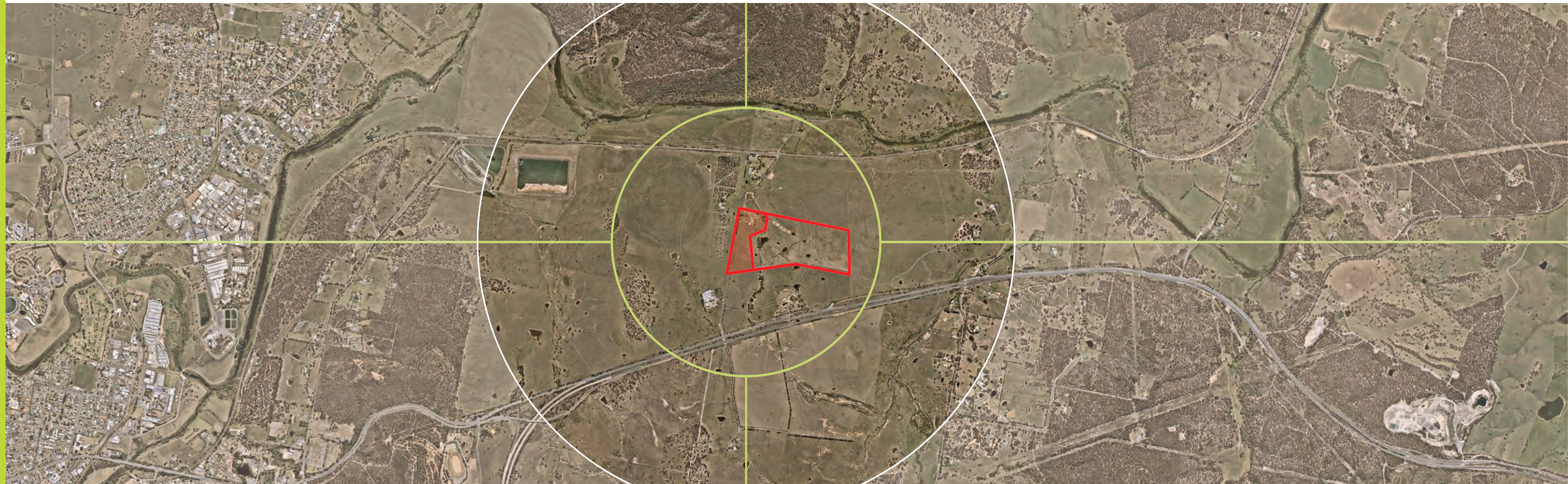


visual impact assessment



REV	DESCRIPTION	INITIAL	DATE
A	CLIENT REVIEW	KM/JA	05/08/2025
B	FOR APPROVAL	KM/JA	05/08/2025
C	FOR APPROVAL	KM/JA	26/09/2025
D	FOR APPROVAL	KM/JA	29/09/2025
E	FOR APPROVAL	KM/JA	10.10.2025

LOT 3, DP 251779, 88 MURRAYS FLAT ROAD, TOWRANG, 2580
GANDANGARA / GUNDUNGURRA COUNTRY

prepared for:
Sydney Metal Traders Pty Ltd

2

VISUAL IMPACT ASSESSMENT - PROPOSED METAL RECYCLING FACILITY

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2. ASSESSMENT SUMMARY

Terras Landscape Architects has been commissioned by Sydney Metal Traders Pty Ltd to prepare this report for a proposed Metal Recycling Facility containing sorting, shredding, and separation facilities, workshops and administrative facilities, weighbridges and stormwater management basins at 88 Murrays Flat Road, Towrang, NSW. 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 88 Murrays Flat Road, Towrang within the Goulburn Mulwaree Local Government Area (LGA), in the NSW Southern Tablelands region.
- It is located approximately 6.5 kilometres north east of the Goulburn CBD and 6.3km south west of Towrang village and the surrounding landscape character is predominantly rural. Secondary characters within 1 kilometre of the site include minor and major transport corridors, railway corridors, industrial and rural residential.
- The site is legally identified as Lot 3, DP261779 and occupies an area of approximately 32.3 hectares on the eastern side of Murrays Flat Road and the proposed operational footprint occupies 6.6 hectares adjoining the western site boundary. It is located in the Local Aboriginal Land Council of Gandangara / Gundungurra and is zoned E4 General Industrial under the Goulburn Mulwaree Local Environmental Plan (2009) [GMLEP].
- It is noted that the proposal shall be viewed in a mainly undeveloped rural context, despite its industrial zoning.
- The concentration of the assessment occurred within approximately 1 kilometre of the proposal. Existing development, topographic relief and vegetation limited views beyond this radius. Permission to access some residential lots was granted by the owners in order to provide a more thorough assessment.
- The overall proposal will have a LOW visual impact due to screening afforded by existing vegetation, surrounding topography and in some instances, existing development.
- It should be noted that the proposed landscaping on site, particularly to the western and southern interfaces will be critical in the retention of a LOW visual impact from viewpoints located in these directions.
- The exception to the above applies to Viewpoint 4. Although the 20 metre landscaped buffer will assist in screening the constructed elements, it will maintain a visual dominance due to the very close proximity to the proposal.

3. INTRODUCTION

3.1. 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.

3.2. 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:

- 1. 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.
- 2. 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.

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

- 3. Establish the site context and describe the site.** A description of the site and its context.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.



3.3. Technical Methodology for Photos and Montages

The creation of photomontages and visualization tools follows established Technical Guidance and Best Practice resources. Ensuring accuracy across all aspects is crucial for the validity of visual representations.

The level of verification required varies based on the type and application of the visualization data. 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 baseline image of each viewpoint to convey the current viewed landscape will be taken with a crop-sensor camera with an equivalent lens used to achieve 50mm FFS. Weather, lighting, camera configuration and date of collection is noted for each viewpoint
2. A cylindrical, photo-stitched panorama will be prepared for each viewpoint to establish landscape character and context.

All viewpoints will include a "massing photomontage," which shows the massing model within the proposed view (a photo collected on site). An allowance is made for the preparation of up to three (3) massing photomontages with vegetation, showing the building massing model and proposed vegetation from three principal viewpoints. Photomontages will be in accordance with the Technical Guidance and Best Practice Resources (Landscape Institute 2019). The methodology is as follows:

3. The build form model provided by architects is imported into a georeferenced file in Vectorworks to create the base site model.
4. Point Cloud data is then overlaid with the proposed site model and baseline photograph to provide verification of the proposal's placement and visibility from the assessed viewpoints. **Note: While photo-stitched imagery considers peripheral visual experience, it is unsuitable for photomontage application due to potential distortions in field of view and focal length during the merging process, which can compromise the accuracy of the focused scene.**
5. The model is then input into Lumion with vegetation modelled at expected maturity to create an accurate representation of the viewpoint within the proposal to match the camera settings of the baseline imagery.

6. The final image is adjusted. 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.



3.4. 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 biophysical 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-kilometre 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.

4. THE SITE

4.1. Local Context

The subject site is located within the Goulburn Mulwaree Local Government Area (LGA), in the NSW Southern Tablelands region. The fertile lands in the Goulburn region were inhabited by numerous local Aboriginal populations. It is recognised as an important meeting place which is reflected in the Aboriginal name of Burbong, a Murring/Wiradjuri word that indicates a special indigenous cultural area.

European settlers discovered the area in the late 1700s and in 1863 Goulburn was proclaimed as Australia's first inland city. It was a prosperous region during the gold rush and became known for merino wool production, however its importance declined in the twentieth century. It is now a popular tourist destination or stopover, located on the Hume highway between Sydney and Canberra.

The site address is 88 Murrays Flat Road, Towrang - a village of former penal establishment. It is located approximately 6.5 kilometres north east of the Goulburn CBD and 6.3km south west of Towrang village. It is formally identified as Lot 3, DP261779 and is zoned E4 General Industrial under the Goulburn Mulwaree Local Environmental Plan (2009) [GMLEP].

The Southern Tablelands and Goulburn region is generally characterised by flat or undulating topography which has been largely cleared for agricultural and grazing practices. There are several heritage listed sites and buildings that reflect the colonial history and contribute to the traditional rural aesthetic. Goulburn's heritage listed railway station is located on the Main Southern Railway Line, which connects Sydney with Albury on the New South Wales and Victorian border. The Hume Highway is a major national highway providing vehicular connections between the same destinations.

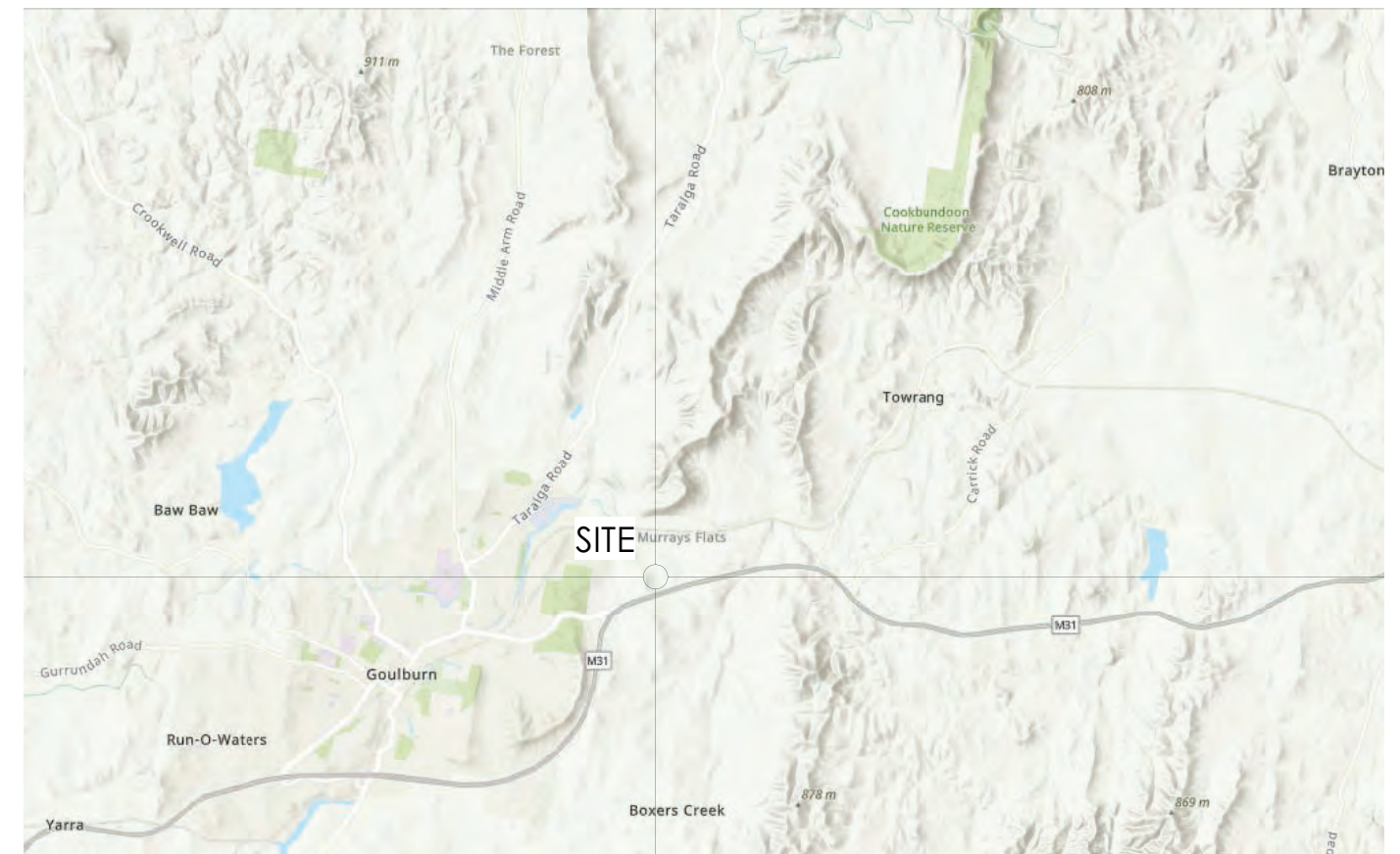


Figure 1 Site location

4.2. Site Context

The site is located on pastoral land between the Main Southern Railway Line and the Hume Highway. It is an irregular polygon in shape with an east - west orientation and the shortest boundary adjoins the eastern side of Murrays Flat Road. Although located within industrial zoned land, the majority of the surrounding land use is currently rural. The exceptions are two small industrial complexes located within 200 metres of the site on the western side of Murrays Flat Road and a stone residence which was the original schoolhouse.

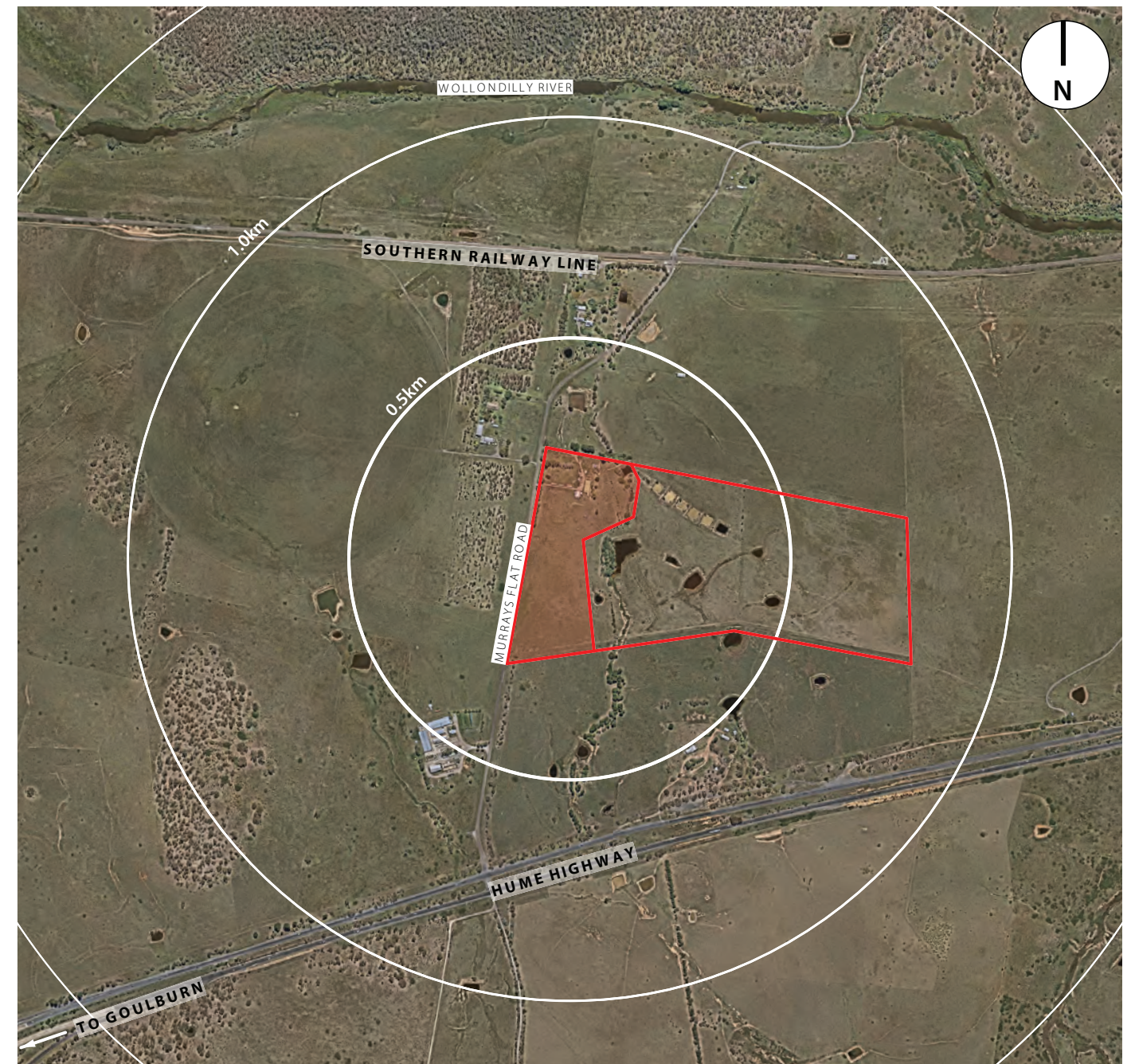


Figure 2 Site location

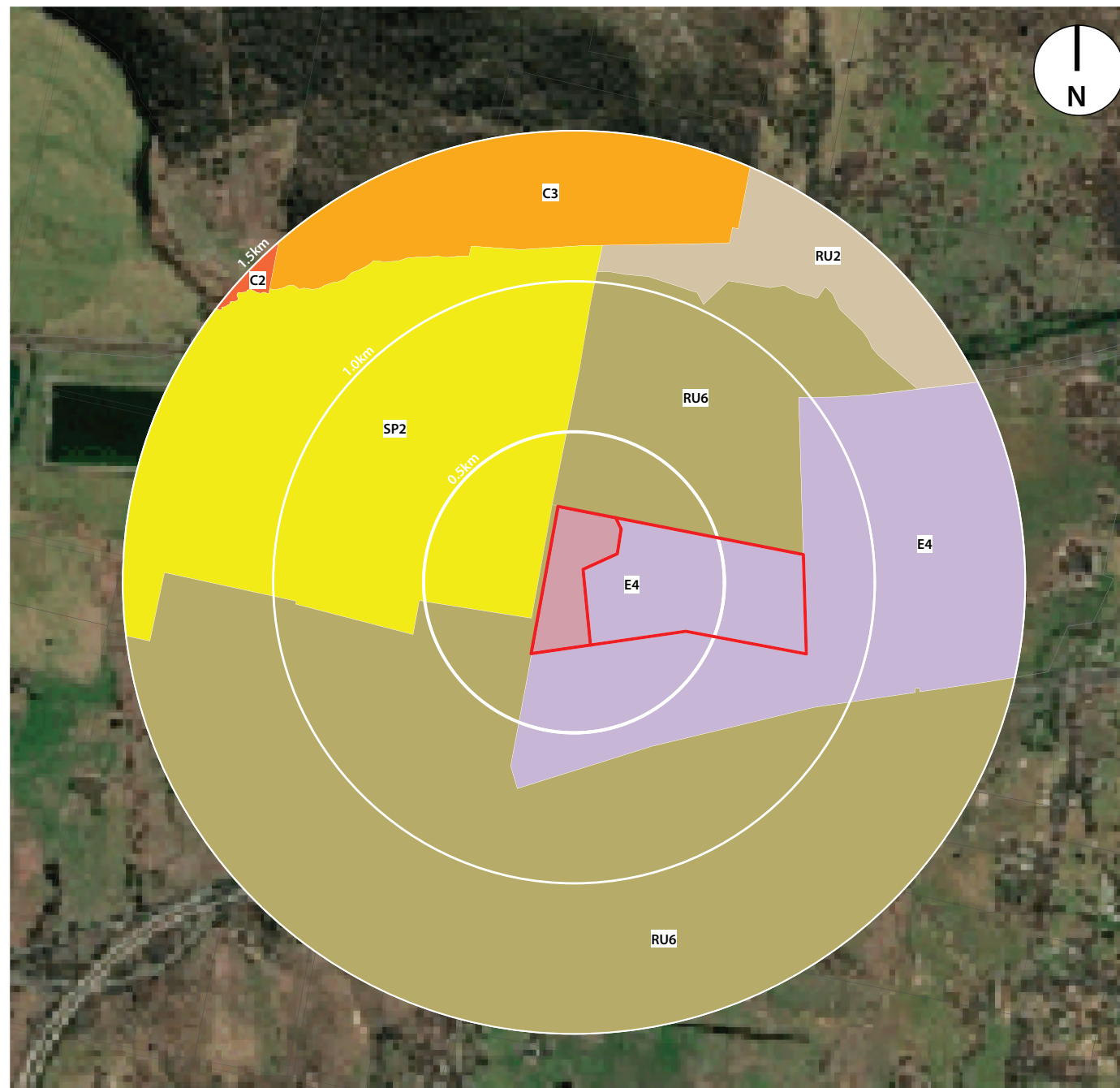


Figure 3 Land zoning diagram

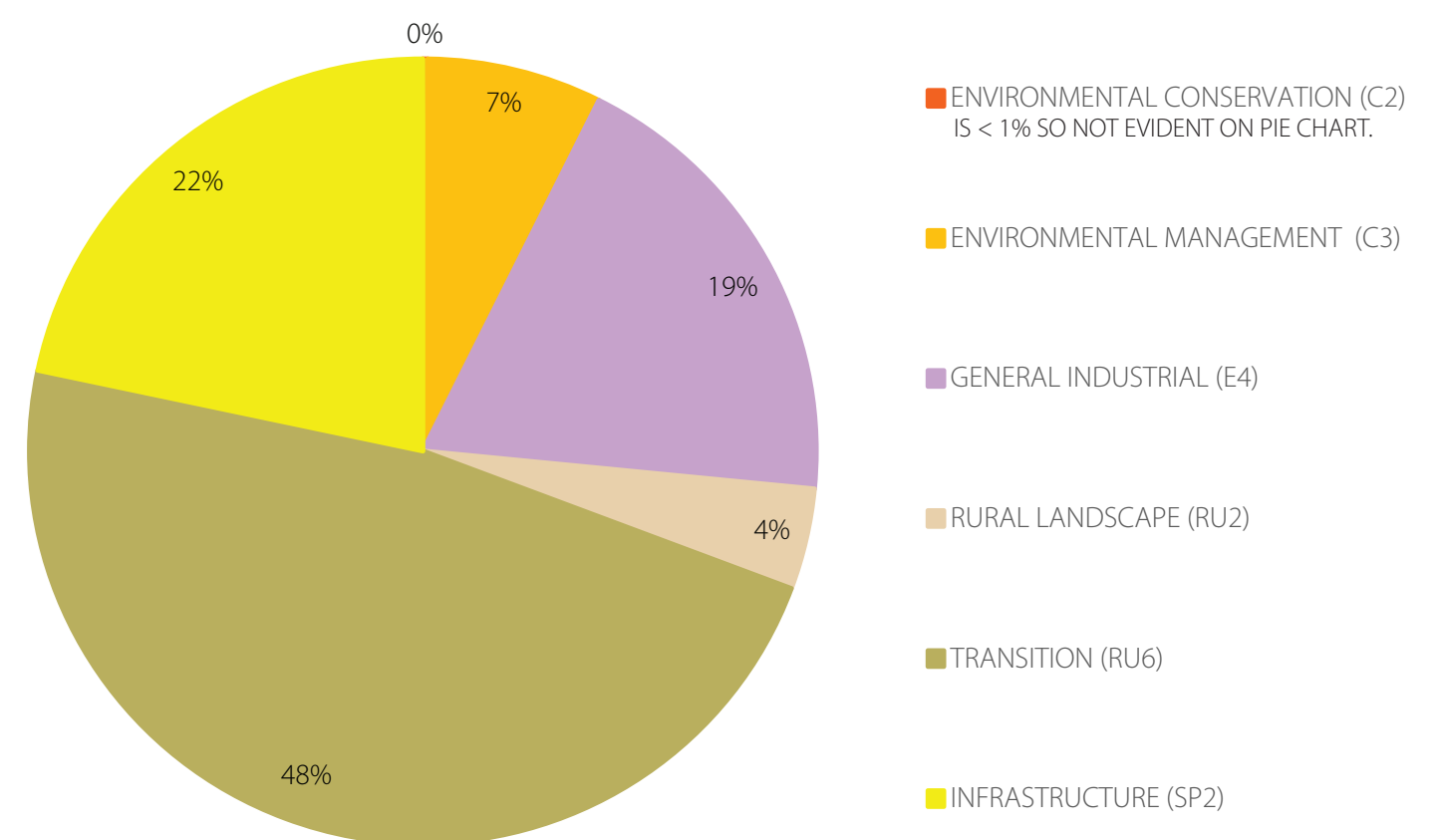


Figure 4 Proportional Percentage of Land Zoning Types Within 1.5km Radius

4.3. Site Description

The total lot area occupies an area of approximately 32.3 hectares on the eastern side of Murrays Flat Road, Towrang and the proposed operational footprint occupies 6.6 hectares adjoining the western site boundary. An unoccupied single storey brick cottage ("Coolabah") in a yard with storage containers, sheds and water tanks is located in the north western corner of the site. These are partially screened by a row of mature pine trees (*Pinus radiata*) aligning Murrays Flat Road.

The majority of the site occurs in the lowest point of Murrays Flat Road which is evidenced by three first order tributaries feeding into a second order stream to the rear of the developed lot. These occur as a series of constructed ponds and dams in a generally north-south orientation and form part of the Wollondilly River catchment. The remainder of the site is maintained pasture grass with occasional native canopy outcrops aligning the riparian corridor. Native grass species identified on site include *Austrostipa bigeniculata*, *Sporobolus creber* and *Chloris truncata*. *Eucalyptus amplifolia* (Cabbage Gum) and *Eucalyptus bridgesiana* (Apple Box) occur as native canopy trees.

There are two separate industrial developments and a private residence located on the western side of Murrays Flat Road. The residence was the original schoolhouse, constructed from stone in 1860 and as such holds some local heritage significance. The locality has a distinctly rural character consisting of broad vistas over open paddocks with a backdrop of vegetated hillsides to the north.



Figure 5 Site boundary

5. VISUAL ENVIRONMENT

5.1. 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 site location features a mix of rural residential, transport corridors and light industrial areas, set in a predominantly rural context. Vehicular traffic is minimal in the immediate site vicinity, however the Hume Highway and Southern Railway Line are located approximately 700 metres from the site.

Six key landscape character units are identifiable within a 1000m radius of the site. These are discussed in greater detail on the following pages and include:

1. Rural Pastures
2. Major Transport Corridor
3. Minor Transport Corridor
4. Industrial
5. Rural Residential
6. Rail Corridor

Other units occur beyond the 1 kilometre radius and are indicated for reference only.

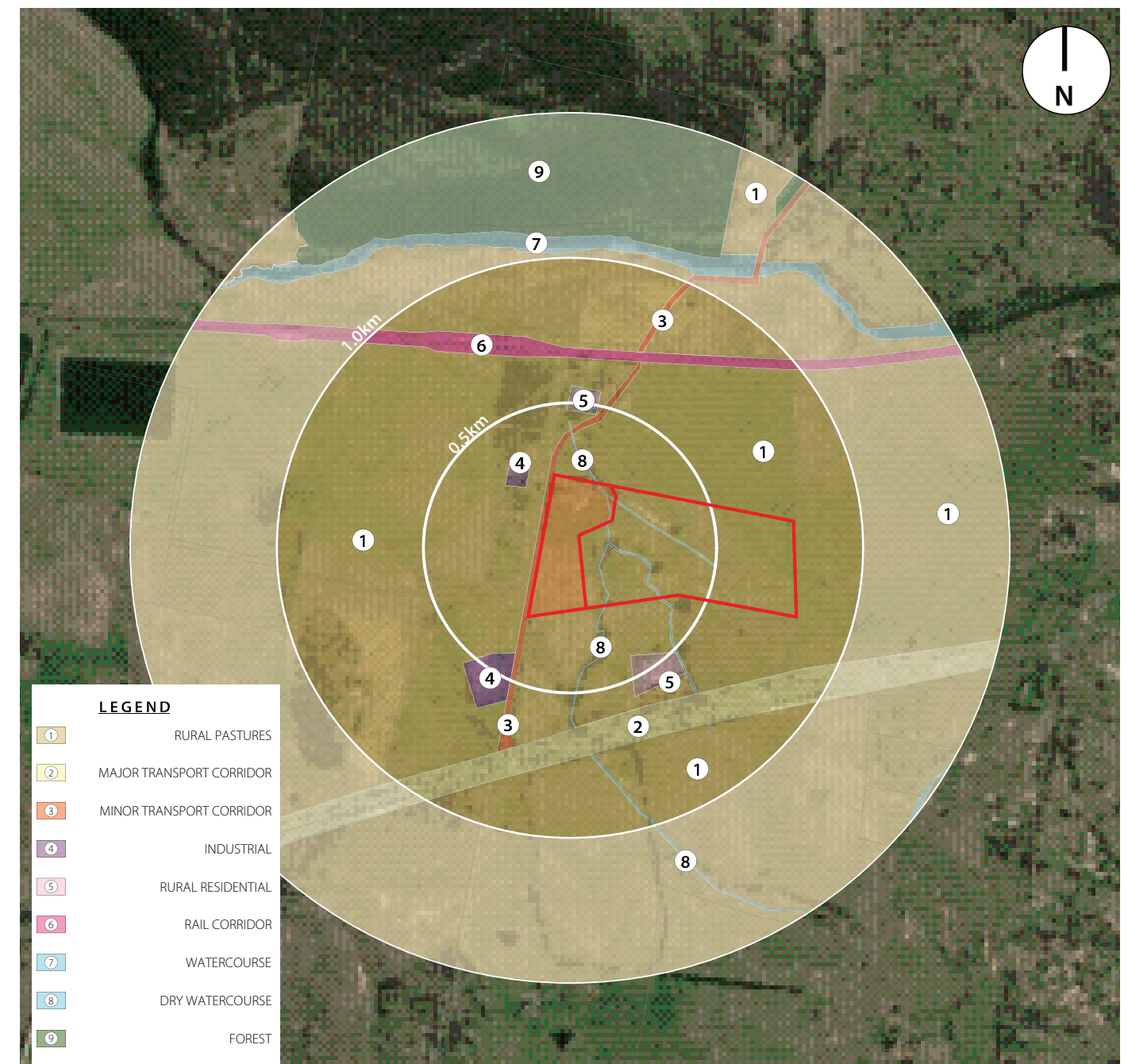


Figure 6 Landscape character units within 1km of site

1. Rural Pastures



Image 1 Murrays Flat Road looking north-west from centre of site western boundary



Image 2 Hume Highway looking south

The majority of the surrounding landscape characters consist of rural pastures with some native canopy outcrops. Topography ranges from mostly flat to gentle undulations with views to distant forested hillsides. The combination of grassland vegetation and relatively flat topography affords broad panoramic views towards distant hillsides.

2. Major Transport Corridor



Image 3 Hume Highway looking west



Image 4 Hume Highway looking east

One major vehicular transport corridor (Hume Highway) is within 1 kilometre proximity to the site. It serves as a major inter-city connection between Sydney and Melbourne.

In this locality the Hume Highway transects the rural pastures identified in Item 1 with occasional rock cuttings as identified in Image 4. This allows for broad panoramic views from vehicles transiting the highway for many kilometres.

3. Minor Transport Corridor



Image 5 Murrays Flat Road looking south



Image 6 Murrays Flat Road looking south from the unsealed forest transition zone. Depression to river crossing evident at centre of image.

The site is located within a low section of the southern portion of Murrays Flat Road. The road is bitumen sealed as far northward as the railway line, then unsealed beyond. The lowest point in the road occurs at a culvert crossing the Wollondilly River, before gently inclining into a transitional landscape between the rural pastures and forest. The road services a very low volume of traffic

4. Industrial



Image 7 Established industrial complex (The Broadway Estate) located on the western side of Murrays Flat Road



Image 8 Established industrial complex located on the western side of Murrays Flat Road, opposite developed portion of site

The site is located within industrial zoned land which currently exists as rural pastures, with a small portion developed in the north western corner. Two established industrial complexes are located on the western side of Murrays Flat Road, consisting of several warehouse-style colorbond sheds, water tanks and trucks.

5. Rural Residential



Image 9 Historic schoolhouse (now a private residence) located within 500m to the north west of site



Image 10 Rural residence located on hilltop approximately 500m south east of the site

There are two rural residences located within a 500 metre radius from the site. The closest is a historic stone building constructed in 1860 which served as the original schoolhouse for the region. It has undergone extensions and is now a private residence.

The second is a split-level brick residence located at a higher elevation to the south east of the site (17658 Hume Highway). The north-facing rear deck affords broad views across grazing land with forested hillsides in the distant background.

6. Rail Corridor



Image 11 Rail corridor (Main Southern Railway Line) looking east from Murrays Flat Road crossing



Image 12 Rail corridor (Main Southern Railway Line) looking east from Murrays Flat Road crossing

The Main Southern Railway Line is located within 1 kilometre of the site, which connects Sydney's Central Station with Albury on the Victorian border. Freight and passenger trains traverse this line, with major stations at Goulburn, Cootamundra and Junee.

6. THE PROPOSAL

6.1. Proposed Project and Landscaping

The proposal seeks to develop and operate a metal recycling facility designed to process ferrous and non-ferrous scrap metals. The proposed facility will receive and process scrap metal sourced from Sydney, Goulburn, the ACT, Southern Highlands, and surrounding regional areas. Processed materials will be transported to both local and overseas markets for recycling and end use.

The Facility will include the following components and infrastructure:

- Receival and Sorting Areas – Bays for the tipping, inspection and initial sorting of incoming scrap metals;
- Fully enclosed purpose built building for removing oils and fuels from end of life vehicles, to enable them to be processed on site in an environmentally appropriate manner;
- Pre-Shredding and Shredding Zones – Equipped with pre-shredders, hammermill shredders, stationary shears and oxy-cutting facilities;
- Post-Processing Separation Facility – Bays for the separation, recovery, and temporary storage of processed ferrous and non-ferrous metals;
- Administrative Infrastructure – Adaptation of the existing on-site cottage into office and staff amenity space including staff parking area;
- Workshop and Maintenance Shed – A fully enclosed 32m x 15m x 12m structure for plant maintenance and operations;
- Mobile and Stationary Equipment – Including loaders, shears, conveyors, radiation detection equipment, and sorting systems;
- Weighbridges – Two entry/exit weighbridges for the accurate measurement of materials and heavy vehicle management and one internal weighbridge;
- Fuel Storage – A 50,000L self-bunded diesel tank, installed on a concrete hardstand with protective bunding, below ground spill containment rank and awning for weather protection;
- Landscaping and Visual Screening – A 20-metre-wide landscaped setback along the western and southern site boundaries;

- Traffic Management and Site Circulation – Paved hardstand access ways using existing access points with the addition of a new exit closer to the Hume Highway to minimise impacts on local roads and residential areas;
- Site Access and Intersection Upgrades – Vehicular access to the Facility will be maintained via Murrays Flat Road, with two key intersection treatments proposed to support safe and efficient traffic flow. A channelised left-turn (CHL) lane will be constructed at the northern intersection (for eastbound traffic), while a channelised right-turn (CHR) lane will be constructed at the southern intersection (for westbound traffic) to improve safe intersection sight distance (SISD) for vehicles turning onto the Hume Highway;
- Renewable Energy Infrastructure – The Facility will incorporate rooftop solar photovoltaic (PV) panels installed on the Workshop Shed, Post Shredder Processing Shed, Shredding Building and Storage, with power stored via an integrated Battery Energy Storage System (BESS);
- Stormwater Management – All operational areas will be constructed of compacted road base incorporating HDPE liners beneath operational areas, stormwater capture systems, and detention basins. The stormwater management system is designed to progressively capture and treat runoff through a series of infrastructure elements. Stormwater will first be directed to Sediment Basin #1 (surface area 1,500 m²), followed sequentially by Sediment Basin #2 (440 m²) and Sediment Basin #3 (1,200 m²), which allow for the settlement of suspended solids. From there, flows are conveyed to a Biofiltration Basin (1,000 m²), which provides secondary treatment via vegetated media. Final treated water is directed to the on-site Dam for detention and controlled release.

The most significant site landscaping is proposed adjacent to the western boundary, consisting of a 20 metre wide vegetated buffer. This will include dense native canopy tree planting with shrubby understorey to screen views from Murrays Flat Road. Species selection are sourced from PCT 1330 (Yellow Box Blakelys Red Gum Grassy Woodland) and Goulburn Mulwaree Council preferred plant list. Additional canopy trees are proposed to supplement the existing trees in the paddock at the front of the existing residence, which will assist in minimising the visual impact of the proposal when viewed from the old schoolhouse. The internal embankments of the proposed sediment basins and detention ponds shall be vegetated with appropriate native grasses and sedges from the same lists referenced above and also as provided in the Water Cycle Management Study (prepared by SOWDES, August 2025).

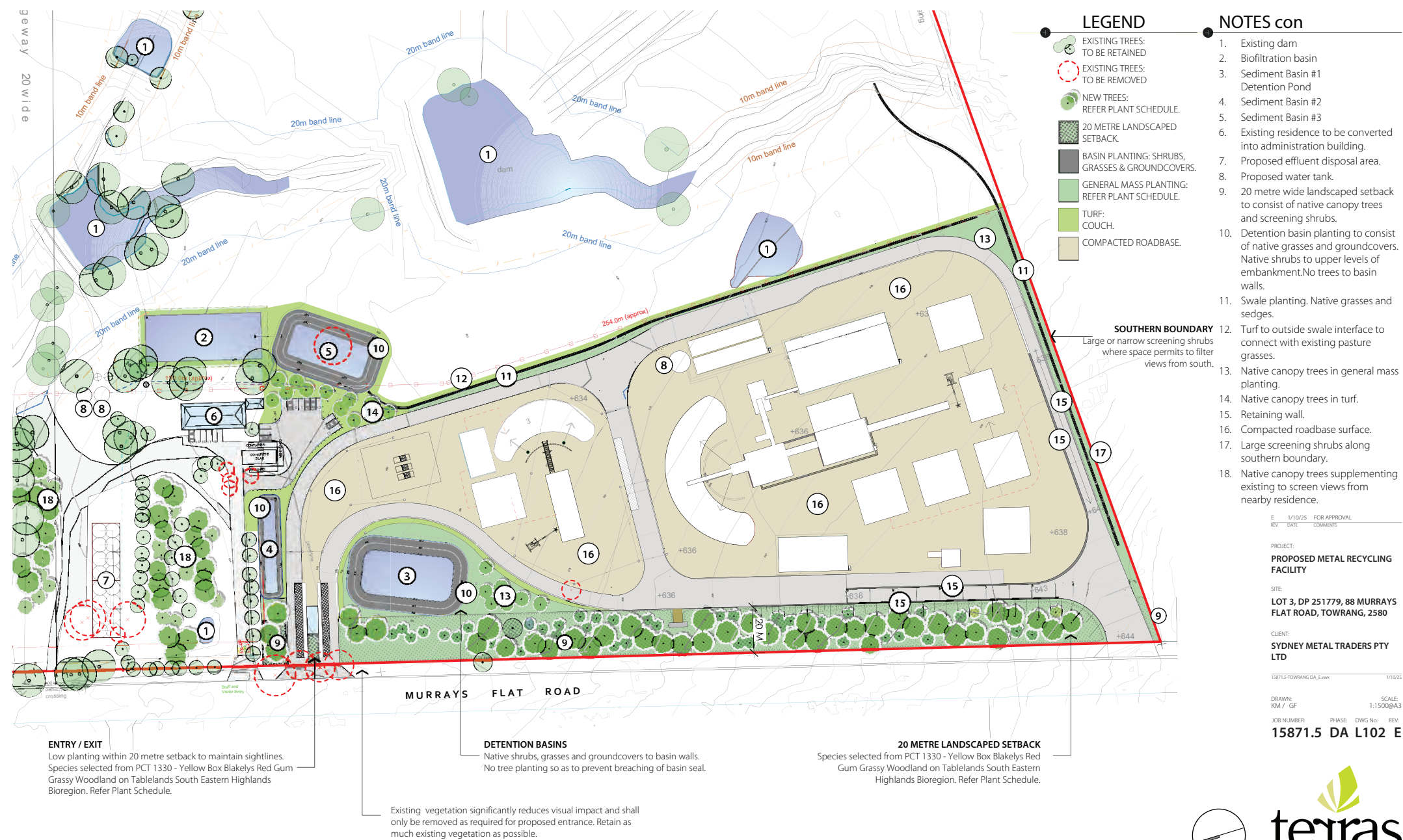
LANDSCAPE CONCEPT PLAN | L102
PROPOSED METAL RECYCLING FACILITY

Figure 7 Landscape Concept Plan (Revision D)

7. VIEWPOINT DATA SHEETS

7.1. 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 limited to less than 1 kilometre of the site.

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.

Photographic images were taken using a digital camera with a focal length approximating a standard 50mm lens for a conventional 35mm camera and equivalent to the human eye, so that all images represent an accurate representation that is neither zoomed in or out. A number of indicative photo panoramas have been included to put views to the site in context with the surrounding area.

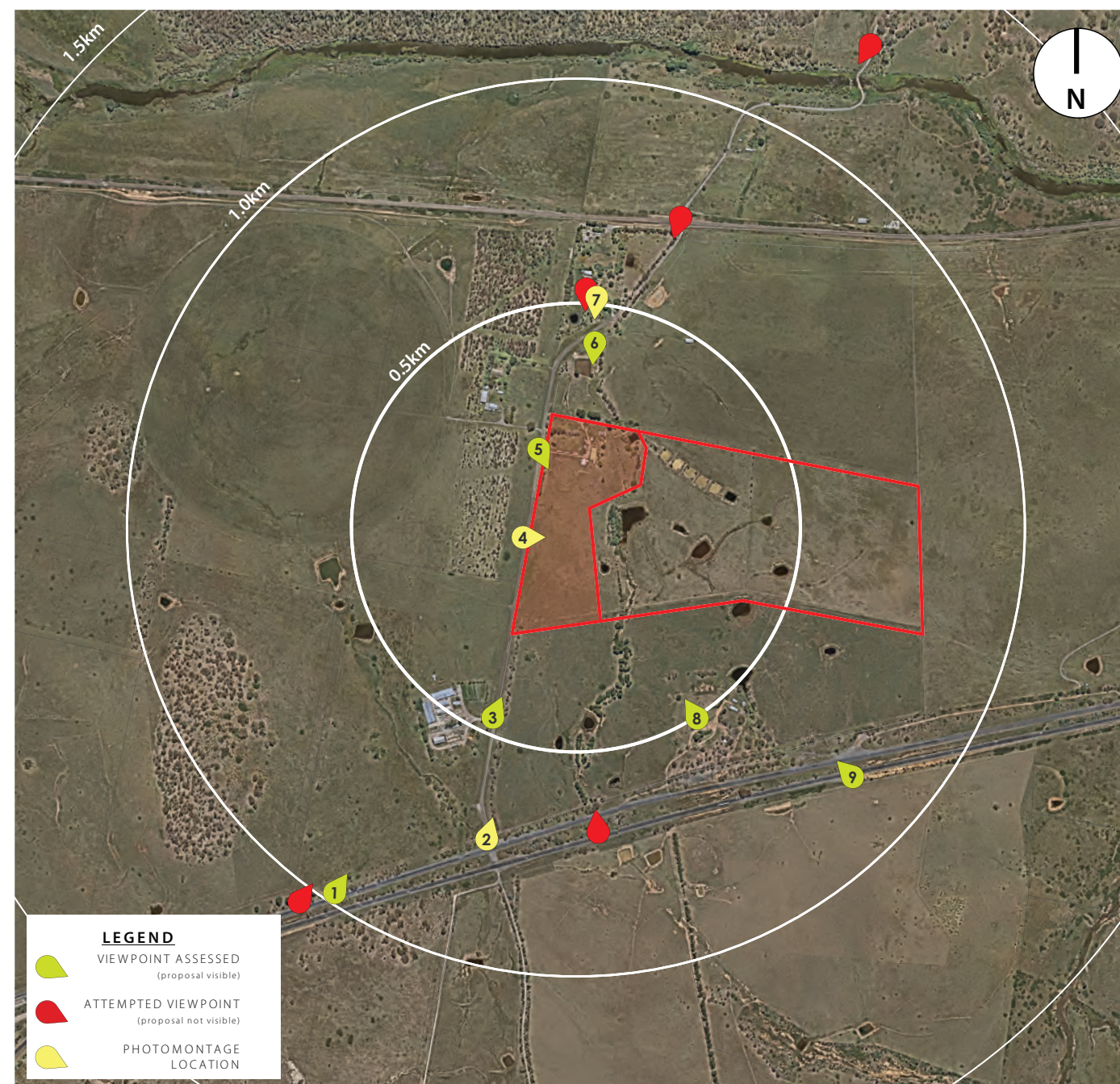


Figure 8 Viewpoint locations

7.2. 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, topography and development the clear viewshed area is very restricted from only some locations to a maximum distance of approximately 500m.

The most prominent views afforded into the site will be for users of Murrays Flat Road at certain points when travelling in both directions.

Direct views are also available from the south western site boundary to the approximate centre, where existing boundary vegetation either obstructs or filters views.

Filtered views are also occasionally afforded to the site when travelling east along the Hume Highway, however this is sporadic due to the undulating topography and roadside vegetation.

Access was restricted to much of the surrounding privately owned property however aerial imagery suggests that varying degrees of filtered views are afforded as indicated in the diagram.

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



Figure 9 Viewshed diagram.

8. ASSESSMENT CRITERIA

8.1. 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 11 Interrelationships & Connecting with Country Approach

Source: Government Architect NSW, 2023

8.2. 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				
VALUES		SUB-VALUES		
		BIOPHYSICAL	ECOLOGICAL	ECONOMIC
	PHYSICAL ELEMENTS OF THE LANDSCAPE THAT ARE TANGIBLE	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
	PERCEPTIVE ELEMENTS OF THE LANDSCAPE THAT ARE SENSORY INTERPRETED OR HAVE BROADER CONNECTION TO SENSORY EXPERIENCE	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
		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 12 Viewer Access 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
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	

Figure 10 Viewer Access Matrix

Source: Adapted from Urbis, 2008

assessment criteria

8.3. 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				
		RATING		
		LOW	MEDIUM	HIGH
ELEMENT	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 13 Visual Quality Reference Table

Source: After Clouston & Brouwer, 1995

8.4. 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						
		SENSITIVITY				
		IMMEDIATE FOREGROUND 0-100m	FOREGROUND 100-250m	MIDGROUND 250m-500m	DISTANT MIDGROUND 500m-1km	BACK-GROUND (>1km)
LAND USE	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 14 Visual Sensitivity Table

Source: Adapted from EDAW, 2000

assessment criteria

8.5. Magnitude of Change

Magnitude of change is an assessment of a number of factors including the proportion of the view/landscape affected, the size or scale, the geographical extent of the area over which the change occurs, the rate and duration of the change 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					
		RATING			
		NEGLIGIBLE	LOW	MODERATE	HIGH
ELEMENT	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 15 Magnitude of Change Table

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

8.6. 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 detracting). 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 16 Visual Impact Table

9. VIEWPOINT ASSESSMENTS



Image 13 Photo stitched view east towards site (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).

Hume Highway, looking north-east



Figure 17 Viewpoint location

Site
Distance: 500m south west
View position: Superior
Visual Quality: Medium

Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Viewpoint 1 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat) Cultural (evolving rural landscape)
	Viewer Access	Despite the high viewer numbers, viewer access is considered MODERATE due to the medium range viewer distance and short viewing duration.
	Visual Sensitivity	The visual sensitivity of the site is considered MODERATE as it will be viewed within 1 km from a major travel corridor.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW as the proposal will be visible intermittently at high speed and present only a minor change to the landscape with no visual impact on the skyline.
	Visual Impact	Based on a moderate visual sensitivity and low magnitude of change rating, the proposal is considered to have a LOW visual impact.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating remains as LOW.

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
Low				
Reassessment based on Professional Opinion:				
No reassessment				

viewpoint 1 - massing outline



Image 14 Viewpoint 1, one frame, existing view



Image 15 Viewpoint 1, indicative massing outline of proposal showing approximate extents of built forms 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.

HAMMER MILL 21.3m ABOVE GROUND LEVEL

EXISTING VEGETATION AND DEVELOPMENT PROVIDING PARTIAL SCREENING OF PROPOSED BUILT FORMS.

Corner of Hume Highway and Murrays Flat Road, looking north-east



Image 16 Photo stitched view north-east towards site (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).



Figure 18 Viewpoint location

Viewpoint 2 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat) Cultural (evolving rural landscape)
	Viewer Access	Despite the high viewer numbers, viewer access is considered MODERATE due to the medium range viewer distance and short viewing duration.
	Visual Sensitivity	The visual sensitivity of the site is considered LOW - MODERATE as it will be viewed within 1 km from either a minor road or a major travel corridor.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as MODERATE as the proposal will result in a noticeable, but not dominant change to the landscape and will have some degree of integration.
	Visual Impact	This viewpoint is located at the intersection of a minor road and major travel corridor resulting in a variable visual sensitivity. A moderate magnitude of change rating results in a LOW - MODERATE visual impact.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating remains as LOW - MODERATE for the reasons noted above.

Site
Distance: 750m south
View position: Neutral
Visual Quality: Medium
Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
LOW - MODERATE (depending on location)				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 2 - photo montage



Image 17 Viewpoint 2, one frame, existing 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 18 Viewpoint 2, indicative massing model of proposal showing approximate extents of built forms within this view with proposed vegetation at maturity.

NOTE:
COLOURS ARE BASED ON THE ARCHITECTURAL PLAN SET SCHEDULE OF FINISHES.

HAMMER MILL 21.3m ABOVE GROUND LEVEL

EXISTING VEGETATION AND LANDFORM FILTERS VIEWS OF PROPOSED BUILT FORMS.

Entrance to The Broadway Estate, 27 Murrays Flat Road, looking north-east



Image 19 Photo stitched view north towards site (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).



Figure 19 Viewpoint location

Viewpoint 3 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation, grasslands), Ecological (development, natural habitat) Cultural (evolving rural landscape)
	Viewer Access	Low viewer numbers, with a duration varying from LOW (vehicles transiting Murrays Flat Road) to potentially MODERATE (staff / customers / occupants of residential / industrial site).
	Visual Sensitivity	The visual sensitivity of the site is considered LOW as it will be viewed within 0.5 km from a minor road.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW, as although the proposal will change the existing landscape there will be significant integration via screening provided by the 20 metre vegetated setback.
	Visual Impact	It is estimated that the proposal will have a LOW visual impact from this location.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating remains as LOW for the above reasons.

Site	
Distance:	500m south
View position:	Neutral
Visual Quality:	Medium - High
Camera	
Date & Weather:	20.06.2025, Clear
Camera & Lens:	Nikon Coolpix P900 (24-2000 mm lens)
Camera Height:	1.5m (Eye level)

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
Low				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 3 - massing outline



Image 20 Viewpoint 3, one frame, existing view



Image 21 Viewpoint 3, indicative massing outline of proposal showing approximate extents of built forms 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.

Centre of western site boundary, looking east



Image 22 Photo stitched view east towards site (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).



Figure 20 Viewpoint location

Site
Distance: 10m south
View position: Neutral
Visual Quality: Medium

Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Viewpoint 4 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation, grasslands), Ecological (development, natural habitat) Cultural (evolving rural landscape)
	Viewer Access	Very low viewer numbers, with a very short duration and distance results in a LOW viewer access rating.
	Visual Sensitivity	The visual sensitivity is considered MODERATE as it will be viewed in the immediate foreground from a minor road.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as HIGH, as the proposal will dominate the landscape due to the very close proximity of this viewpoint. The 20m landscaped setback will soften the built form but it will be visible on the skyline.
	Visual Impact	The proposal will have a HIGH visual impact which will be somewhat reduced by the landscaped buffer as it matures.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating remains as HIGH.

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
High				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 4 - photo montage



Image 23 Viewpoint 4, one frame, existing view



Image 24 Viewpoint 4, indicative massing model of proposal showing approximate extents of built forms within this view with proposed vegetation at maturity.

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.

NOTE:

COLOURS ARE BASED ON THE ARCHITECTURAL PLAN SET SCHEDULE OF FINISHES.

Opposite north-western boundary, looking south east



Image 25 Photo stitched view south-east towards 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: 10m north west
View position: Neutral
Visual Quality: Medium

Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Viewpoint 5 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat) Cultural (evolving rural landscape).
	Viewer Access	Very low viewer numbers, with a very short duration and distance results in a LOW viewer access rating.
	Visual Sensitivity	The visual sensitivity is considered MODERATE as it will be viewed in the immediate foreground from a minor road.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW, as the proposal will be completely obstructed by the existing boundary vegetation.
	Visual Impact	The proposal will have a LOW visual impact.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating remains as LOW.

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
Low				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 5 - massing outline



Image 26 Viewpoint 5, one frame, existing view



EXISTING VEGETATION PROVIDING
SCREENING OF PROPOSED BUILT FORMS TO
REAR (SHOWN RED DASHED).

Image 27 Viewpoint 5, indicative massing outline of proposal showing approximate extents of built forms 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.

Cattle loading yard, opposite 125 Murrays Flat Road, looking south



Image 28 Photo stitched view south towards site (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).



Figure 22 Viewpoint location

Site
Distance: 300m north
View position: Neutral
Visual Quality: Low

Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Viewpoint 6 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (vegetation, grassland), Ecological (natural habitat) Cultural (evolving rural landscape)
	Viewer Access	Very low viewer numbers, with a very short duration and distance results in a LOW viewer access rating.
	Visual Sensitivity	The visual sensitivity is considered LOW as it will be viewed in the middleground from a minor road.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW, as despite the relatively close proximity the existing built form and vegetation will filter views to the majority of the proposal.
	Visual Impact	It is estimated that the proposal will have a LOW visual impact from this viewpoint.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance,the viewpoint rating remains at LOW for the above reasons.

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
Low				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 6 - massing outline



Image 29 Viewpoint 6, one frame, existing 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 30 Viewpoint 6, indicative massing outline of proposal showing approximate extents of built forms within this view.

EXISTING VEGETATION TO FILTER MOST VIEWS OF PROPOSED BUILT FORMS.

EXISTING CONTAINERS ON PROPOSAL SITE.

Front yard 125 Murrays Flat Road, looking south east



Image 31 Photo stitched view south towards 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: 500m north
View position: Neutral
Visual Quality: Medium

Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Viewpoint 7 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development, natural habitat) Cultural (evolving rural landscape), Heritage (conservation)
	Viewer Access	Very low viewer numbers, with a short distance but long duration results in a MODERATE viewer access rating.
	Visual Sensitivity	The visual sensitivity is considered LOW as it will be viewed in the middleground from a residential area.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as MODERATE, as it will present as moderate visual contrast that will be visible on the skyline with other features. Some integration will occur over time as the proposed canopy trees mature.
	Visual Impact	Based on the ratings noted above, it is estimated that the proposal shall have a LOW visual impact.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating remains as LOW.

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
Low				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 7 - massing montage



Image 32 Viewpoint 7, one frame, existing 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 7, indicative massing model of proposal showing approximate extents of built forms within this view with proposed vegetation at maturity.

EXISTING VEGETATION ALLOWS FOR FILTERED VIEWS OF PROPOSED BUILT FORMS, TO BE AUGMENTED BY SUPPLEMENTARY TREE PLANTING.

EXISTING CONTAINERS ON PROPOSAL SITE.

Rear deck of residence, 17658 Hume Highway, looking north-west



Image 34 Photo stitched view north towards site (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).



Figure 24 Viewpoint location

Site
Distance: 500m south
View position: Neutral
Visual Quality: Medium

Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Viewpoint 8 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation, grassland), Ecological (natural habitat)
	Viewer Access	Very low viewer numbers, with a short distance and long duration results in a MODERATE viewer access rating.
	Visual Sensitivity	The visual sensitivity is considered LOW as it will be viewed in the middleground from a residential area.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW, as the majority of the proposal will be screened by existing vegetation.
	Visual Impact	The proposal will have a LOW visual impact from this viewpoint.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating remains at LOW.

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
Low				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 8 - massing outline



Image 35 Viewpoint 8, one frame, existing 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 36 Viewpoint 8, indicative massing outline of proposal showing approximate extents of built forms within this view.

EXISTING VEGETATION TO FILTER MOST VIEWS OF PROPOSED BUILT FORMS.

Hume Highway westbound lane looking north-west



Image 37 Photo stitched view north towards site (NOTE: Photo stitching provides a level of distortion to photographs, but is used in this instance to establish context).



Figure 25 Viewpoint location

Site
Distance: 800m south
View position: Neutral
Visual Quality: Low

Camera
Date & Weather: 20.06.2025, Clear
Camera & Lens: Nikon Coolpix P900 (24-2000 mm lens)
Camera Height: 1.5m (Eye level)

Viewpoint 9 - Summary		
Visual Analysis of Existing Site	Landscape Values	Biophysical (ridgelines, vegetation), Ecological (development)
	Viewer Access	High viewer numbers, with a medium distance and short duration results in a MODERATE viewer access rating.
	Visual Sensitivity	The visual sensitivity is considered MODERATE as it will be viewed in the distant middleground from a major travel corridor.
Visual Analysis of Proposed Site	Magnitude of Change	The magnitude of change is assessed as LOW, as the majority of the proposal will be screened by existing vegetation.
	Visual Impact	The proposal will have a LOW visual impact from this viewpoint.
	Professional Comment	In some instances the assessment criteria can be affected disproportionately due to one or more factors. In this instance, the viewpoint rating is maintained as LOW.

Visual Evaluation Criteria				
	NEGLIGIBLE	LOW	MODERATE	HIGH
Viewer Access				
Visual Sensitivity				
Magnitude of Change				
Visual Impact (Rating based on above criteria):				
Low				
Reassessment based on Professional Opinion:				
No Reassessment				

viewpoint 9 - massing outline



Image 38 Viewpoint 9, one frame, existing view



Image 39 Viewpoint 9, indicative massing outline of proposal showing approximate extents of built forms 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.

EXISTING VEGETATION AND LANDFORMS PROVIDING PARTIAL SCREENING OF MOST PROPOSED BUILT FORMS. SITE STOCK PILES AND SUPPORTING ELEMENTS STILL LIKELY TO BE VISIBLE.

10. OVERALL VIEWPOINT SUMMARY

VIEWPOINT SUMMARY					
	ACCESS	SENSITIVITY	MAGNITUDE	IMPACT	ASSESSED IMPACT
Viewpoint 1 Hume Highway eastbound, looking north-east	MODERATE	MODERATE	LOW	LOW	LOW
Viewpoint 2 / Photomontage Cnr Hume Hwy & Murrays Flat Rd, north-east	MODERATE	LOW-(MOD)	MODERATE	LOW-(MOD)	LOW-(MOD)
Viewpoint 3 27 Murrays Flat Road, looking north-east	LOW-(MOD)	LOW	LOW	LOW	LOW
Viewpoint 4 / Photomontage Centre western site boundary, south-east	LOW	MODERATE	HIGH	HIGH	HIGH
Viewpoint 5 Opposite north-western boundary, south-east	LOW	MODERATE	LOW	LOW	LOW
Viewpoint 6 Opposite 125 Murrays Flat Rd, looking south	LOW	LOW	LOW	LOW	LOW
Viewpoint 7 / Photomontage 125 Murrays Flat Road, looking south-east	MODERATE	LOW	MODERATE	LOW	LOW
Viewpoint 8 17658 Hume Highway, looking north-west	MODERATE	LOW	LOW	LOW	LOW
Viewpoint 9 Hume Highway westbound, looking north-west	MODERATE	MODERATE	LOW	LOW	LOW

Figure 27 Viewpoint Summary Table



Figure 26 Viewpoint Summary Graph: Viewpoint Assessment Results

11. IMPACT ASSESSMENT

11.1. 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.

Viewpoint 1 is typical of eastbound vehicular traffic traversing the Hume Highway. Foreground canopy trees and vegetated hills in the background contribute to the rural aesthetic of the surrounding landscape and characterise a moderate scenic visual quality. Despite the highway location, visual access here is considered moderate due to the viewer distance and short viewing duration. The existing industrial development obstructs most of the view to the proposal from this location. The highest point of the proposed hammer mill will breach the existing canopy tree height whilst the remainder of the proposed built form will likely be viewed as a conglomerate of the existing structures. The magnitude of change is assessed as low which when coupled with a moderate visual sensitivity results in a likely LOW visual impact.

Viewpoint 2 is located within 750 metres of the site, at the intersection of the Hume Highway (major travel corridor) and Murrays Flat Road (minor road). This location was selected as it addresses traffic slowing down to exit the highway and turn into Murrays Flat Road. As these two road types have differing visual sensitivity ratings, the resulting visual impact bridges both outcomes (ie: low - moderate). However the longest viewing duration will be from vehicles entering Murrays Flat Road (as opposed to vehicles travelling on the highway at high speed), so a greater emphasis is placed on the low rating afforded from the minor road. A photomontage was generated from this location, as it was considered to be a potentially critical viewpoint as vehicles slow and enter Murrays Flat Road. As with Viewpoint 1, the moderate visual quality is a result of the rural aesthetic of the surrounding landscape and the magnitude of change is considered moderate. This is due to the proposal having a noticeable but not dominant change to the surrounding landscape and it being viewed in context with an existing industrial complex. The existing roadside vegetation provides some filtering of views to the proposal and shall be supplemented where possible with screening shrubs along the site's southern boundary. The 20 metre wide landscaped buffer adjacent to Murrays Flat Road will screen a portion of the proposal, reducing the impact of the built form mass.

Viewpoint 3 represents a typical view from the entrance to The Broadway Estate at 27 Murrays Flat Road (due to private property ownership and access restrictions). It should be noted that views from within this property may vary seasonally due to established deciduous trees aligning the road. Vehicles transiting Murrays Flat Road will have

a low viewing duration, whilst a moderate rating applies to staff / occupants of the site. Although the proposal shall be viewed within a rural context, the magnitude of change is estimated to be low. The majority of the proposed structures shall have a low elevational profile which will not breach the existing tree canopy lines or distant ridgelines. The highest component (Hammer Mill, at 21.3 metres above ground level) shall be mostly obstructed by foreground vegetation and the proposed Gatehouse located at the new entrance shall be screened by native vegetation within the 20 metre landscaped setback. Tall shrub planting along the southern boundary will assist in filtering views from this location, resulting in an anticipated LOW visual impact.

The only viewpoint assessed with a HIGH visual impact occurs at Viewpoint 4, immediately adjacent to the site's western boundary. Understandably, this rating is due to the very close proximity to the proposal, resulting a significant change in the landscape, removal of key landscape components (middleground vegetation, grassland and distant hillsides) and the presence of new features on the skyline. The proposed foreground vegetation buffer within the 20 metre setback will provide screening to the built form as it establishes, as indicated in the generated photomontage.

Despite the very close proximity to the site, it is anticipated that the proposal will not be visible from Viewpoint 5. This is due to the screening provided by the existing boundary vegetation.

The cattle loading yard opposite 125 Murrays Flat Road was selected as Viewpoint 6 as it may be representative of views experienced by southbound vehicles within 500 metres of the site. It occurs at a bend in the road where potentially the most direct views from the north may be encountered. It should be noted that this location has very low viewer numbers and viewing duration with a low viewer sensitivity rating. The existing site structures and vegetation filter most views to the proposal which shall be augmented with supplementary tree planting in the front paddock of the existing site residence. It is anticipated that the estimated LOW visual impact shall be further reduced as these trees mature.

Viewpoint 7 is located in the front yard of the original schoolhouse on 125 Murrays Flat Road, which now serves as a private residence. Although viewer numbers are very low, this viewpoint and photomontage location was selected due to the local historic significance of the old schoolhouse. A potentially long viewing duration of the sole occupant resulted in a moderate viewer access rating. Viewpoints were attempted adjacent to east-facing windows, but it was determined that the proposal may not be seen due to screening afforded by existing foreground vegetation. This viewpoint was therefore taken from a paddock boundary in front of this vegetation. Although middleground vegetation will screen most of the proposed structures, the Hammer Mill will be visible through a break in this vegetation. The top of the mill will also breach the distant canopy vegetation and skyline, resulting in a moderate magnitude of change, with an overall LOW visual impact rating. The proposed supplementary tree planting discussed in Viewpoint 6 will assist in filtering views to this structure as they mature.

Another residence that may have been visually impacted is located 500 metres to the south of the site at 17658



Hume Highway (Viewpoint 8). Similarly to Viewpoint 7, this viewpoint has low viewer numbers however the long viewing duration resulted in a moderate viewer access rating. The viewpoint's higher elevation potentially affords superior views across open pastures, however a row of existing pine trees obstructs most of the view to the proposed built forms. It is anticipated that only a small portion of the top of the Hammer Mill will be visible, with only filtered glimpses available to some smaller elements. The magnitude of change is therefore considered to be low, with an anticipated overall LOW visual impact from this location. The canopy trees proposed for the south eastern corner of the site and large shrub planting along the southern boundary may assist in further filtering views.

Viewpoint 9 represents a typical view that may be encountered by westbound traffic on the Hume Highway. This particular location was selected due to its higher elevation and potentially unobstructed views through road cuttings and roadside vegetation. Viewer access and sensitivity is considered to be moderate, however the magnitude of change is low as only a very small portion of the proposal will be visible and it will likely occur at high speed. The proposed visible structure will have a low profile and will be viewed in context with the existing development evident in the background, resulting in an estimated LOW visual impact.

11.2. 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, the proposed times of operation and lighting technology proposed (Electrical Projects Australia Pty Ltd, 2024).

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. Suggestions are to be considered alongside operational hours, lighting requirements from Council, the practicality of application for certain areas regarding CPTED and recommendations from any lighting consultants.

Employing methods such as:

- Eliminating upward spill lighting by directing light downward
- Shielded fittings
- Energy-efficient bulbs
- Asymmetric beams
- Direction of light from reflective surfaces
- Warm-white colours, where afforded
- Curfew switch off for decorative lighting
- Motion detector control lighting

11.3. Conclusion

The proposed development is permissible within its General Industrial Zoning and contains Transitional Zones to the north, west and south of the site. Although the surrounding landscape character currently retains a rural aesthetic, there is some evidence of light industry establishing on Murrays Flat Road.

A review of the visual catchment of the site showed that views of the proposal were limited to within approximately 500 metres. Despite the majority of the surrounding landscape consisting of cleared paddocks, topographic undulations and vegetated copses either restricted or filtered views to the site. Views that are not already obstructed shall be augmented with canopy trees and shrubby understoreys where appropriate.

The overall proposal will have a LOW visual impact due to factors such as distance from site, visual integration through vegetated setbacks, landscape treatments and general height consistency with the existing structures and surrounding landscape. The proposal will result in a surprisingly unobtrusive change to the existing landscape from the assessed viewpoints and although contrasting with the surrounding land use can be considered as generally integrated with the surrounding visual environment.

As expected, Viewpoint 4 from the site's immediate western boundary, held the only HIGH impact rating. However, it should be noted that immediate proximity viewpoints will produce high visual impacts due to the viewer's close vicinity to the site and limitations on distance to obtain full context. All other assessed viewpoints concluded a LOW visual impact due to integration with the existing landscape character, existing visual barriers / filters and proposed landscape treatment.

Once the proposed 20 metre landscaped buffer has established, the proposal will not be as visible from the front and the LOW visual impacts will be maintained. It is noted that the site is currently zoned for industrial use, and further industrial development is anticipated in the future.



11.4. 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:

- Provision of 20 metre wide landscaped setback.
- Implementation of other vegetation to the site as per the landscape plans
- Varied treatment and use of recessive colours to building facades to reduce its perceived mass and encourage integration into the existing landscape
- Implementation of some light spillage control methods, where applicable

Recommended further mitigation measures:

- Early works planting would be recommended especially in the 20 metre setback to ensure canopy trees and screening shrubs are established in the early stages of the development
- Ensuring use of non-reflective surfaces

12. REFERENCES

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

- Administrative information: <https://meconemosaic.au/>
- *Arc GIS*, <https://www.arcgis.com/apps/View/index.html?appid=63fa2b441c2c49e4b726cffa89629e46>, viewed 24.06.2025
- *Connecting to Country*, Government Architect NSW, 2023.
- *Control Of The Obtrusive Effects Of Outdoor Lighting*, Australian/New Zealand Standard, 2023.
- *Dark Sky Planning Guideline*, NSW Govt Planning and Environment, June 2023.
- *Goulburn / Mulwaree Local Environmental Plan 2009*, <https://legislation.nsw.gov.au/view/html/inforce/current/epi-2009-0056#statusinformation>, viewed 17.06.2025
- *Goulburn / Mulwaree Development Control Plan 2009*, <https://www.goulburn.nsw.gov.au/Development/Plans-Strategies#section-4>, viewed 17.06.2025
- *Guideline for landscape character and visual impact assessment*, Transport for NSW, June 2023.
- *Guideline for landscape character and visual impact assessment: Version 2.2*, New South Wales Government Transport for NSW, 21 August 2020.
- *Guidelines for Landscape and Visual Impact Assessment: Third Edition*, Landscape Institute, March 2013.
- *Guidance Note for Landscape and Visual Assessment*, AILA, June 2018.
- Landscape and visual assessment workshop, Stacey Brodbeck and Suzie Rawlinson 2023.
- *Landscape Assessment Guidelines For Professionals Working In Resource Management*, New Zealand Institute of Landscape Architects 'te-tangi-a-te-manu' (2022).
- *Mecone Mosaic*, <https://meconemosaic.au/?coords=%5B%5B-34.72993559640342%2C149.78951609476667%5D%5D>, viewed 17.06.2025
- *Nearmap*, <https://apps.nearmap.com/> viewed 24.06.2025
- *NSW Planning Portal Spatial Viewer* <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address>, viewed 24.06.2025.
- *Policy: Use of Photomontages and Visualisation Tools*, Land and Environment Court of New South Wales, 17 May 2024.
- *Rural Land Evaluation*, Department of Planning (DOP), 1988, Government Printer (Dept. of Planning).
- *Scenic Perceptions of Australian Landscapes*, Williamson, D, 1978, Landscape Australia, Vol. 2, pp 94-100.
- *Section 12, Visual Assessment, The Mount Arthur North Coal Project Pty Ltd Environmental Impact Statement*, EDAW (Australia), 2000, URS Australia Pty Ltd, prepared for Coal Operations Australia Limited.
- *SEED The Central Resource for Sharing and Enabling Environmental Data in NSW*, <https://geo.seed.nsw.gov.au>, viewed 08.07.2025
- *SIXMaps*, <https://maps.six.nsw.gov.au/> viewed 24.06.2025
- *Social and Economic Impact Assessment (Version 1.1)*, Think Economics, October 2023,
- *Technical Supplement - Landscape and Visual Impact Assessment*, Department of Planning and Environment, August 2022.
- *Visual Representation of Development Proposals*, Landscape Institute Technical Guidance Note, September 2019 (Currently under review, as of January 2024).

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