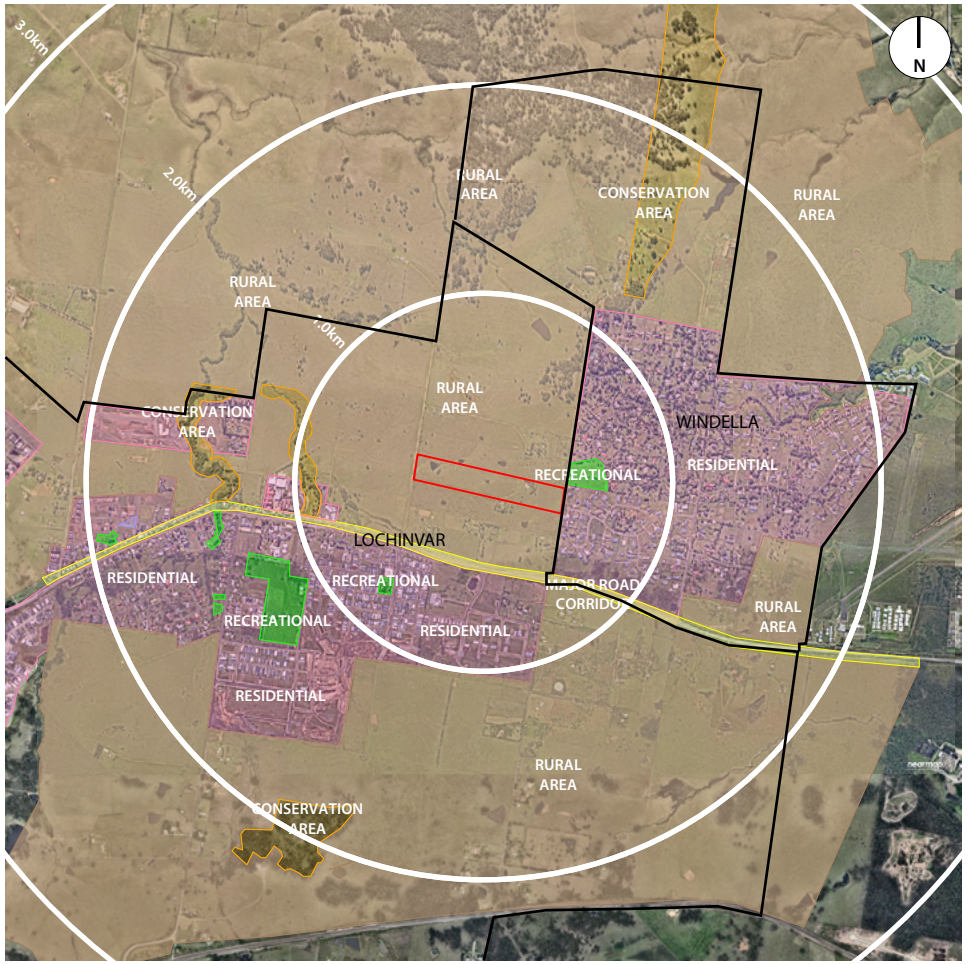

Figure 9 Landscape character units within 1km of site

visual environment

Changing landscape character from satellite view over 9 year period:

Image 1 Nearmap Satellite Imagery - June 2015

Image 2 Nearmap Satellite Imagery - June 2024

14 landscape character units

1. Residential

Image 3 Residences along Pennparc Drive, Windella Ridge Esate

Image 5 Lochinvar Ridge Estate entry on Sanctuary Drive

Image 7 Springfield Drive residential within Hereford Hill Estate

Image 10 Back of Pennparc Drive residences from Cecily Reserve

Image 4 Back of Pennparc Drive residences from Cecily Reserve

Image 6 Springfield Drive residential within Hereford Hill Estate

Image 8 Springfield Drive residential within Hereford Hill Estate

Image 11 Back of Pennparc Drive residences from Cecily Reserve

The nature of the surrounding R1 - General Residential, R5 - Large Lot Residential and RU2 - Rural Landscape residential area is largely characteristic of single and double storey, timber cladded and rendered brick homes and development. Rural fencing within housing estates creates a rural setting and enforces the rural characteristics of the residential area.

General residential lots (south of site) are typically between 400-700m^2, whilst the large lot residential areas (east of site) typically range from 4000m^2-1.8ha.

Large retaining walls are present within existing estates, that create a stepped landscape into the undulating terrain.

Image 9 Windella residential area, east of site

Image 12 Windella residential area, east of site

landscape character units

2. Rural

Image 13 Wyndella Road residence, north of site

Image 14 Looking west from Wyndella Road

Image 15 Looking west from Wyndella Road

Image 16 Windermere Road residence

The rural area of Lochinvar and surrounding suburbs creates a landscape setting defined by openess and scattered vegetation as a backdrop to the area. These areas create a defined landscape characterised by naturally weathering landscapes and habitats to local ecology. Cattle grazing, horse paddocks, scattered large sheds and rural infrastructure is largely associated with these areas.

3. Major Road Corridor

Image 17 Looking west along New England Highway

Image 18 Looking west along New England Highway

Image 19 Looking east along New England Highway

Image 20 Looking east along New England Highway

The portion of the New England Highway adjoining Lochinvar, operates as a major travel corridor linking to Greta at the north and Rutherford at the south. Both northern and southern extents of the highway provide linkage to the Hunter Expressway, another major travel corridor that connects Newcastle to the Hunter Valley.

This portion of the travel corridor has a speed limit of 80km/hr and experiences a high amount of users and traffic at all times during the day and night. Traffic volumes increase in school zone times, as the traffic relates to the drop-off and collection of students at both St Patricks Primary School and St Joseph's College, west of site.

landscape character units

4. Recreational

Image 21 Cecily Reserve Park playground

Image 22 Lochinvar Sporting Complex

Image 23 Hereford Hill Park, on Springfield Drive

Image 24 Hereford Hill Park, on Springfield Drive

Within the residential area of Lochinvar, lie pockets of recreational land. The recreational areas primarily feature parks and reserves, however, the Lochinvar Sporting Complex provides recreational opportunity for a variety of seasonal sports, and is located to the west of Hereford Hill Estate.

In addition to formal recreation areas, wide paths within housing estates provide users with opportunities for walking and passive recreation, however, these paths are limited to within the residential area and there is currently no pedestrian access along the New England Highway linking residential areas to Lochivar CBD or Windella Ridge Estate.

5. Conservation Area

Image 25 Conservation area, from Cantwell Road, looking east

Image 26 Conservation area, from Cantwell Road, looking east

Image 27 Conservation area, from Windermere Road, looking east

Image 28 Conservation area, from Windermere Road, looking east

Amongst residential and rural areas are pockets of conservation area associated with natural stands of established vegetation. This vegetation within the immediate vicinty of site, is mostly confined to low points of the landscape, along water courses, such as Lochinvar Creek.

These conservation areas are key to maintaining vegetation in the rural landscape and protecting natural ecosystems and habitats.

5. THE PROPOSAL

5.1. Proposed Project and Landscaping

The proposal seeks to redevelop the 10.78ha site into a 209 home site manufactured home estate. The proposed entrance is from Wyndella Road to the west of site.

The proposal includes a three-staged release of lots and indoor and outdoor community facilities for residents, such as:

- A bowls green
- Event lawn
- Yoga lawn
- Two pickleball courts
- Pool
- A community facilities building with
- Function room with stage
- Lounge and library room
- Art room
- Small-scale cinema
- Indoor gym
- Games room
- Kitchen
- Outdoor seating area and verandah
- Bathroom facilities and storage areas.

The western and eastern boundary of site hold vegetated setbacks and detention basins for on-site water control. There is a caravan storage area located in the south eastern corner of the site and there is an APZ that wraps around the perimeter of the site.

The landscape proposal nominates tree planting buffers to the western, southern and eastern boundaries of site. The western boundary aims to protect and retain existing screening vegetation whilst incorporate more native buffer trees and street trees to soften the interface from Wyndella Road and further west. The southern buffer, to the New England Highway, is provided through informal native tree planting along the fence line, creeping fig vine planted at intervals to climb over proposed retaining walls, and street tree planting amongst the integral road design to soften built form from the inferior views from the south. Further to this, visual impact from lots along the eastern boundary, have been reduced and a 30m vegetation strip introduced to soften views of built form from the Windella Estate.

Street tree planting has also been incorporated to provide visual relief in builtscape as the site slopes from the north to south.

It is proposed that the works will be staged. Stage One works will include the built form of stage one but also the planted buffer to the southern and eastern boundary of the site. This is proposed to establish a vegetated screen in the initial works prior to construction of the rest of the development with particular regard to views from the New England Highway and views from residences of Pennparc Drive to the east of the site.

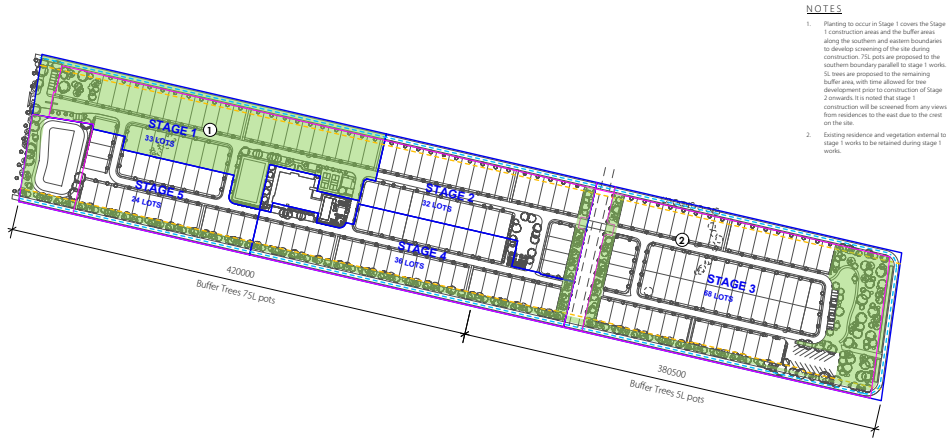

Figure 10 Landscape Staging Plan (Stage 1 Shown Green), Maitland MHE, Revision P Terras Landscape Architects

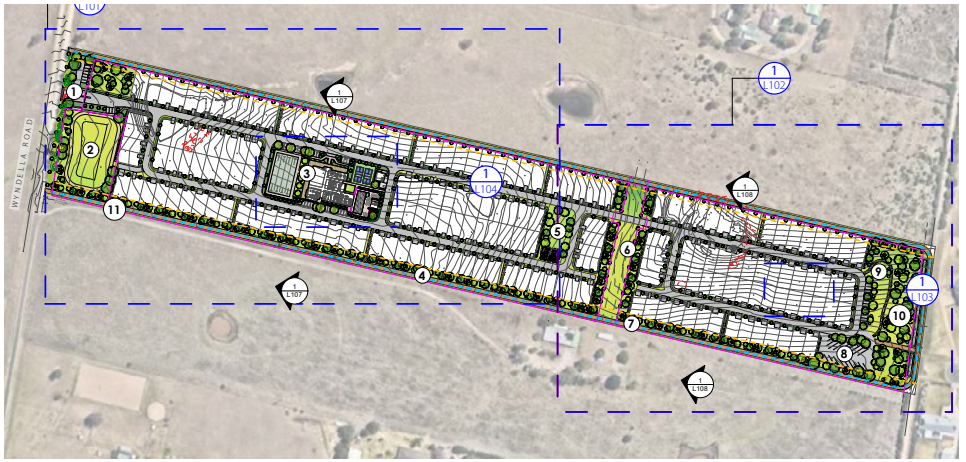

Figure 11 Landscape Site Plan, Maitland MHE, Revision P, Terras Landscape Architects

6. VIEWPOINT DATA SHEETS

6.1. Viewpoint Analysis

This section of the VIA considers the likely impact that the proposed development may have on the local visual environment. This is achieved by selecting particular sites, referred to as Viewpoints, conducting inspections and determining how the development will appear from these locations. These viewpoints are further explored in the following sections. Other potential viewpoints around the site were also assessed for inclusion in this report. Due to local topography, existing vegetation, access and existing development, views to the site are generally limited to less then 1km except for distant views from Cantwell and Windermere Road. Physical accessibility was also restricted due to private property ownership. The proposed impact is expected to be mainly localised and decreases as distance from the site increases.

Where accessible, areas within the study locality were visited to gain an appreciation of views and sight lines back to the subject site. This VIA assesses the existing visual amenity of the site and resultant visual impact of the proposed development.

Landscape assessment is concerned with changes to the physical landscape in terms of features/elements that may give rise to changes in character. Visual appraisal is concerned with the changes that arise in the composition of available views as a result of changes to the landscape, people's responses to the changes and to the overall effects on visual amenity. Changes may result in adverse (negative) or beneficial (positive) effects.

The nature of landscape and visual assessment requires both objective analysis and subjective professional judgement. Accordingly, the following assessment is based on the best practice guidance listed above, information and data analysis techniques, uses subjective professional judgement.

A number of indicative photo panoramas and photomontages of selected viewpoints have been included to put views to the site in context with the surrounding area and demonstrate the visual change in the landscape, considering the proposal.

Photomontages have been provided for all viewpoints.

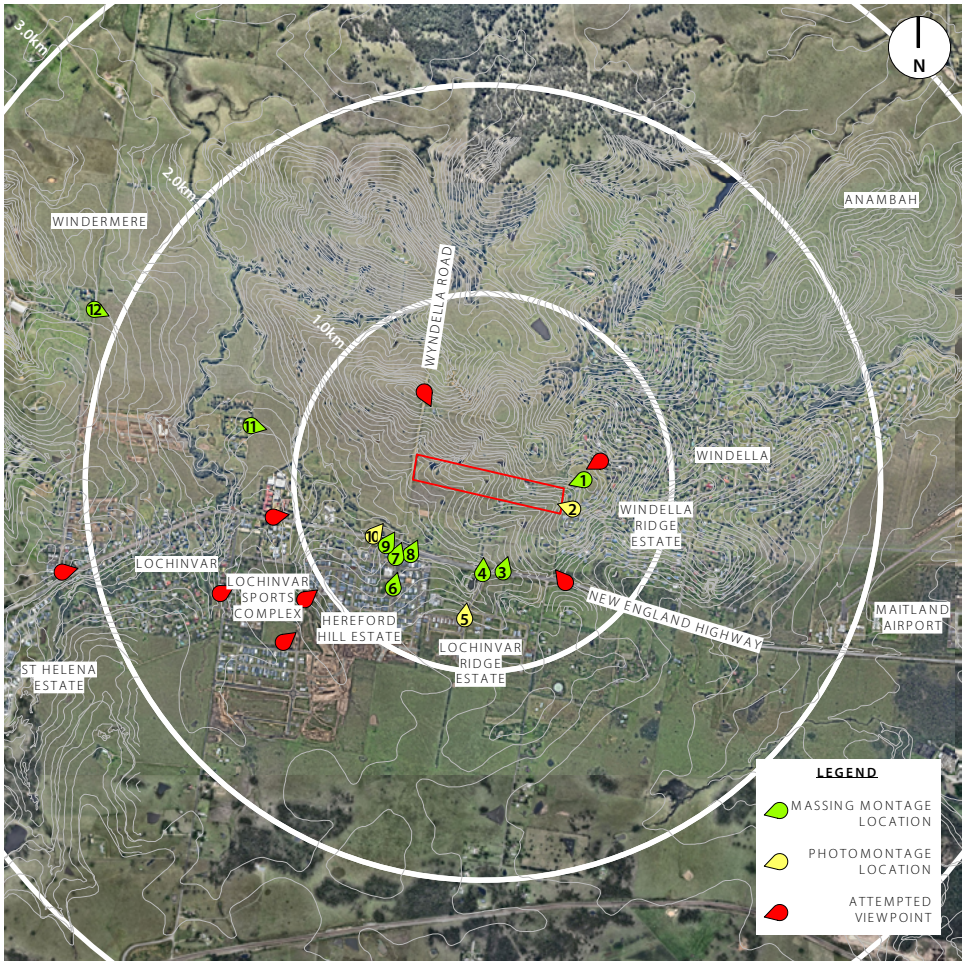

Figure 12 Viewpoint locations

viewpoint data sheets

6.2. Viewsheds

The viewshed diagram explores and demonstrates the views into the site from the nominated viewpoint locations. As discussed in the viewpoint analysis, due to existing vegetation and topography the clear viewshed area is primarily restricted to approximately 1km and filtered viewshed area of maximum 2.2km (excluding northern, Windermere Road where clear views are afforded but reduced due to distance from site).

The terrain of Lochinvar, naturally mitigates view corridors of the surrounding area. Distant views surrounding site are afforded from selected viewpoint positions, due to undulating topography. The low points of major and minor roads surrounding site, permit infrequent views. Elevated points in the surrounding landscape provide clearer views, however, are mostly viewed through a filtered-view landscape.

The most prominent views afforded into the site will be for residences at the end of Pennparc Drive, facing west, as they are located to the immediate boundary of the proposal. However, a 60m+ setback from houses with 20m+ of vegetative screening, provides a vegetated outlook along the boundary of these residences, which, whilst shifting the rural landscape character, does significantly reduce the visual impact of built form. Another prominent view is afforded to residences on Simmental Street facing north, in Lochinvar Ridge Estate.

Due to the site's elevated position adjacent to the New England Highway, filtered and clear views travelling east and west along the New England Highway are afforded, due to existing vegetation and built form in the foreground. The remaining views to the site are considered filtered due to the existing topography, development in the foreground and mid ground and the height of the established street vegetation of the surrounding area.

Viewer access and impact is discussed in greater detail in the separate viewpoint analysis sheets.

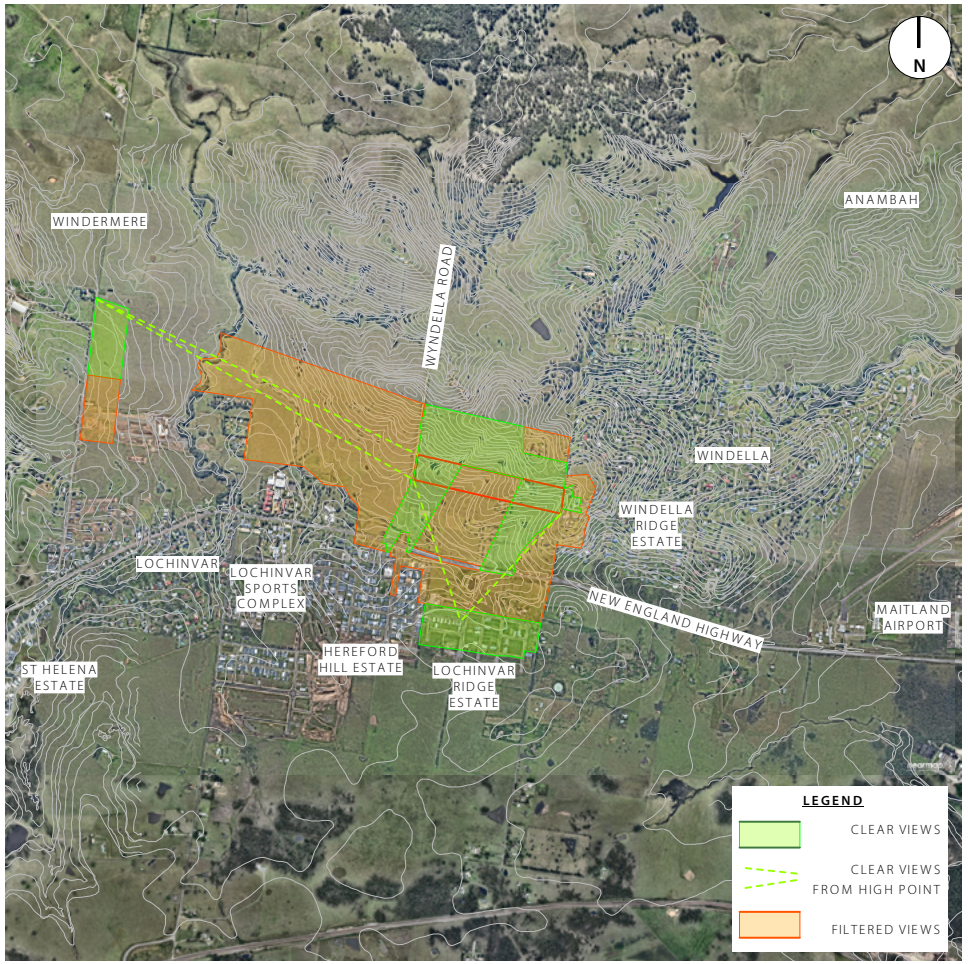

Figure 13 Viewshed diagram.

7. ASSESSMENT CRITERIA

7.1. Landscape Values

The distinct nature of landscapes influences the ways in which we identify and connect to self and place. As a profession, we have a responsibility to understand and perceive landscapes appropriately. It is important that both Indigenous and Non Indigenous values and perspectives are captured and equally shared and understood. Landscape values are lenses through which people view the world around them. They determine the ways people value landforms and landscapes and therefore contribute to its visual quality due to nostalgic associations and the desire to preserve items of significance. Landscape values can include the following:

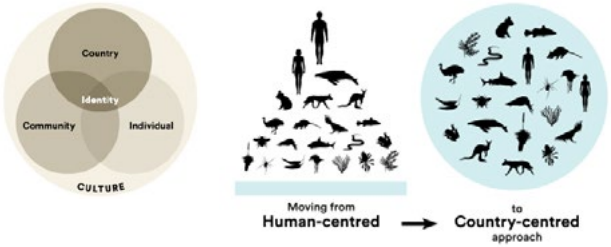

Figure 14 Interrelationships & Connecting with Country Approach

Source: Government Architect NSW, 2023

7.2. Viewer Access

Viewer access considers the relative number and type of viewers, the viewer distance, the viewing duration and view context. The rationale is that if the number of people who would potentially see portions of the proposal is low, then the visual impact would be low, compared to when a large number of people would have the same view.

LANDSCAPE VALUES MATRIX				
		SUB-VALUES		
VALUES	PHYSICAL ELEMENTS OF THE LANDSCAPE THAT ARE TANGIBLE	BIOPHYSICAL	ECOLOGICAL	ECONOMIC
		PHYSICAL, CHEMICAL, BIOLOGICAL ELEMENTS THAT INTERACT TO SHAPE A NATURAL LANDSCAPE RIDGELINES, HILLS, VEGETATION, BODY OF WATER	ELEMENTS THAT SHOW EVIDENCE OF A COMMUNITY IN THE LANDSCAPE ANIMALS, HABITATS, MICRO-ECOSYSTEMS, EXISTING DEVELOPMENT	ELEMENTS OF THE LANDSCAPE THAT CAN BE ECONOMICALLY MOTIVATED FOR HUMAN ADVANCEMENT MINES, TIMBER PLANTATIONS
	ASSOCIATIVE ELEMENTS OF THE LANDSCAPE THAT ARE PROTECTED DUE TO THEIR INTRINSIC VALUE	HERITAGE	CULTURAL	SPIRITUAL
		ELEMENTS THAT ARE IMPORTANT TO THE TELLING OF THE HISTORY OF THE LANDSCAPE CONSERVATION OR MAINTENANCE AREAS, HERITAGE PROTECTED	ELEMENTS OF THE LANDSCAPE THAT ARE EVOLVING WITH NEW IDEAS AND A DESIRED FUTURE CHARACTER. CELEBRATING CONNECTION TO COUNTRY, SPACES OF GATHERING	ELEMENTS OF THE LANDSCAPE THAT DEFINE A RELIGIOUS OR SPIRITUAL CONNECTION TO THE LAND, DEEPER THAN PHYSICAL STORIES, THOUGHTS, BELIEFS
	PERCEPTIVE ELEMENTS OF THE LANDSCAPE THAT ARE SENSORY INTERPRETED OR HAVE BROADER CONNECTION TO SENSORY EXPERIENCE	EMOTIONAL	SOCIAL	AESTHETIC
		SENSORY ELEMENTS THAT ARE IMPORTANT TO HISTORY OF THE PERSON EXPERIENCING THE LANDSCAPE SOUND OF WAVES, CHANGING OF TIDES, SMELL OF SOIL IN FOREST	ELEMENTS OF THE LANDSCAPE THAT CREATE SPACES FOR SOCIAL EXPERIENCE AND MEMORY FEELINGS ASSOCIATED WITH SOCIAL INTERACTION, COOPERATION, COMPETITION, CONFORMITY	APPRECIATION OF ELEMENTS OF A LANDSCAPE FOR THEIR INTRINSIC BEAUTY EXCLUSIVE OF A WIDER CONTEXT SENSE OF WONDER EVOKED FROM UNDEVELOPED LANDSCAPES

Figure 15 Landscape Values Matrix

Source: Adapted from NZILA 'te-tangi-a-te-manu', 2022

VIEWER ACCESS MATRIX														
		VIEWER DISTANCE												
		VERY SHORT (<250m)			SHORT (250m-500m)			MEDIUM (500m-2km)			LONG/DISTANT (>2km)			
		VIEWING DURATION												
		<10mins	10-30mins	>30mins	<10mins	10-30min	>30mins	<10mins	10-30min	>30mins	<10mins	10-30min	>30mins	
VIEWER NUMBERS	VERY LOW (>49 PEOPLE PER DAY)	L	M	H	L	M		L		M	L			
	LOW (50-149 PEOPLE PER DAY)	L	M	H	L	M		L		M	L			
	MODERATE (150-199 PEOPLE PER DAY)	M	H		M		H	L	M		L			
	HIGH (>200 PEOPLE PER DAY)	H			M	H		M		H	L		M	

Figure 16 Viewer Access Matrix

Source: Adapted from Urbis, 2008

assessment criteria

7.3. Visual Quality

The visual quality of an area is essentially an assessment of how viewers may respond to designated scenery. Scenes of high visual quality are those that are valued by a community for the enjoyment and improved amenity that they can create. Conversely, scenes of low visual quality are of little scenic value to the community with a preference that they be changed and improved, often through the introduction of landscape treatments (e.g. screen planting).

As visual quality relates to aesthetics, its assessment tries to anticipate subjective responses. There is evidence to suggest that certain landscapes are continually preferred over others with preferences related to the presence or absence of certain elements.

The rating of visual quality of this study has been based on the following generally accepted conclusions arising from scientific research (DOP, 1988).

- Visual quality increases as relative relief and topographic ruggedness increases.
- Visual quality increases as vegetation pattern variations increase.
- Visual quality increases due to the presence of natural and/or agricultural landscapes.
- Visual quality increases owing to the presence of water forms (without becoming common) and related to water quality and associated activity.
- Visual quality increases with increases in land use compatibility.

VISUAL QUALITY REFERENCE TABLE

ELEMENT		RATING: LOW	RATING: MEDIUM	RATING: HIGH
LANDFORM / RELIEF				
	CONTRAST	FLAT TERRAIN DOMINANT. RIDGELINES NOT OFTEN SEEN.	UNDULATING TERRAIN DOMINANT. LITTLE CONTRAST OR RUGGEDNESS. RIDGELINES PROMINENT IN ONLY HALF OF LESS OF LANDSCAPE UNITS.	HIGH HILLS IN FOREGROUND AND MIDDLE GROUND. PRESENCE OF CLIFFS, ROCKS AND OTHER GEOLOGICAL FEATURES. HIGH RELIEF (E.G. STEEP SLOPES RISING FROM WATER OR PLAIN). RIDGELINES PROMINENT IN MOST OF LANDSCAPE UNIT.
VEGETATION				
	DIVERSITY AND CHANGING PATTERNS	ONE OR TWO VEGETATION TYPES PRESENT IN FOREGROUND. UNIFORMITY ALONG SKYLINE	PATTERNING IN ONLY ONE OR TWO AREAS. 3 OR 4 VEGETATION TYPES IN FOREGROUND FEW EMERGENT OR FEATURE TREES	HIGH DEGREE OF PATTERNING IN VEGETATION. 4 OR MORE DISTINCT VEGETATION TYPES. EMERGENT TREES PROMINENT AND DISTINCTIVE TO REGION.
NATURALNESS				
	CORRECT BALANCE	DOMINANCE OF DEVELOPMENT WITHIN MANY PARTS OF A LANDSCAPE	SOME EVIDENCE OF DEVELOPMENT BUT NOT DOMINANT	ABSENCE OF DEVELOPMENT OR MINIMAL DISTURBANCE WITHIN LANDSCAPE UNIT. PRESENCE OF PARKLAND OR OTHER OPEN SPACE INCLUDING BEACH, LAKESIDE, ETC.
WATER				
	PRESENCE, EXTENT AND CHARACTER	LITTLE OR NO VIEW OF WATER. WATER IN THE BACKGROUND WITHOUT PROMINENCE. PRESENCE OF POLLUTED WATER OR STAGNANT WATER.	MODERATE EXTENT OF WATER. PRESENCE OF CALM WATER. NO ISLANDS, CHANNELS, MEANDERING WATER. INTERMITTENT STREAMS, LAKES, RIVERS, ETC.	DOMINANCE OF WATER IN FOREGROUND AND MIDDLE GROUND. PRESENCE OF FLOWING WATER, TURBULENCE AND PERMANENT WATER.
DEVELOPMENT				
	FORM & IDENTITY	PRESENCE OF COMMERCIAL AND INDUSTRIAL STRUCTURES. PRESENCE OF LARGE SCALE DEVELOPMENT (E.G. MINING INFRASTRUCTURE, ETC) RESIDENTIAL DEVELOPMENT	PRESENCE OF ESTABLISHED RESIDENTIAL DEVELOPMENT. SMALL SCALE, INDUSTRIAL ETC IN MIDDLEGROUND. PRESENCE OF SPORTS AND RECREATION FACILITIES.	PRESENCE OF RURAL STRUCTURES (E.G. FARM BUILDINGS, FENCES ETC.). HERITAGE BUILDINGS AND OTHER STRUCTURES APPARENT. ISOLATED DOMESTIC SCALE STRUCTURES.

Figure 17 Visual Quality Refernce Table

Source: After Clouston & Brouwer, 1995

assessment criteria

7.4. Visual Sensitivity

Visual sensitivity is the estimate of the significance that a change will have on a landscape and to those viewing it. For example, a significant change that is not frequently seen may result in a low visual sensitivity although its impact on a landscape may be high.

The assessment of visual sensitivity is based on a number of variables such as: the number of people affected; viewer location including distance from the source; the surrounding land use and degree of change. Variables may also include viewer position, i.e. inferior, where the viewer's station is below the horizontal axis as characterised by looking up (least preferred), neutral, where the viewer sight line is generally along the horizontal axis, and, superior, where the viewer sight line is above the horizontal axis as characterise by looking down to an object (most preferred).

Generally the following principles apply:

- Visual sensitivity decreases as the viewer distance increases. This occurs as changes to the scenic environment must be assessed over a broader viewshed which is comprised of a greater number of competing elements.
- Visual sensitivity decreases as the viewing time decreases.
- Visual sensitivity can also be related to viewer activity (e.g. a person viewing an affected site while engaged in recreational activities will be more strongly affected by change than someone passing a scene in a car travelling to a desired destination).
- Visual sensitivity decreases as the number of potential viewers decreases.

Visually sensitive landscapes include:

- Main ridgelines
- Significant natural landscape features such as coastal headlands, prominent hills, lake channel entrances, lake islands and lake promontories
- National Parks, State Recreation Areas and other protected natural conservation areas
- Other areas zoned for natural values (areas zoned C2 - Conservation)
- Within 100m of the lake edge
- Within 300m of the coastal edge
- Heritage conservation areas and precincts

The adjoining table outlines the visual sensitivity based on the above criteria.

VISUAL SENSITIVITY TABLE

LAND USE	SENSITIVITY				
	IMMEDIATE FOREGROUND 0-100m	FOREGROUND 100-250m	MIDGROUND 250m-500m	DISTANT MIDGROUND 500m-1km	BACK-GROUND (>1km)
NATURAL AREAS E.G. WATERWAYS, NATIONAL PARKS, ETC.	HIGH			MODERATE	LOW
TOURIST OR RECREATION AREAS E.G. SHAREWAYS, PARKS, ETC.	HIGH		MODERATE		LOW
CULTURAL INSTITUTIONS E.G. CHURCH, ART GALLERY, ETC.	HIGH		MODERATE		LOW
MAJOR TRAVEL CORRIDORS	HIGH	MODERATE			LOW
SCENIC DRIVE (TOURIST ROUTE) E.G. WINE COUNTRY DRIVE	HIGH	MODERATE		LOW	
RESIDENTIAL AREAS	MODERATE		LOW		
MINOR ROADS	MODERATE	LOW			NEGLIGIBLE
AGRICULTURAL OR INDUSTRIAL AREAS	LOW			NEGLIGIBLE	

Figure 18 Visual Sensitivity Table

Source: Adapted from EDAW, 2000

assessment criteria

7.5. Magnitude of Change

Magnitude of change is an assessment of a number of factors including the propoortion of the view/landscape affected, the size or scale, the geographical extent of the area over which the change occurs, the rate abd duration of the cahnge and the level of contrast and compatibility. This change may be adverse or beneficial.

Where key components are lost, such as mature, diverse, rare, or distinctive landscape elements, the proposal is considered to have a more significant impact on magnitude of change, as it will result in a change to the existing landscape character. In contrast, key components such as new, uniform, homogenous landscape elements in lower-value landscape character areas are said to have a less significant impact on magnitude of change. (GLVIA, 3rd Ed.)

MAGNITUDE OF CHANGE TABLE

ELEMENT	RATING: NEGLIGIBLE	LOW	MODERATE	HIGH
SIZE & SCALE	BENIGN CHANGE TO THE EXISTING LANDSCAPE ELEMENTS, THAT RESULT IN NO DIFFERENCE IN THE VIEWED LANDSCAPE.	UNOBTRUSIVE CHANGE TO THE EXISTING LANDSCAPE ELEMENTS, THAT RESULT IN A MUTED AND MINOR DIFFERENCE IN THE STREETSCAPE, COMPLIMENTING OR NOT AFFECTING THE EXISTING LANDSCAPE CHARACTER.	CONSIDERABLE CHANGE TO THE EXISTING LANDSCAPE ELEMENTS, THAT RESULT IN A NOTICEABLE, BUT NOT DOMINANT, DIFFERENCE IN EXISTING LANDSCAPE CHARACTER.	SIGNIFICANT CHANGE TO THE EXISTING LANDSCAPE ELEMENTS, THAT RESULT IN A SUBSTANTIAL DIFFERENCE OR SHIFT IN EXISTING LANDSCAPE CHARACTER.
EXTENT	NEITHER BENEFICIAL OR ADVERSE VISUAL CONTRAST TO THE EXISTING LANDSCAPE CHARACTER.	THE PROPOSAL REQUIRES THE REMOVAL OF LITTLE TO NO KEY COMPONENTS, AND/OR THE ADDITION OF NEW COMPONENTS TO THE LANDSCAPE THAT CONTRIBUTE TO A VISUAL LOSS IN THE EXISTING VIEWED LANDSCAPE	THE PROPOSAL REQUIRES THE REMOVAL OF SOME COMPONENTS, OR THE ADDITION OF NEW COMPONENTS TO THE LANDSCAPE THAT CREATE DIVERSITY TO THE EXISTING VIEWED LANDSCAPE, AND/OR AT TIMES, ARE IN CONTRAST TO THE EXISTING LANDSCAPE CHARACTER.	THE PROPOSAL REQUIRES THE REMOVAL OF KEY COMPONENTS, OR THE ADDITION OF NEW, KEY COMPONENTS TO THE LANDSCAPE THAT ALTER, OR BECOME A NEW DOMINANT FEATURE, TO THE EXISTING VIEWED LANDSCAPE (E.G. REMOVAL OF VEGETATION THAT CHANGES AN INTIMATE LANDSCAPE TO OPEN, OR THE INTRODUCTION OF TALL STRUCTURES TO OPEN SKYLINES).
NATURE OF VISIBILITY	THE PROPOSAL BLENDS IN WITH THE EXISTING ENVIRONMENT AND IS WELL SCREENED TO THE EXTENT THAT THE EXISTING VIEWED LANDSCAPE IS INDISTINGUISHABLE.	THE PROPOSAL PRESENTS ITSELF WITH LOW TO MINOR AESTHETIC VISUAL CONTRAST, BLENDING IN WITH THE EXISTING VIEWED LANDSCAPE DUE TO A HIGH LEVEL OF INTEGRATION OF ONE OR SEVERAL OF THE FOLLOWING: FORM, SHAPE, PATTERN, LINE, TEXTURE OR COLOUR. IT CAN ALSO RESULT FROM THE USE OF EFFECTIVE SCREENING OFTEN USING A COMBINATION OF LANDFORM AND LANDSCAPING.	THE PROPOSAL PRESENTS ITSELF WITH MODERATE AESTHETIC VISUAL CONTRAST TO ITS VIEWED LANDSCAPE, BUT HAS SHOWN SOME DEGREE OF INTEGRATION (E.G. GOOD SITING PRINCIPLES EMPLOYED, RETENTION OF SIGNIFICANT EXISTING VEGETATION, PROVISION OF SCREEN LANDSCAPING, CAREFUL COLOUR SELECTION AND/ OR APPROPRIATELY SCALED DEVELOPMENT).	THE PROPOSAL PRESENTS ITSELF WITH HIGH AESTHETIC VISUAL CONTRAST TO ITS VIEWED LANDSCAPE WITH LITTLE OR NO INTEGRATION AND/OR SCREENING, OR CONTRAST IN FINISH TO SURROUNDING DEVELOPMENT.
SKYLINE		THE PROPOSAL IS PARTLY, OR NOT VISIBLE AT ALL ON THE SKYLINE WITH OTHER FEATURES	THE PROPOSAL IS VISIBLE ON THE SKYLINE WITH OTHER FEATURES	THE PROPOSAL IS VISIBLE ON THE SKYLINE AS A NEW FEATURE
CONSISTENCY OF VIEW		THE PROPOSAL IS INTERMITTENTLY OR INFREQUENTLY VISIBLE.	THE PROPOSAL IS INTERMITTENTLY AND SEQUENTIALLY VISIBLE.	THE PROPOSAL IS AN ONGOING, OR MULTI-PHASE DEVELOPMENT THAT IS CONTINUOUSLY AND SEQUENTIALLY VISIBLE.
PROPORTION OF IMPACT	THE PROPOSAL IS INCONSEQUENTIAL OR NOT VISIBLE AT ALL ON THE SKYLINE.	LOW PROPORTION OF THE VIEW IMPACTED	MODERATE PROPORTION OF THE VIEW IMPACTED	HIGH PROPORTION OF THE VIEW IMPACTED

Figure 19 Magnitude of Change Table

Source: Adapted from GLVIA, 3rd ed. & Volume 4A: LVIA Methodology and Glossary, Wood Group UK Limited, March 2021.

assessment criteria

7.6. Visual Impact

Visual impact is the assessment of changes in the appearance of the landscape as the result of some intervention typically man-induced, to the visual quality of an area having regard to visual sensitivity, magnitude of change and the other attributes that these elements embody as discussed above.

Visual impact may be positive (i.e. beneficial or an improvement) or negative (i.e. adverse or a detraction). When visual impacts are negative, the loss of visual quality needs to be determined and when they are found to be undesirable or unacceptable, then mitigation measures need to be formulated with the aim of reducing the impact to within, at least acceptable limits.

The adjoining table illustrates how Visual Sensitivity Levels and Magnitude of Change combine to produce varying degrees of Visual Impact. Where a landscape viewpoint has been assessed as significant and adverse, mitigation methods should be described to lower visual impact. Refer Mitigations in Section 9.

Further assessment is provided in the Visual Evaluation for selected viewpoints.

VISUAL IMPACT TABLE					
		VISUAL SENSITIVITY LEVELS			
		HIGH	MODERATE	LOW	NEGLIGIBLE
MAGNITUDE OF CHANGE	HIGH	HIGH	HIGH	MODERATE	LOW
	MODERATE	HIGH	MODERATE	LOW	LOW
	LOW	MODERATE	LOW	LOW	NEGLIGIBLE
	NEGLIGIBLE	LOW	LOW	NEGLIGIBLE	NEGLIGIBLE

Figure 20 Visual Impact Table

viewpoint 1

Location: Cecily Reserve Park Playground, Looking South-East

Image 29 Cylindrical panorama stitched to 90° FOV, west towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 21 Viewpoint location

Site

Distance: 70m east
View position: Neutral
Visual Quality: Medium

Camera

Date & Weather: 29.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 1 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Heritage (conservation vegetation), Emotional (Wind across open field), Aesthetic (rural landscape).
	Viewer Access	Despite the low viewer numbers, due to the moderate duration and proximity, viewer access is considered MODERATE.
	Visual Sensitivity	The visual sensitivity of the site is considered HIGH as it will be viewed from a recreational area.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW, as the proposal is largely screened by proposed vegetation and provides a level of screening to existing built form in the midground.
	Visual Impact	The proposal has moderate visual access and high sensitivity due to the recreational area, however, will be to a large extent screened by existing established vegetation and built environment in the foreground. Thus, the visual impact is MODERATE.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the sensitivity of the recreational zone with the above criteria, is assessed as high, when it is more likely, moderate-low, due to the minimal recreational activity, affecting only a small percentage of viewers and also the vegetation and built form in the foreground screen the proposed development in the most part from this viewpoint and provide a level of screening also to the existing built form in the midground. This factor reassesses the visual impact of this viewpoint to an overall LOW impact.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access			■	
Visual Sensitivity				■
Mag. of Change		■		

Visual Impact - Significance rating based on above criteria:

Moderate

Reassessment based on Professional Opinion:

Low

Image 30 Viewpoint 1, one frame, existing view

Figure 22 Viewpoint 1, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 2

Location: Pennpark Drive Residences, Looking West

Image 31 Cylindrical panorama stitched to 90° FOV, west towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

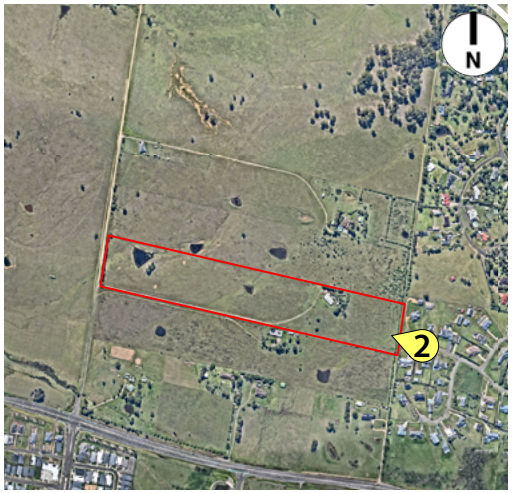

Figure 23 Viewpoint location

Site

Distance: 70m west
View position: Neutral
Visual Quality: Medium

Camera

Date & Weather: 29.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 2 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Cultural (evolving residential landscape character), Aesthetic (rural landscape).
	Viewer Access	Despite the low viewer numbers, due to the long duration and proximity, viewer access is considered HIGH.
	Visual Sensitivity	The visual sensitivity of the site is considered MODERATE as it will be viewed from a residential area with proximity.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as HIGH, as the proposal from this location will be a significant change to the existing landscape character with high proportion of the view aesthetically differing to the existing viewed landscape.
	Visual Impact	The proposal has high visual access and moderate sensitivity due to the residential area. Despite showing a level of integration through street tree planting and buffer trees to the eastern boundary of site, the visual impact is assessed as HIGH, as the proposal from this viewpoint, will change the existing, rural viewed landscape.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the impact is reassessed as MODERATE. Despite the significant shift in landscape character, the proportion of the view is considered to be softened by the vegetative buffer and recessive colour treatment of the proposal. Whilst the previous viewed landscape was one of rural character, the proposed landscape treatment to the eastern boundary creates a predominantly vegetated landscape which significantly reduces the visual impact of built form, and subsequent visual impact rating. NOTE: Assessment is based on fully completed proposed development.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

High

Reassessment based on Professional Opinion:

Moderate

Image 32 Viewpoint 2, one frame, existing view

Figure 24 Viewpoint 2, photorealistic CGI of proposal showing extents of building and proposed vegetation for Stage 1 works within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

Image 33 Viewpoint 2, one frame, existing view

Figure 25 Viewpoint 2, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 3

Location: New England Highway, Travelling West, Looking North

Image 34 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 26 Viewpoint location

Site

Distance: 240m south
View position: Inferior
Visual Quality: Medium

Camera

Date & Weather: 29.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 3 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Aesthetic (rural landscape).
	Viewer Access	Proximity and high viewer numbers, despite short duration, results in a HIGH viewer access rating.
	Visual Sensitivity	The visual sensitivity of the site is considered MODERATE as it will be viewed from a major travel corridor in the midground.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as MODERATE as the proposal is viewed at the northern end of the hill, the mid and foreground remains unchanged rural landscape, however, the proposal from this location will provide a moderate contrast to the existing viewed landscape character.
	Visual Impact	The proposal has high visual access and moderate sensitivity due to the nature of the New England Highway and will present some contrast to the existing landscape character, resulting in a MODERATE visual impact.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In the context of the viewpoint being from a major travel corridor, motorists from this location are typically focused west and the level of screening provided along the New England Highway, southern elevation of site will provide integration. It is also noted that the presence of vegetation and scattered buildings within the view currently. The proposal is viewed from a vehicle travelling west, looking north at a speed limit of 80km/hr, the overall impact is maintained as a MODERATE rating due to these reasons. NOTE: Assessment is based on fully completed proposed development.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Moderate

Reassessment based on Professional Opinion:

No Reassessment

Image 35 Viewpoint 3, one frame, existing view

Figure 27 Viewpoint 3, photorealistic CGI of proposal showing extents of building and proposed vegetation for Stage 1 works within this view. NOTE: The Stage 1 built form extents occur to the west of this frame and the planting to the southern boundary will be indistinguishable.

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

Image 36 Viewpoint 3, one frame, existing view

Figure 28 Viewpoint 3, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 4

Location: Sanctuary Drive/New England Highway Instersection, Facing North

Image 37 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 29 Viewpoint location

Site

Distance: 450m south
View position: Inferior
Visual Quality: Low-Medium

Camera

Date & Weather: 29.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 4 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat)
	Viewer Access	Proximity and high viewer numbers, despite short duration, results in a HIGH viewer access rating.
	Visual Sensitivity	The visual sensitivity of the site is considered LOW as it will be viewed from a minor road.
Visual Analysis of Proposed Site	Magnitude of Change	The topography allows for a greater degree of the proposal to be visible, the magnitude of change is considered MODERATE, as the proposal will blend to an extent with the existing environment due to proposed southern boundary buffer screening, however, reduces views of open rural landscape associated with the rural character.
	Visual Impact	The proposal has high visual access and low sensitivity, despite minor contrast to existing landscape setting, has shown a level of integration through southern boundary screening providing vegetative integration with existing environment, and is assessed as a LOW overall rating.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In the context of an approaching intersection to a major road, and in conjunction with the above factors, this viewpoint has maintained an overall LOW visual impact.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Low

Reassessment based on Professional Opinion:

No reassessment

Image 38 Viewpoint 4, one frame, existing view

Figure 30 Viewpoint 4, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 5

Location: Simmental Street Residence, Facing North

Image 39 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 31 Viewpoint location

Site

Distance: 780m south
View position: Neutral
Visual Quality: Medium

Camera

Date & Weather: 29.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 5 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Heritage (conservation vegetation), Cultural (evolving residential landscape character), Aesthetic (rural landscape).
	Viewer Access	Despite viewing duration, the low viewer numbers and moderate distance results in LOW viewer access.
	Visual Sensitivity	The visual sensitivity of the site is considered LOW as it will be viewed from a residential setting with a moderate viewing distance.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as MODERATE, as the proposal will blend to a moderate extent with the existing environment as a result of proposed southern boundary buffer screening, however, subsequently, reduces views of open rural landscape associated with the rural character by increasing density of vegetation along the ridgeline.
	Visual Impact	Despite the level of integration through screening, the proposal does reduce views of open, rural landscape associated with rural character, but has low visual access and sensitivity thus, the visual impact is LOW.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the impact is maintained as LOW. Whilst the landscape character is changed (due to the reduction of views to open, rural landscape, the proposal introduces views of vegetated ridgelines, the introduction of vegetated ridgelines can be considered neither a negative nor positive change to the overall landscape (in a context of an evolving rural residential landscape character). In addition, this view is only afforded to a small audience of residences from this high point, the overall visual impact is LOW.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Low

Reassessment based on Professional Opinion:

No Reassessment

Image 40 Viewpoint 5, one frame, existing view

Figure 32 Viewpoint 5, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 6

Location: Springfield Drive Footpath Near Park, Travelling North

Image 41 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 33 Viewpoint location

Site

Distance: 635m south
View position: Neutral
Visual Quality: Low-Medium

Camera

Date & Weather: 29.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 6 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Heritage (conservation vegetation), Cultural (evolving residential landscape character), Social (gathering place for community)
	Viewer Access	Moderate viewer numbers and viewing distance will result in a LOW viewer access.
	Visual Sensitivity	The visual sensitivity of the site is considered MODERATE as it will be viewed from a recreational area.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW, as a minimal proportion of the proposal is visible from this location and of inconsequential impact to the viewed landscape, although presents a minor contrast in rural character by increasing density of vegetation to the open, rural landscape.
	Visual Impact	The proposal has low viewer access and despite a high sensitivity, the proposal displays a high level of integration through landscape treatment and siting with the undulating landscape, resulting in a LOW visual impact overall.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. Despite being from a recreational area, this viewpoint is largely viewed in a residential streetscape and setting. With consideration for the magnitude of change, the proposal presents neither a positive nor negative visual impact to landscape character through the introduction of vegetation, and can be considered an extension of existing vegetation from this view, and thus the visual impact has been maintained as LOW.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Low

Reassessment based on Professional Opinion:

No Reassessment

Image 42 Viewpoint 6, one frame, existing view

Figure 34 Viewpoint 6, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 7

Location: Springfield Drive/New England Highway Intersection, Facing North

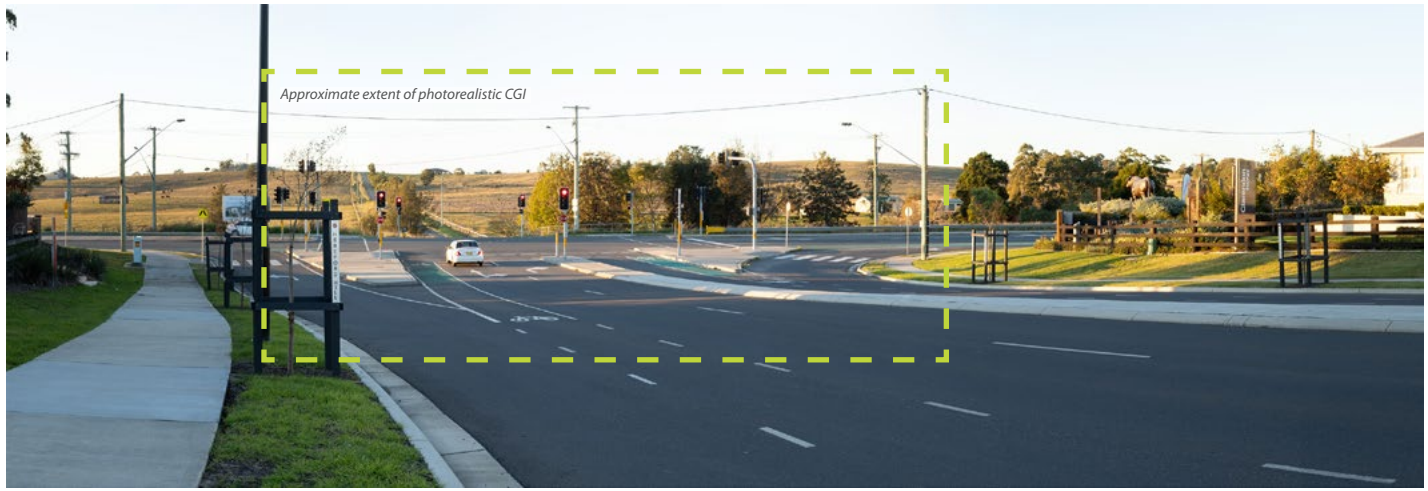

Image 43 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 35 Viewpoint location

Site

Distance: 400m south
View position: Neutral
Visual Quality: Low-Medium

Camera

Date & Weather: 19.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 7 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Cultural (infrastructure for evolving residential landscape character)
	Viewer Access	Proximity and high viewer numbers, despite short duration, results in a HIGH viewer access rating.
	Visual Sensitivity	The visual sensitivity of the site is considered LOW as it will be viewed from a minor road.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as MODERATE, despite southern boundary buffer screening providing a degree of integration with the existing vegetation, this change, also contrasts to landscape character by reducing views to open, rural landscape associated with rural landscape character.
	Visual Impact	The proposal has high visual access and low sensitivity, however, shows a level of integration through landscape treatment and integration with the undulating landscape, the visual impact is LOW.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the impact is maintained as a LOW overall visual impact, due to the above factors.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Low

Reassessment based on Professional Opinion:

No Reassessment

Image 44 Viewpoint 7, one frame, existing view

Figure 36 Viewpoint 7, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 8

Location: Residence on New England Highway, Facing North

Image 45 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 37 Viewpoint location

Site

Distance: 380m south
View position: Neutral
Visual Quality: Medium

Camera

Date & Weather: 19.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 8 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Cultural (infrastructure for evolving residential landscape character)
	Viewer Access	Despite viewing duration, the low viewer numbers and proximity results in MODERATE viewer access.
	Visual Sensitivity	The visual sensitivity of the site is considered LOW as it will be viewed from a residential setting in the midground.
Visual Analysis of Proposed Site	Magnitude of Change	The proposed screening to the southern boundary, whilst screening proposed built development, provides a degree of change to the viewed landscape character of the rural visual environment by reducing views to open rural landscape, producing a MODERATE magnitude of change to the existing environment.
	Visual Impact	The proposal has low visual access and sensitivity, but due to the visible extent of landscape character change, despite a level of integration through screening, the visual impact is LOW.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, as the amount of viewers is minimal, the viewpoint is elevated from the road and the direction of view is only afforded in the residences' back yard looking north, where a large proportion of the view is dominated by the New England Highway, the visual impact has been maintained as LOW from this viewpoint as the small proportion of the view impacted by proposed infil vegetation provides neither a positive nor negative visual change to the existing landscape character.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access			■	
Visual Sensitivity		■		
Mag. of Change			■	

Visual Impact - Significance rating based on above criteria:

Low

Reassessment based on Professional Opinion:

No Reassessment

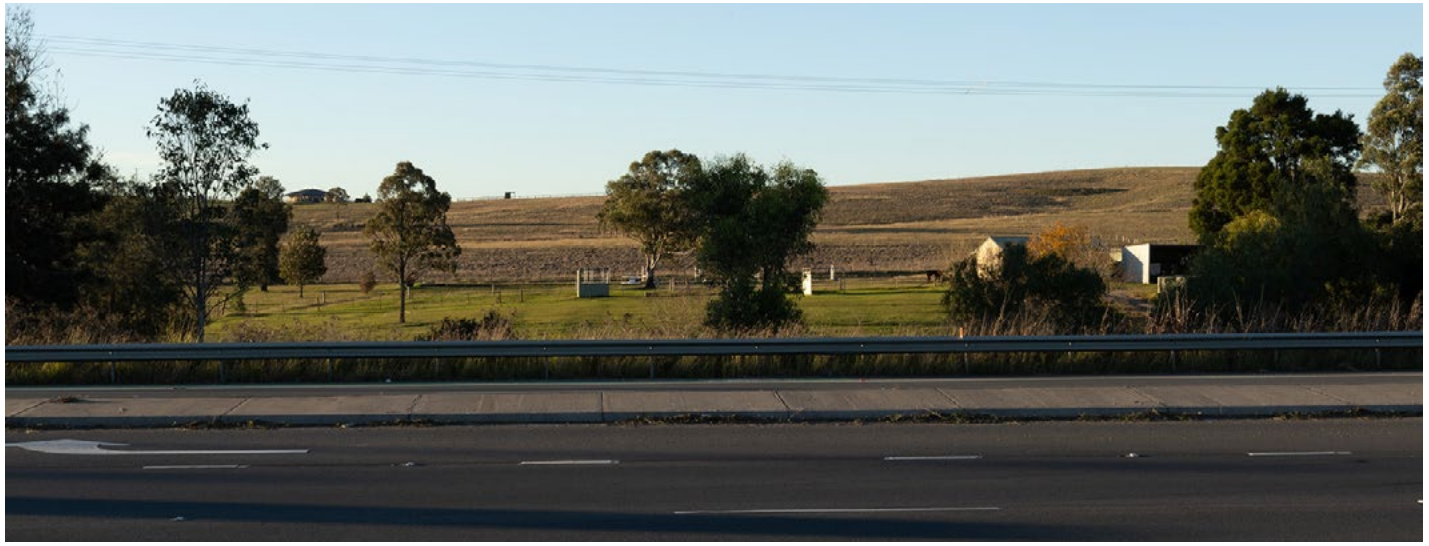

Image 46 Viewpoint 8, one frame, existing view

Figure 38 Viewpoint 8, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 9

Location: Residence on New England Highway, Facing North

Image 47 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 39 Viewpoint location

Site

Distance: 400m south
View position: Neutral
Visual Quality: Low-Medium

Camera

Date & Weather: 19.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 9 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Cultural (infrastructure for evolving residential landscape character), Emotional (Wind across open field), Aesthetic (rural landscape).
	Viewer Access	Despite viewing duration, the low viewer numbers and proximity results in MODERATE viewer access.
	Visual Sensitivity	The visual sensitivity of the site is considered LOW as it will be viewed from a residential setting in the midground.
Visual Analysis of Proposed Site	Magnitude of Change	Despite the proposed screening to the southern boundary and the additional screening provided by the existing environment in the fore and midground, the extent of landscape character change in the proportion of this view and the duration for residences, the magnitude of change is assessed as MODERATE.
	Visual Impact	The proposal has low visual access and sensitivity, and despite the moderate extent of landscape character change, the visual impact is LOW.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, as the amount of viewers is minimal, the viewpoint is elevated from the road and the direction of view is only afforded in the residences' back yard looking north (as the residence itself, is offset a further 25m), and where a large proportion of the view is dominated by the New England Highway, the visual impact has been maintained as LOW from this viewpoint.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Low

Reassessment based on Professional Opinion:

No Reassessment

Image 48 Viewpoint 9, one frame, existing view

Figure 40 Viewpoint 9, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 10

Location: New England Highway, Travelling East, Looking North

Image 49 Cylindrical panorama stitched to 90° FOV, north towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Figure 41 Viewpoint location

Site

Distance: 350m south-west
View position: Inferior
Visual Quality: Medium

Camera

Date & Weather: 19.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 10 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Emotional (Wind across open field), Aesthetic (rural landscape).
	Viewer Access	Proximity and high viewer numbers, despite short duration, results in a HIGH viewer access rating.
	Visual Sensitivity	The visual sensitivity of the site is considered MODERATE as it will be viewed from a major travel corridor.
Visual Analysis of Proposed Site	Magnitude of Change	The proposal from this location (due to the proportion of the changed view and visual contrast to surrounding viewed landscape) results in a new feature in the existing view, resulting in a MODERATE magnitude of change.
	Visual Impact	The proposal has high visual access and moderate sensitivity due to the nature of the New England Highway, despite screening vegetation, provides a degree of change to the existing landscape character, resulting in a MODERATE rating.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In the context of the direction of view from this location, views north, as assessed from this viewpoint, are not the primary viewing direction (as the New England Highway travels east to west), thus reduces overall visual impact for drivers for this viewpoint. Despite a contrast to existing rural landscape character, the broader rural landscape character is still maintained in the fore and middle ground, and the proposal shows a level of integration through commensurate form, line and vegetative screening, providing a vegetated ridgeline which is neither beneficial nor adverse to visual quality, resulting in a MODERATE visual impact.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Moderate

Reassessment based on Professional Opinion:

No Reassessment

Image 50 Viewpoint 10, one frame, existing view

Figure 42 Viewpoint 10, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 11

Location: Cantwell Road Residence, Facing East

Image 51 Cylindrical panorama stitched to 90° FOV, east towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

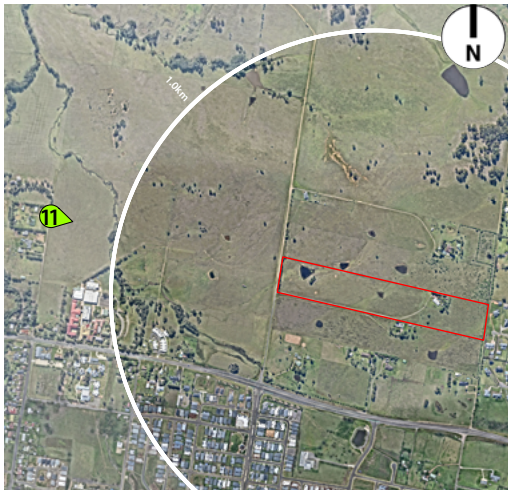

Figure 43 Viewpoint location

Site

Distance: 900m west
View position: Inferior
Visual Quality: Medium

Camera

Date & Weather: 19.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 11 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Emotional (Wind across open field), Aesthetic (rural landscape).
	Viewer Access	Low viewer numbers and long distance, results in LOW viewer access.
	Visual Sensitivity	The visual sensitivity of the site is considered NEGLIGIBLE as it will be viewed from a rural/agricultural area.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as NEGLIGIBLE, as a minimal proportion of the proposal is visible from this location and of inconsequential impact to the viewed landscape due to proposed and existing vegetation along the western boundary.
	Visual Impact	The proposal has low viewer access, sensitivity, and negligible magnitude of change from this viewpoint, resulting in a NEGLIGIBLE visual impact overall.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. The proposal is indistinguishable in the existing viewed landscape and is of benign visual contrast, resulting in a visual impact of NEGLIGIBLE.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Negligible

Reassessment based on Professional Opinion:

No Reassessment

Image 52 Viewpoint 11, one frame, existing view

Figure 44 Viewpoint 11, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint 12

Location: Windemere Road Residence, Looking East

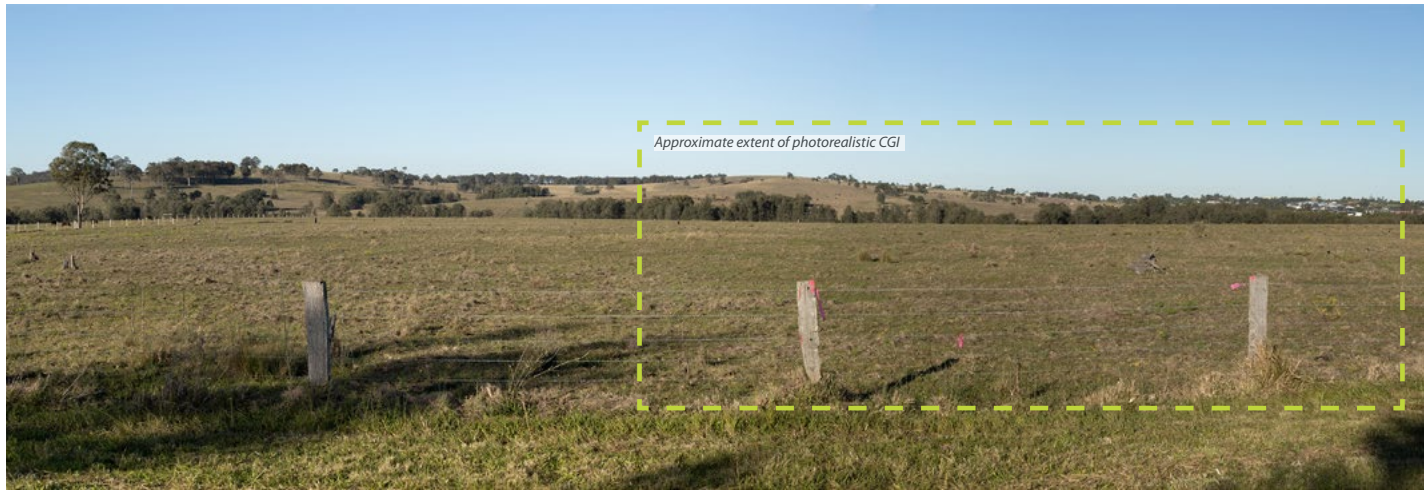

Image 53 Cylindrical panorama stitched to 90° FOV, east towards site with approximate extents of site. (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

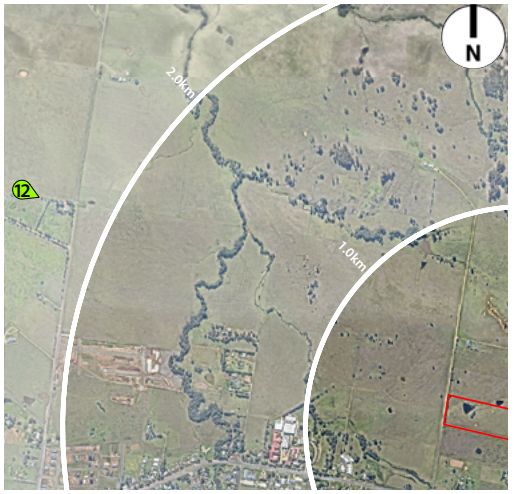

Figure 45 Viewpoint location

Site

Distance: 2km west
View position: Superior
Visual Quality: Medium

Camera

Date & Weather: 19.06.2024; Mostly Clear
Camera & Lens: Canon EOS RP + 50mm Fixed FL (40° H. FOV)
Camera Height: 1.6m with Ball-head Tripod

Viewpoint 12 - Summary

Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat), Emotional (Wind across open field), Aesthetic (rural landscape).
	Viewer Access	Low viewer numbers and long distance, results in LOW viewer access.
	Visual Sensitivity	The visual sensitivity of the site is considered NEGLIGIBLE as it will be viewed from a rural/agricultural area from an extended distance.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as NEGLIGIBLE, as the proposal presents an indistinguishable contrast to the proportion of the view, blending with the existing development also present within the viewpoint.
	Visual Impact	The proposal has low viewer access, negligible sensitivity and magnitude of change from this viewpoint, resulting in a NEGLIGIBLE visual impact overall.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the impact is maintained as a NEGLIGIBLE overall visual impact, due to the above factors.

Visual Evaluation Criteria

	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Mag. of Change				

Visual Impact - Significance rating based on above criteria:

Negligible

Reassessment based on Professional Opinion:

No Reassessment

Image 54 Viewpoint 12, one frame, existing view

Figure 46 Viewpoint 12, photorealistic CGI of proposal showing extents of building and proposed vegetation within this view

Note:
This montage is a singular, stand-still image to particular camera settings to match those closest to the visual experience of the average human.

Photostitched imagery, whilst it does consider peripheral visual experience, is not suitable for this application as it is affected by distortion to field of view and focal length during photo merging and cannot be relied upon to produce an accurate and correct depiction of the predicted view.

The montage included can be considered an accurate representation of the focused scene of the viewpoint, as experienced in-situ.

Photostitched imagery has been included on each viewpoint analysis page to convey a sense of context, with an outline of the approximate extent of the photomontage viewpoint, on relevant pages.

viewpoint summary

8. OVERALL VIEWPOINT SUMMARY

VIEWPOINT SUMMARY					
	ACCESS	SENSITIVITY	MAGNITUDE	IMPACT	ASSESSED IMPACT
Viewpoint 1 / Massing Montage Cecily Reserve Park, Looking South-East	MODERATE	HIGH	LOW	MODERATE	LOW
Viewpoint 2 / Photomontage Pennparc Drive Residences, Looking West	HIGH	MODERATE	HIGH	HIGH	MODERATE
Viewpoint 3 / Massing Montage New England Highway, Travelling West	HIGH	MODERATE	MODERATE	MODERATE	MODERATE
Viewpoint 4 / Massing Montage Sanctuary Drive/New England Highway	HIGH	LOW	MODERATE	LOW	LOW
Viewpoint 5 / Photomontage Simmental Street Residences	LOW	LOW	MODERATE	LOW	LOW
Viewpoint 6 / Massing Montage Springfield Drive Footpath Near Park	LOW	MODERATE	LOW	LOW	LOW
Viewpoint 7 / Massing Montage Springfield Drive/New England Highway	HIGH	LOW	MODERATE	LOW	LOW
Viewpoint 8 / Massing Montage New England Highway Residence (East)	MODERATE	LOW	MODERATE	LOW	LOW
Viewpoint 9 / Massing Montage New England Highway Residence (West)	MODERATE	LOW	MODERATE	LOW	LOW
Viewpoint 10 / Photomontage New England Highway, Travelling East	HIGH	MODERATE	MODERATE	MODERATE	MODERATE
Viewpoint 11 / Massing Montage Cantwell Road Residence	LOW	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE
Viewpoint 12 / Massing Montage Windermere Road Residence	LOW	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE

Figure 48 Viewpoint Summary Table

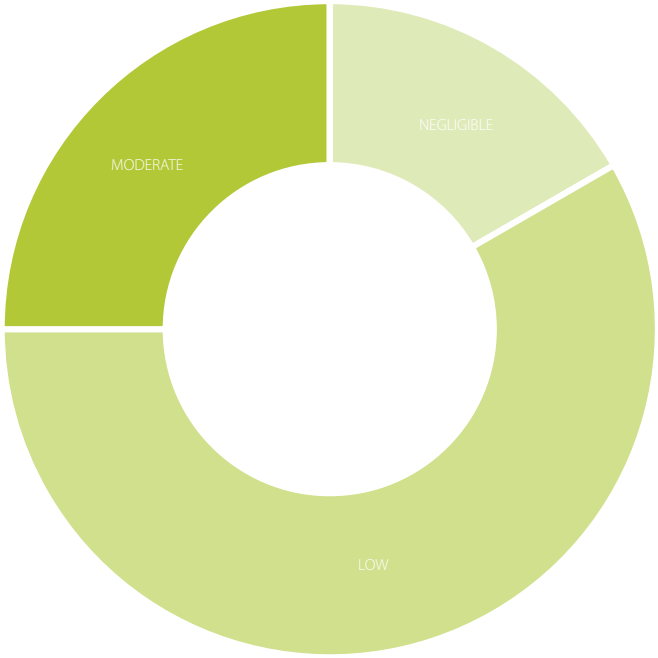

Figure 47 Viewpoint Summary Graph: Viewpoint Assessment Results

9. IMPACT ASSESSMENT

9.1. Discussion

This section considers the general impact the proposal may have on the local visual environment and identifies those areas where the visual impact may potentially be the most significant. This was done by undertaking a surrounding site inspection and broadly scoping the study area to identify where the proposed development would likely to be visible and appear to be most prominent.

An assessment of visual impact is about a systematic gauging of the amount of change that a proposal may bring to an existing scene. This discussion section is a synthesis of those discrete, matrix-driven observations within the larger landscape relationships to the site. By including the potential tempering factors of magnitude of change and the actual compositional elements in the surroundings, we can create a more nuanced context and qualify the output of the initial methodology as of benefit, or detriment to the resultant scenic quality.

STAGE 1

Stage One works include the establishment of the vegetated buffer to the southern and eastern boundary of the site. Viewpoints primarily affected by the proposed works of Stage One are situated on the western side of the site where the land slopes downward toward Wyndella Road. The visual impact from Viewpoint 2, from Pennparc Drive residences, during Stage One works is NEGLIGIBLE, primarily due to the crest in the site screening the majority of the Stage One works. Minor rooftops in the midground are indistinguishable. The visual impact from Viewpoint 3, from the New England Highway, is NIL as the viewpoint is unchanged and the proposal not visible from this location. The greatest visual impact of Stage One works will be to Viewpoint 10, along the New England Highway, travelling east, where the newly installed vegetation will not yet be established enough to provide a vegetative buffer to constructed dwellings on site, providing clear views to the built form of Stage One.

ALL STAGES

Despite the proximity, Viewpoint 1, from Cecily Reserve Park Playground, is reassessed as LOW due to the existing buildings and stand of vegetation providing a visual barrier to the proposal.

Viewpoint 2, at the cul-de-sac of Pennparc Drive, is assessed from residences adjacent to the site, that are subject to the most visual exposure of the proposal. It should be noted that all other residences are orientated north-south, therefore, the visual impact for others would not be impacted to the same degree. The visual impact is reassessed as MODERATE. There is a shift in the landscape character from a rural outlook to a vegetated screen. Whilst the previous viewed landscape was one of rural character, the proposed landscape treatment to the eastern boundary is a 30m treed buffer which restricts the distant outlook, however, provides a natural vegetated view, screening the built form and is therefore, considered moderate. It should be noted that visual impact from this viewpoint during Stage 1 works are NEGLIGIBLE, as minor rooftop are visible in the midground, but not distinguishable.

The visual access and visual sensitivity from Viewpoint 3, travelling west, looking north along the New England Highway, is high due to the viewpoint being from a major travel corridor however motorists from this location are typically focused west and the screening provided along the southern boundary of site will provide a level of integration. Also noted is the presence of existing vegetation and scattered buildings within the view currently. The proposal is viewed from a vehicle travelling west, at a speed limit of 80km/hr, the overall impact is maintained as MODERATE due to these reasons. It should be noted that visual impact from this viewpoint during Stage 1 works are NIL, as no built form is visible within this view.

Viewpoint 4 from the Sanctuary Drive and New England Highway intersection, has high visual access but moderate sensitivity due to the viewpoint being from a minor road. A level of integration is provided from this viewpoint due to the proposed canopy planting to the southern boundary offering screening. The existing built form and scattered trees within this view contribute to the integration and assessment of overall impact as LOW.

Viewpoint 5 is considered from the residences of Simmental Street, facing north, within the Lochinvar Ridge Estate. The proposal blends to a large extent with the existing environment as a result of topography, proposed southern boundary buffer screening and existing midground landscape, resulting in the proposal commensurate with the surrounding landscape and of LOW visual impact.

Viewpoints 6 is viewed from the Springfield Drive footpath near the Hereford Hill Playground. The visual impact from this viewpoint has been assessed as LOW, as the proposal presents neither a positive nor negative visual impact to landscape character through the introduction of vegetation, and can be considered an extension of existing vegetation from this view.

Viewpoint 7 is typical of users exiting Springfield Drive and travelling east or west onto the New England Highway. Despite the viewing time being a short period, as the intersection is signal-light operated, the viewing time (while brief) does afford viewers an extended visual break facing north to the proposal before turning. As the proposal will be sequentially visible through established fore and midground environment, but show a high level of screening with the existing landscape, the overall visual impact is assessed as LOW.

Viewpoint 8 and 9 are typical of two residencies on an elevated block facing north on the New England Highway. The proposal is only visible from this location through gaps in the existing vegetation to the fore and midground. As the private open spaces of the residences are setback into each lot and viewer numbers are low, the visual impact is assessed as LOW.

Viewpoint 10 is typical of users travelling east along the New England Highway, south of site. Viewer access here is high, as this portion of the New England Highway is commonly used as a route to connect Greta to Rutherford. In the context of the direction of view from this location, views north, as assessed from this viewpoint, are not the primary viewing direction (as the New England Highway travels east to west), thus reducing overall visual impact for drivers for this viewpoint. Despite a contrast to existing rural landscape character, the broader rural landscape character is still maintained in the fore and middle ground, and the proposal shows a level of integration through commensurate form, line and vegetative screening, providing a vegetated ridgeline which is neither beneficial

nor adverse to visual quality, resulting in a MODERATE visual impact.

Viewpoint 11 and 12 are typical of two residencies from distant roads, west of site, Cantwell Road and Windermere Road. Due to the extended distance, topography, existing vegetation and fore and mid ground elements, the proposal is indistinguishable in the surrounding viewed landscape and overall, NEGLIGIBLE visual impact.

LIGHTING IMPACT

Whilst CPTED requires adequate lighting for safety at night, the balance of these components becomes critical when ensuring the safety of all users of the site, including environmental receivers such as flora and fauna. Beyond the potential impact of obtrusive lighting on humans, consideration for the finer ecosystems and habitats on site and their interactions with the proposal, are key to the protection of these systems and mitigation of potential threats to these environments.

Obtrusive lighting and impacts to environmental receivers are case-by-case dependent and should be considered in the greater context of the area. Areas with greater potential impact on these systems, such as sites adjoining environmentally sensitive areas or sites located near areas rich in biodiversity with listed threatened species, should consider the impact to threatened or endangered species and unique biota through a site-specific assessment consistent with the National Light Pollution Guidelines for Wildlife, developed by the Australian Government Department of the Environment and Energy.

Generally, natural darkness should be protected where possible and the lighting design of the proposal should consider artificial impact and the management of all living things (National Light Pollution Guidelines for Wildlife 2020). In order to gain an understanding of the existing nature of the obtrusive effects on outdoor lighting, an analysis of the existing limitations of site should be conducted and the existing conditions accounted for, such as (but not limited to), the level of lighting existing in the area. Refer "Obtrusive Lighting" as per External Lighting Concept Design Report, Revision 2 (23/05/2024) prepared by Marline Newcastle.

Recommendations in accordance with AS/NZS 4282:2023 'Control of the obtrusive lighting effects of outdoor lighting,' should be considered to reduce light spillage visual impact in low-light, and night conditions. Recommendations as per the External Lighting Concept Design Report, Revision 2 (23/05/2024) prepared by Marline Newcastle, should be implemented to minimise light spillage to the surrounding environment, where afforded. Any lighting to the eastern side of the development is to be low and shielded away from view.

9.2. Conclusion

A review of the visual catchment of the proposed site showed that views of the proposal were limited to within approximately 1km of the site for clear views, and as far as 2km for distant, filtered views. This is predominantly due to the existing built environment, topography, and existing vegetation.

This visual impact assessment has assessed visual change and influence for the overall scheme. A summary of these results can be found in the Viewpoint Summary.

It is noted that the project will be staged. Stage One proposes to include the establishment of the vegetated buffer to the southern and eastern boundaries. This has been proposed during early works to establish screening of the proposed development from key views from the New England Highway and the residences to the east of the site, from Pennparc Drive.

The proposal will have an overall LOW-MODERATE visual impact. As expected, Viewpoints 2, 3 and 10 from Pennparc Drive residences and the New England Highway held MODERATE impact ratings. This is primarily due to the proposed development being introduced into an the rural landscape however a level of integration is afforded due to proposed buffer planting to the site boundaries and the existing vegetation and built form surrounding the site.

It should be noted that the proposal is viewed within a changing landscape character setting, comprising a major road corridor beside developing housing estates and rural-residential development. In saying this, a medium visual quality rating has been applied to the site and surrounding areas due to the nature of the undulating and rural landscape. Proposed landscaping on site, particularly to the southern boundary, fronting the New England Highway interface, further south of site, will be critical in the addressing of visual impact from these viewpoints.

9.3. Mitigations

Mitigation measures included within this report are recommendations and opportunities for the proposal to consider to reduce visual impact further and/or maintain viewpoint ratings as they have been assessed. Mitigations are concluded from an analysis of the proposal and potential elements or processes that could provide adverse visual effects in contrast to the desired future character or landscape character of the surrounding area.

Mitigation measures already in place that will be key in maintaining the current visual impact rating:

- Retention of existing trees to Wyndella Road
- Implementation of vegetation to the site as per the landscape plans
- Varied treatment and use of recessive colours to the facades of development to reduce its perceived mass and encourage integration into the existing landscape

Recommended further mitigation measures:

- Early works planting for vegetation would be recommended to ensure trees are established in the early stages of the development
- Early establishment of buffer vegetation to the southern boundary
- Implementation of lighting impact control methods to reduce obtrusive lighting to natural ecosystems at night

10. REFERENCES

This visual impact assessment has considered the following documents and resources during assessment:

- Australian/New Zealand Standard, 2023, ***Control of the obtrusive effects of outdoor lighting***
- Department of Planning (DOP), 1988, ***Rural Land Evaluation***, Government Printer (Dept. of Planning).
- Department of Planning and Environment, August 2022, ***Technical Supplement - Landscape and Visual Impact Assessment***
- EDAW (Australia), 2000, ***Section 12, Visual Assessment, The Mount Arthur North Coal Project Pty Ltd Environmental Impact Statement***, URS Australia Pty Ltd, prepared for Coal Operations Australia Limited.
- Maitland City Council, Development Control Plan, 2011, https://www.maitland.nsw.gov.au/sites/default/files/documents/public-exhibition/part_c_final_1.pdf
- Maitland City Council, Local Environmental Plan, 2011, https://legislation.nsw.gov.au/view/whole/html/inforce/current/epi-2011-0681
- Marline Newcastle, External Lighting Concept Design Report, Revision 2 (23/05/2024).
- Land and Environment Court of New South Wales, 17 May 2024, ***Policy: Use of Photomontages and Visualisation Tools***
- Landscape Institute, March 2013, ***Guidelines for Landscape and Visual Impact Assessment: Third Edition***
- Landscape Institute Technical Guidance Note, September 2019 (Currently under review, as of January 2024), ***Visual Representation of Development Proposals***
- Nearmap, https://apps.nearmap.com/
- New South Wales Government Transport for NSW, 21 August 2020, ***Guideline for landscape character and visual impact assessment: Version 2.2***
- NSW Planning Portal Spatial Viewer https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address, viewed 25.10.2023
- Think Economics, October 2023, ***Social and Economic Impact Assessment (Version 1.1)***
- Williamson, D, 1978, "Scenic Perceptions of Australian Landscapes", Landscape Australia, Vol. 2, pp 94-100.
- Transport for NSW, June 2023, Guideline for landscape character and and visual impact assessment
- Stacey Brodbeck and Suzie Rawlinson 2023, Landscape and visual assessment workshop
- AILA, June 2018, Guidance Note for Landscape and Visual Assessment
- New Zealand Institute of Landscape Architects 'te-tangi-a-te-manu' (2022). Landscape Assessment Guidelines for professionals working in resource management.
- NSW Govt Planning and Environment, June 2023, Dark Sky Planning Guideline
- • EDAW (Australia), 2000, "Section 12, Visual Assessment, The Mount Arthur North Coal Project Pty Ltd Environmental Impact Statement", URS Australia Pty Ltd, prepared for Coal Operations Australia Limited.
- • Williamson, D, 1978, "Scenic Perceptions of Australian Landscapes", Landscape Australia, Vol. 2, pp 94-100.
- Goverment Architect NSW, 2023, Connecting to Country

appendix

viewpoint 1 data

Location: Cecily Reserve Park Playground, Looking South-East

Figure 49 Viewpoint 1, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 50 Viewpoint 1, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
73.718

Field of View:
40°

viewpoint 2 data

Location: Pennpark Drive Residences, Looking West

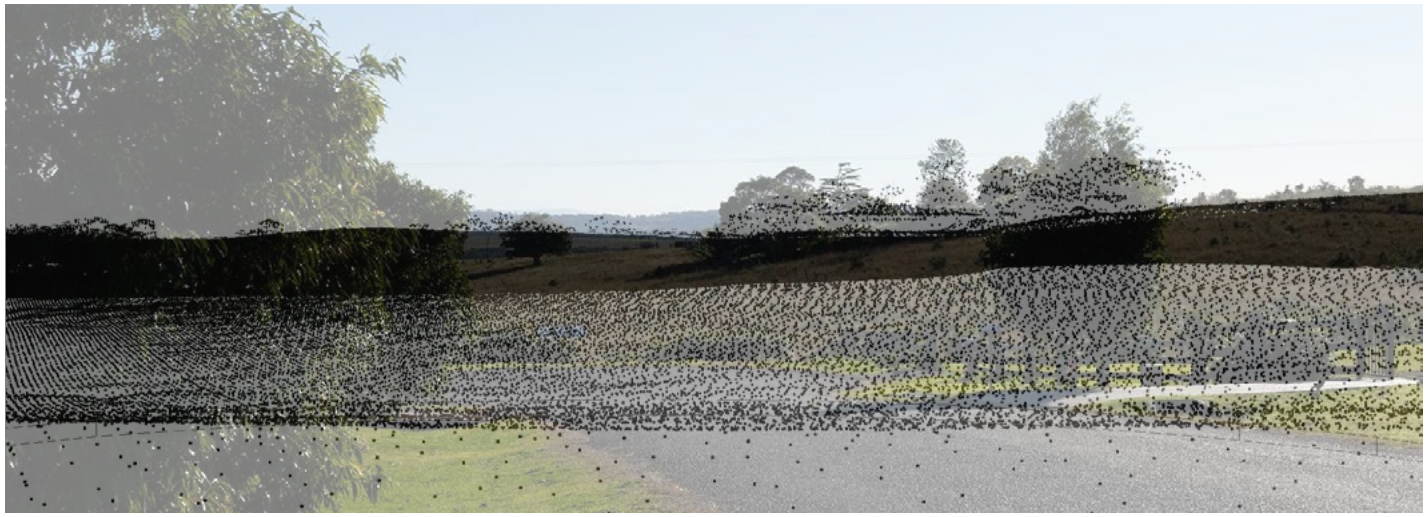

Figure 51 Viewpoint 2, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 52 Viewpoint 2, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
68.001

Field of View:
40°

viewpoint 3 data

Location: New England Highway, Travelling West, Looking North

Figure 53 Viewpoint 3, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 54 Viewpoint 3, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
43.732

Field of View:
40°

viewpoint 4 data

Location: Sanctuary Drive/New England Highway Instersection, Facing North

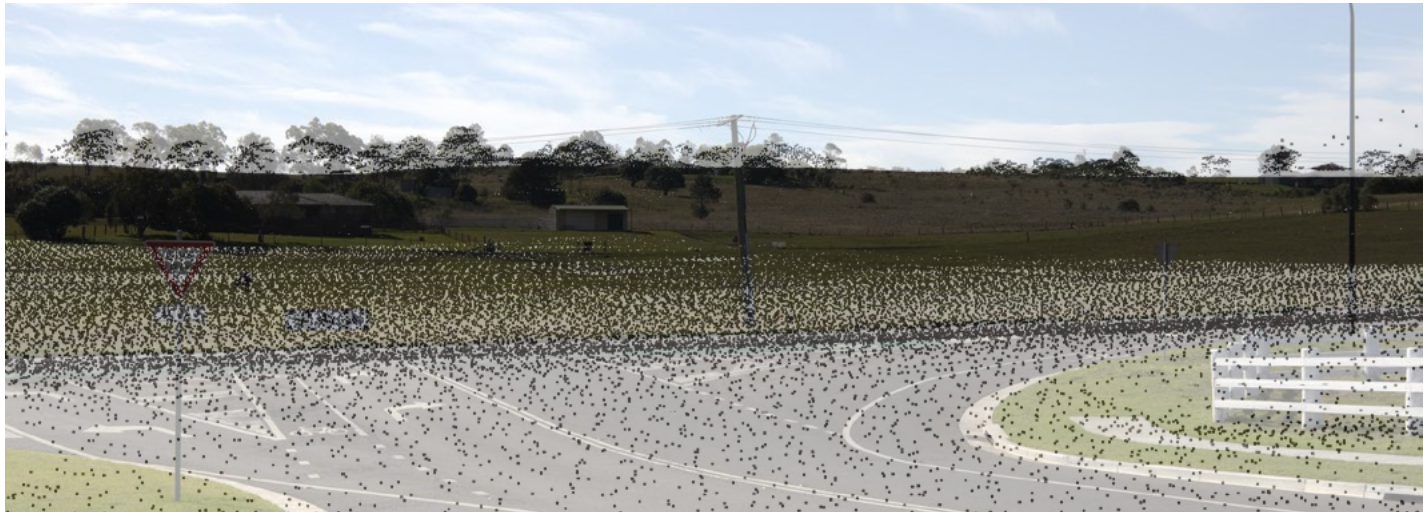

Figure 55 Viewpoint 4, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 56 Viewpoint 4, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input
Point Cloud: ELVIS; 02/2012
Program(s): Vectorworks, Lumion, Photoshop

Programmed Camera
RL of Camera Position: 43.052
Field of View: 40°

viewpoint 5 data

Location: Simmental Street Residence, Facing North

Figure 57 Viewpoint 5, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 58 Viewpoint 5, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
51.667

Field of View:
40°

viewpoint 6 data

Location: Springfield Drive Footpath Near Park, Travelling North

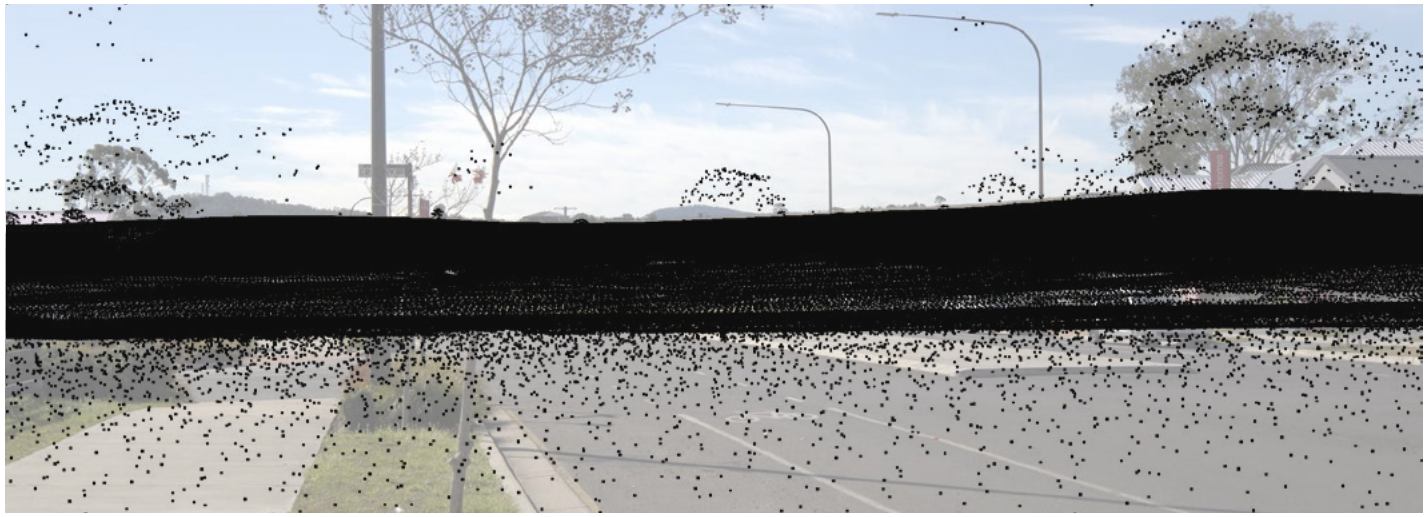

Figure 59 Viewpoint 6, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 60 Viewpoint 6, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
42.029

Field of View:
40°

viewpoint 7 data

Location: Springfield Drive/New England Highway Intersection, Facing North

Figure 61 Viewpoint 7, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 62 Viewpoint 7, one frame. NOTE: Survey points used for alignment (shown yellow markers

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
39.470

Field of View:
40°

viewpoint 8 data

Location: Residence on New England Highway, Facing North

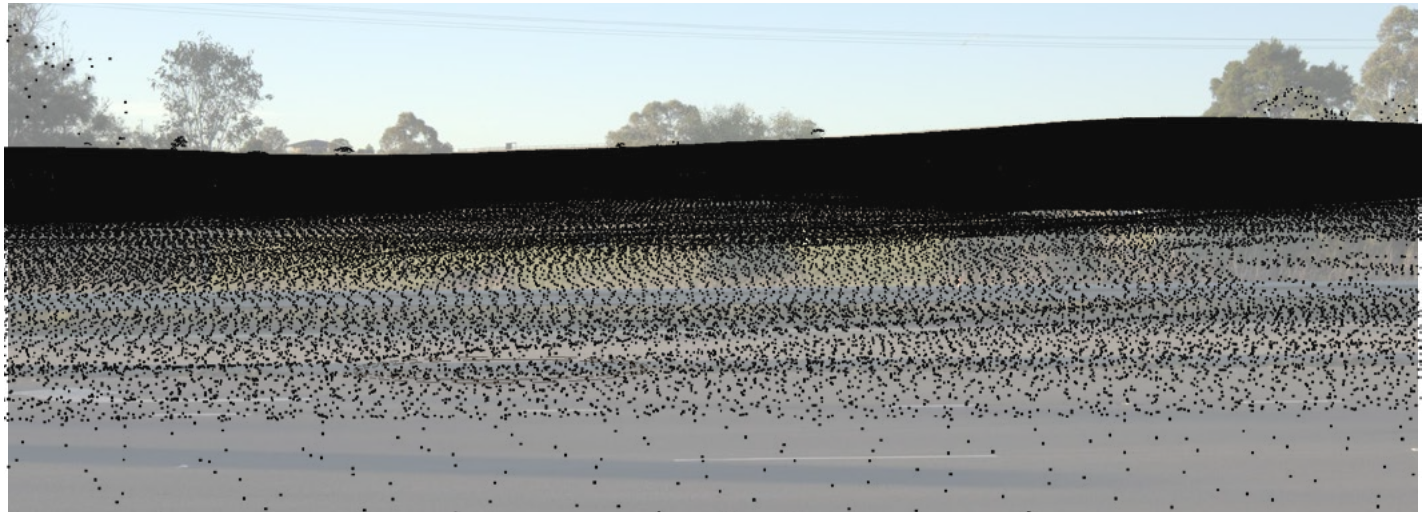

Figure 63 Viewpoint 8, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

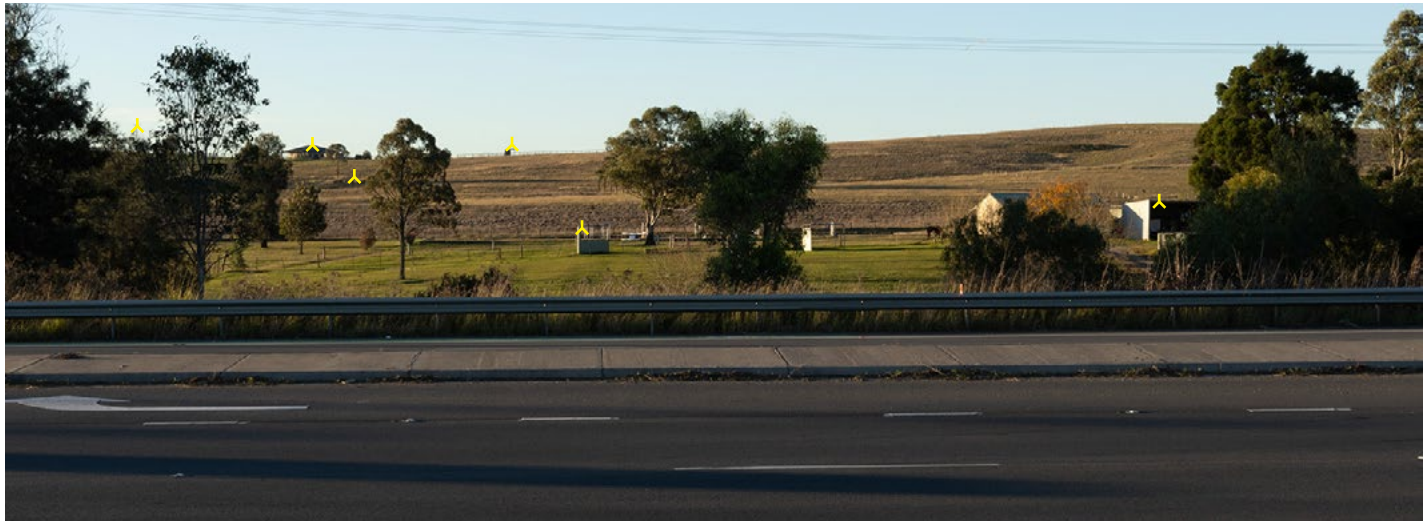

Figure 64 Viewpoint 8, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
38.843

Field of View:
40°

viewpoint 9 data

Location: Residence on New England Highway, Facing North

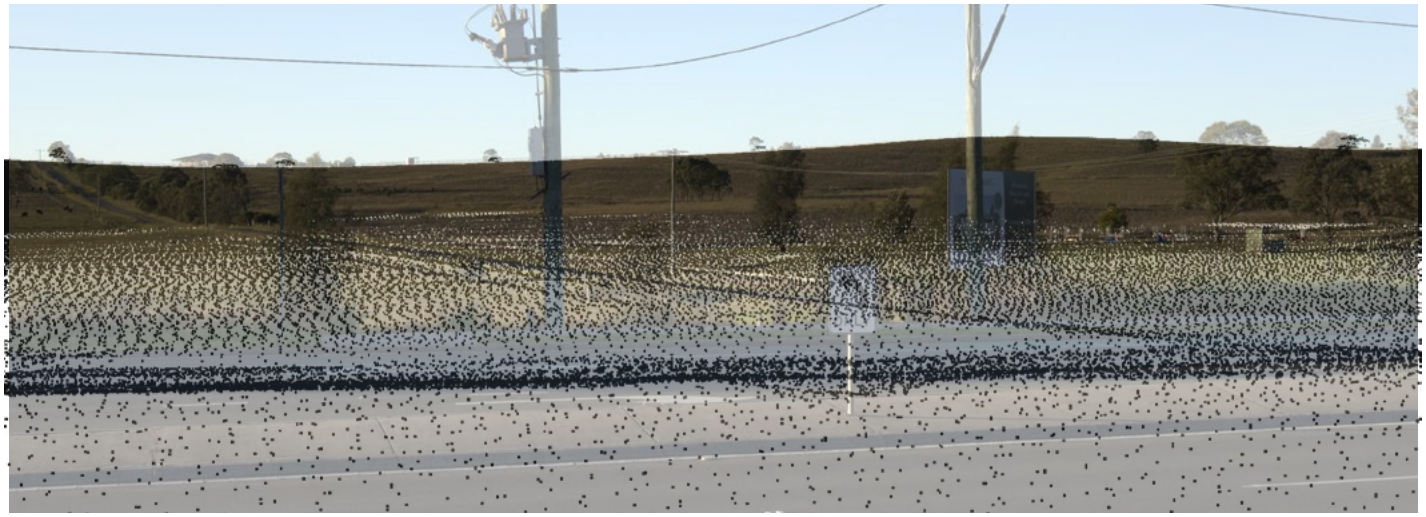

Figure 65 Viewpoint 9, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 66 Viewpoint 9, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
38.146

Field of View:
40°

viewpoint 10 data

Location: New England Highway, Travelling East, Looking North

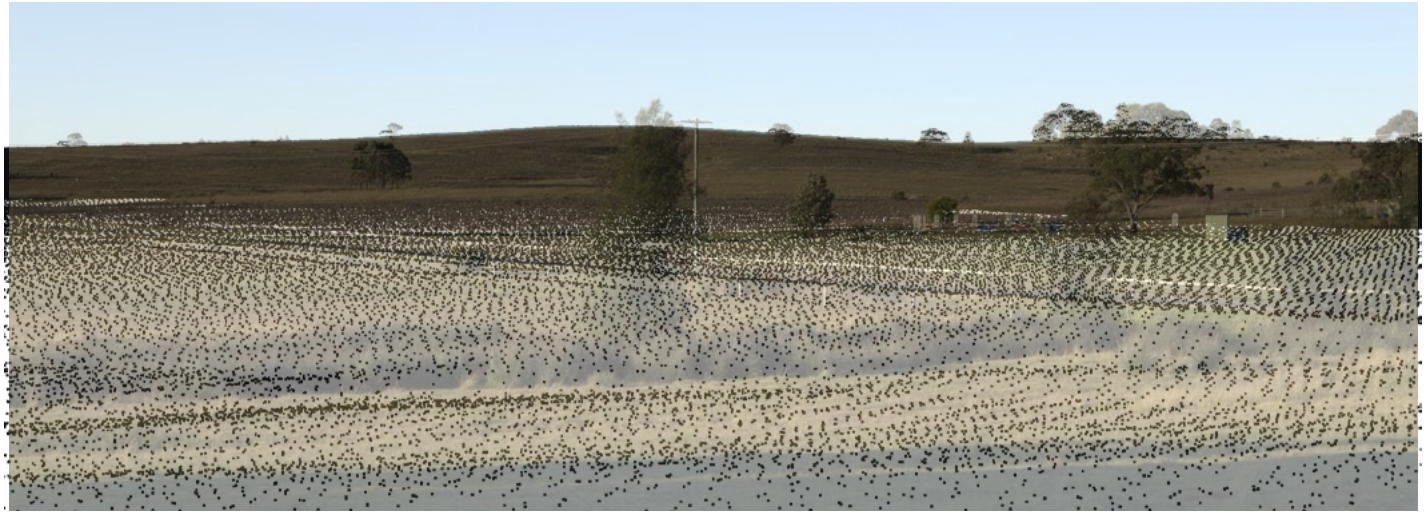

Figure 67 Viewpoint 10, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 68 Viewpoint 10, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
37.370

Field of View:
40°

viewpoint 11 data

Location: Cantwell Road Residence, Facing East

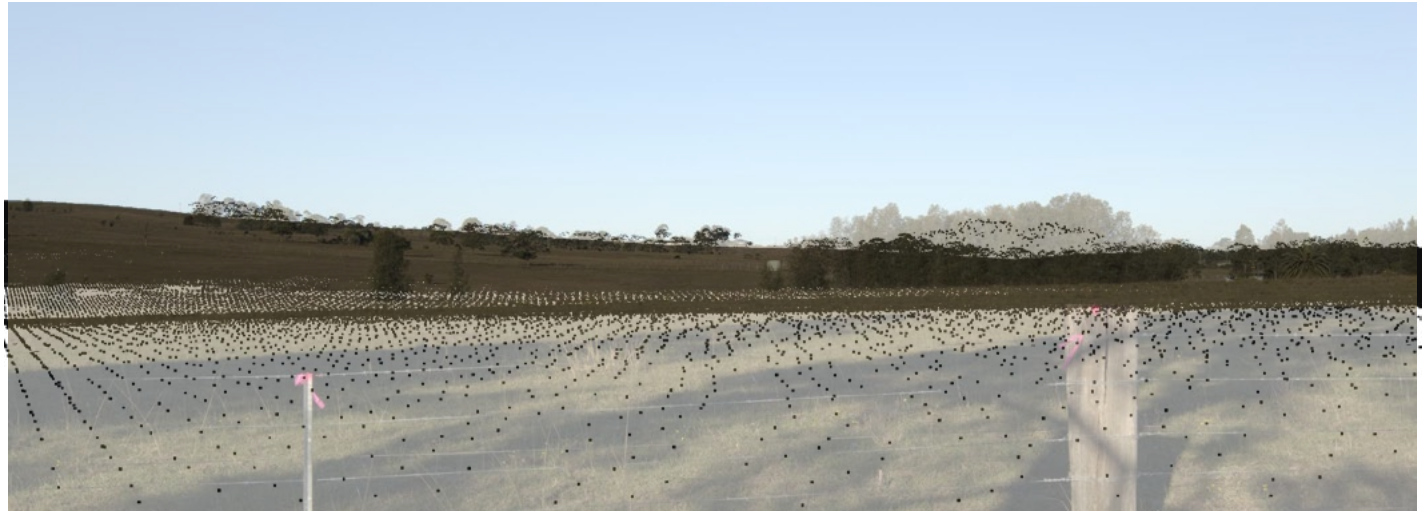

Figure 69 Viewpoint 11, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 70 Viewpoint 11, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
27.185

Field of View:
40°

viewpoint 12 data

Location: Windemere Road Residence, Looking East

Figure 71 Viewpoint 12, one frame, point cloud data. NOTE: Point Cloud Data collected February 2012 from ELVIS Spatial Services. Items within the point cloud may have grown since, or may have been removed.

Figure 72 Viewpoint 12, one frame. NOTE: Survey points used for alignment (shown yellow markers)

Data Input

Point Cloud:
ELVIS; 02/2012

Program(s):
Vectorworks, Lumion, Photoshop

Programmed Camera

RL of Camera Position:
36.536

Field of View:
40°

terras
landscape architects
412 King Street Newcastle NSW 2305. ABN 67129348842 0249294926