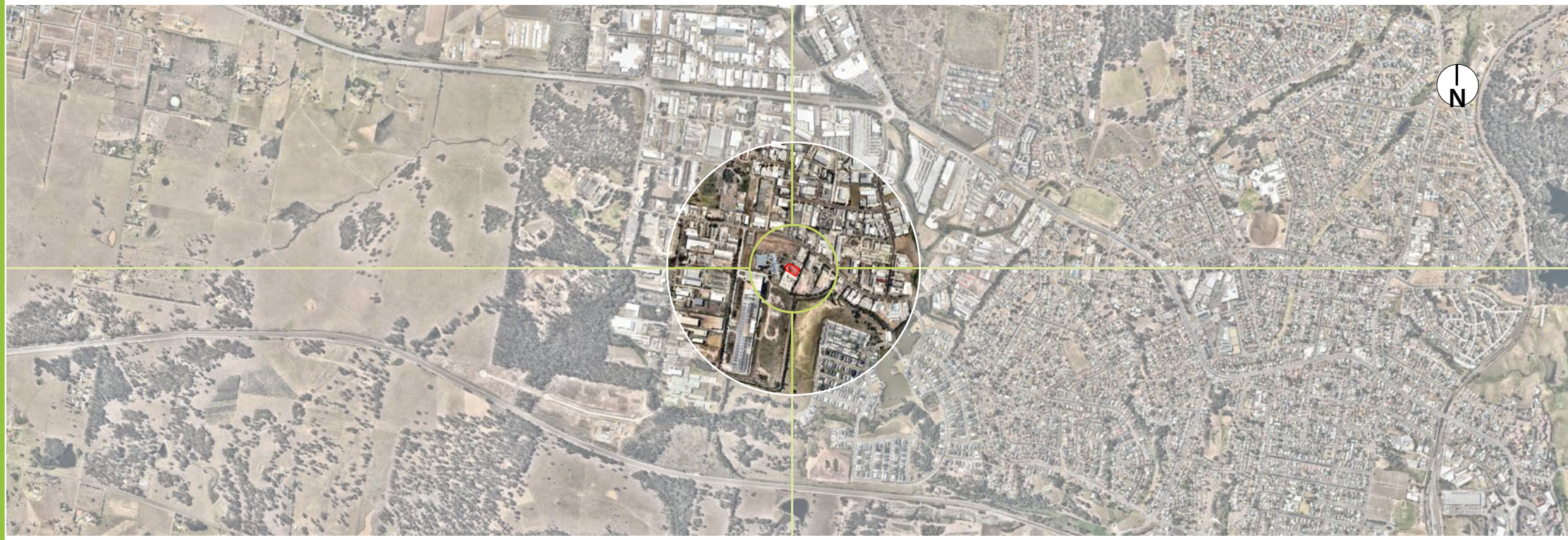

VISUAL IMPACT ASSESSMENT REPORT - RUTHERFORD TYRE RECYCLERS

BURLINGTON PLACE, RUTHERFORD, NSW, 2320

WONNARUA COUNTRY

prepared for:

JACKSON ENVIRONMENT AND PLANNING PTY LTD

Rev	Description	Initial	Date
A	CLIENT REVIEW	JA	12.02.2024
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assessment summary

1. ASSESSMENT SUMMARY

Terras Landscape Architects has undertaken a visual assessment of a proposed development to retrofit an existing auto-shop into a tyre recycling facility for Rutherford Tyre Recyclers Pty Ltd. The site is located in E4 Industrial Zone and aims to receive and process up to 4,500 tones of tyres per year turning whole tyres into products such as rubber matting and rubber pavers. 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 proposal site is located within Rutherford General Industrial Zone (E4) at the end of Burlington Place.
- Rutherford is a highly industrial small township with a population of approximately 13,000 people in which 17% of the working population work within the technicians and trade industries. The township is predominantly composed of family townhouses at one to two stories in height with a large industrial and commercial area. The outskirts of the town and its surrounds are mainly rural landscape and primary production land.
- The site has an existing building to remain and is located in Rutherford industrial and commercial zones and is surrounded by other industrial sites similar in building size and form, along with some larger industrial buildings in the immediate surroundings.
- The local area character units associated with the site include industrial/commercial, public recreation, private recreation, environmental management, residential, constructed waterbodies, and arterial roading.
- Views of the site are limited to approximately 250 metres due to surrounding development and existing vegetation.
- The greatest visual impact is immediately on the site boundary, where view of proposed works are visible. The proposed works will not alter the exterior shape of the building and are not visible from other views.
- As a result of the above factors the overall visual impact rating has been assessed to be NIL. The landscape underplanting proposed by Terras Landscape Architects as seen in the attached Landscape Documentation will not add any additional screening of proposed works but will add to the overall visual appeal of the site when viewed from the street frontage.

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 reduce 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 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 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 assessment has been undertaken in accordance of the requirements of Guidelines for Landscape Character and Visual Impact Assessment (RMS, 2013) and as such, the work has been carried out following the steps below:

- Assess the visibility of the proposal. This includes a review of the existing visual environment/landscape setting of the locality.
- Identify key existing viewpoints and their sensitivity. 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.
- Assess visual impacts. 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.

A 0.9m diameter helium filled red balloon was positioned in the approximate centre of the study area. The balloon was released to the maximum height of the proposed building (3.1 metres above existing ground level) and tightly secured. This balloon was then used to identify (or attempted to view) the proposal from various points within the subject locality.

2.3. Terminology

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

•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 subject site (referred to also as the site) is defined as the land area directly affected by the proposal within defined boundaries. (re: (part) Lot 3005 DP1040568).

•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.

3. THE SITE

3.1. Site Context

Rutherford is a township located 40 minutes north-west of Newcastle within Maitland Local Government area in the Hunter Valley of New South Wales.

Rutherford is a highly industrial small township home to a population of approximately 13,000 people in which 17% of the working population work within the technicians and trade industries. The township is predominantly composed of family townhouses at one to two stories in height with the surrounding areas mainly being rural landscape and primary production land.

The site is located within Rutherfords large industrial and commercial zones (E4 and E3). The proposal is surrounded by other industrial sites similar in building size and form, with an exact replica on each side boundary along with some larger industrial buildings in the immediate surroundings.

In close proximity to the southern boundary of the proposal site is RE2 (Private Recreation) Zoning, consisting of 'Tom's Golf Range' (image 7) and 'Oak Tree Retirement Village' (image 14). The views towards the site from these points are screened by a row of existing trees and existing industrial warehouses on neighboring lots in which are larger than that of the warehouse located on the proposal site.

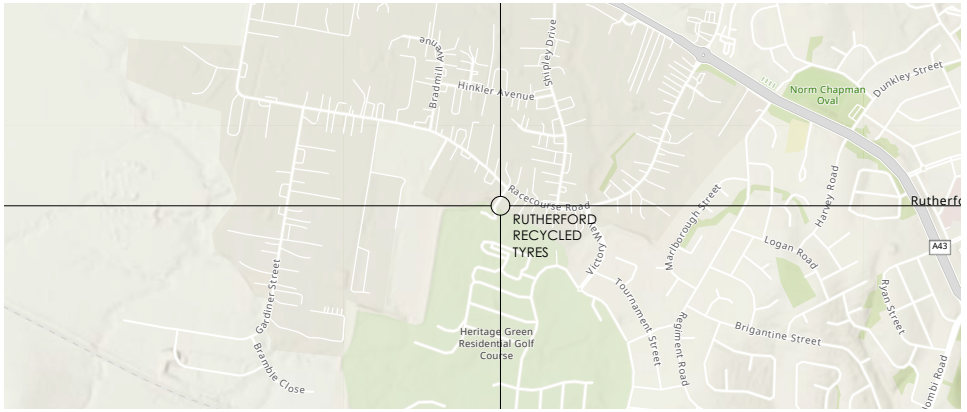

Image 1 Site location

the site

Image 2 The site and immediate surrounds

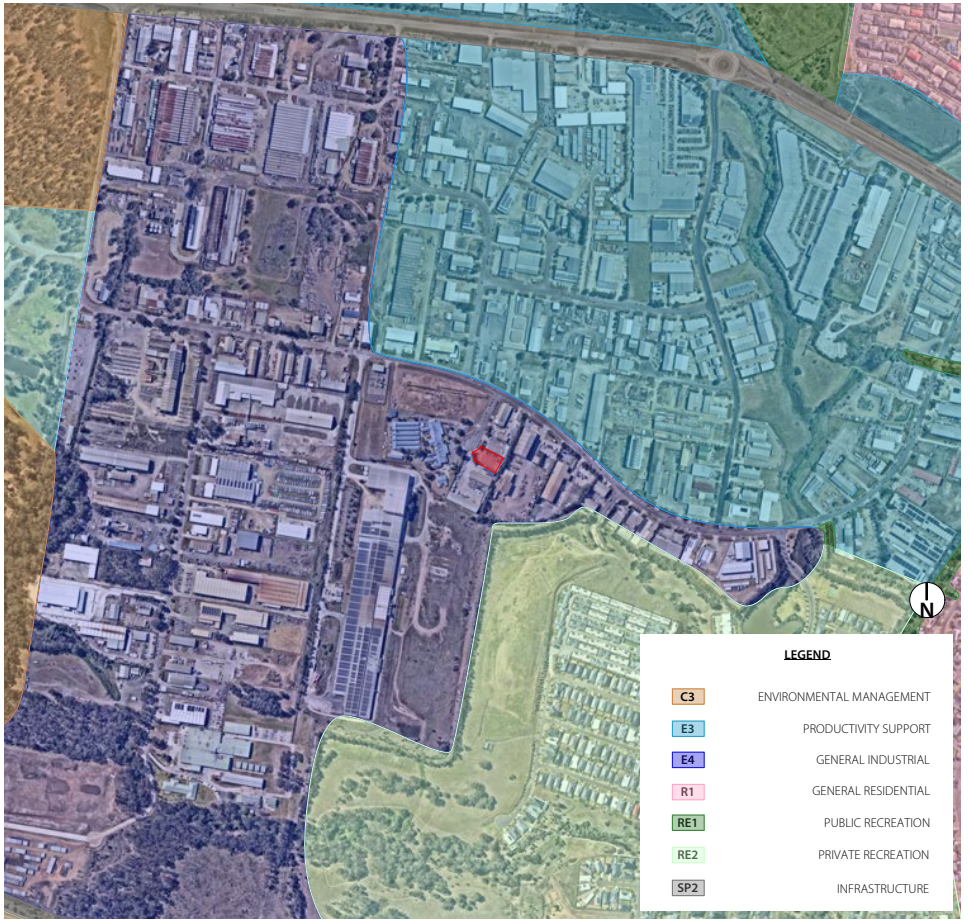

Image 3 Land zoning diagram

site description

3.2. Site Description

The site itself is approximately 1700 square metres located at the end of Burlington Place on the left hand side. The site is currently in use as an auto-mechanic shop and is to be retrofit into a recycled tyre plant.

The exterior of the site consists of container storage which is to be removed under the proposed new use of the lot. The street frontage consists of existing grass and a small specimen tree along with an existing hedgerow along the South-west boundary. The existing canopy is to be under-planted with native shrubs and grasses in order to soften the frontage of the lot and increase visual appeal from the street frontage.

Image 4 View from the end of Burlington Place looking into the proposal site.

4. VISUAL ENVIRONMENT

4.1. Landscape Character Units

Within the immediate site area surroundings there have been a range of character units identified, these have been selected using a combination of zoning, current use and their visual character. The landscape units shown in image 5 show the commercial and industrial zones (1) on the outskirts of the township leaving the residential (5) towards the middle.

Seven landscape character units are identifiable around the proposal site. These are:

1. Industrial / Commercial.
2. Public Recreation.
3. Private Recreation.
4. Environmental Management Area.
5. Residential development.
6. Constructed Water Body.
7. Arterial Roading.

These are explained in greater detail on the following page.

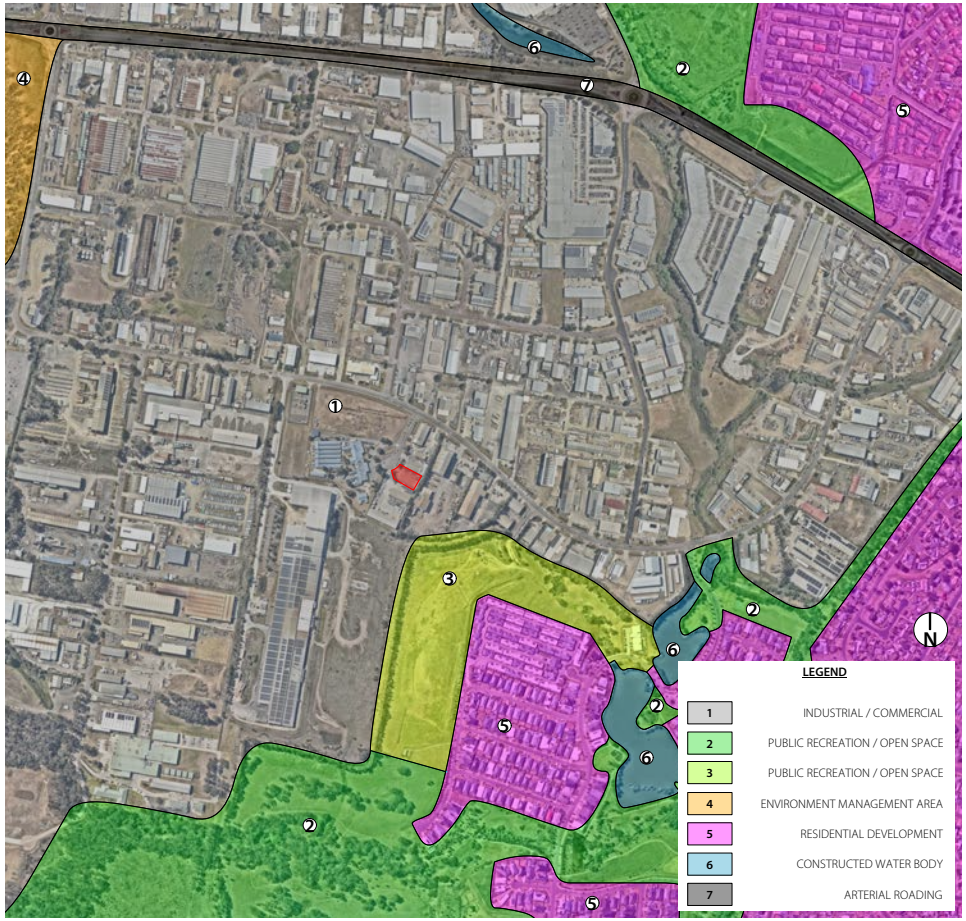

Image 5 Landscape character units.

landscape character units

1. Industrial / Commercial

Image 6 Industrial warehouse within E4 Zone along Racecourse Road.

Image 10 Industrial warehouses within E4 Zone along Racecourse Road.

Large scale industrial and commercial land zoning (E4 and E3). Within these zones there are large scale warehouse type buildings with little to no landscape mitigation along street frontage ranging from one to two stories in height.

2. Public Recreation

Image 7 Pocket park within local residential subdivision.

Within the residential development areas there are a range of open public green spaces in the forms of pocket parks. There is no views of the proposal site from any of these pocket parks.

3. Private Recreation

Image 8 Tom's Golf Range behind proposal site.

To the south of site is a private recreation area (RE2) known as Tom's Golf Range. The driving way faces away from the proposal site and can not see into the proposal site (as seen in image 15) due to existing screening from trees, raised mounds and larger warehouses.

4. Environment Management

Image 9 Local Environmental Management Area west of site.

To the west of site outside the local E4 General Industrial zone is a local Environmental Management zone (C3). The aim of this zoning is to protect, manage and restore, not allowing damaging developments on this land. There are no views to the proposal site from this zone and it is unlikely that there would be any impact on the values of the Environmental Management zone.

landscape character units

5. Residential development

Image 11 Image within Heritage Parc residential subdivision.

Image 14 Image within local retirement village 'Oak Tree Retirement'.

To the south-east of site is a small subdivision consisting of family sized lots at one to two stories high, there is also a small retirement village with small single story units. Views into site are full screened by existing tree lines and industrial warehouses.

6. Constructed water body

Image 12 Heritage Parc Lake.

Within immediate area of the proposal site is a set of stormwater basins and management systems along with a constructed lake within the Heritage Parc subdivision.

7. Arterial Roading

Image 13 Local Arterial roading.

North of the proposal site runs New England Highway. Classed as SP2 (Classified Road) this highway is the main point of connection for Rutherford and its surrounding townships. The highway aims to be an efficient corridor catering to increased growth of the surrounding townships while providing greater access for heavy industrial vehicles.

5. THE PROPOSAL

5.1. Proposed Project and Landscaping

Rutherford Tyre Recyclers Pty Ltd are seeking approval to establish a tyre recycling facility within an existing shed located at 9 Burlington Place, Rutherford (Lot 3005 / DP1040568) (the Proposal). The operation can be defined as a 'resource recovery facility'. The materials produced will be crumb rubber, recovered steel, recovered cotton, rubber pavers and rubber matting.

The Site covers an area of 1,655m2, with a ~290m2 existing shed on the site that has a ~35m2 office attached on the eastern side of the shed. The Site is supported by an outdoor concrete hardstand area with access to the Site from Burlington Place via a driveway. The driveway provides access to the outdoor hardstand which has access to the shed, open awning and office. The office contains staff amenities and is located on the western side of the Site, near the Site entrance.

Prior to operations, minor infrastructure changes to the industrial shed and Site are proposed to enable the fit-out and use of the Site as a best practice tyre recycling facility. This will involve enclosing the existing open awning at the back of shed, removing the dividing wall and installing two roller doors, creating a larger, fully enclosed industrial shed on Site. The total area of the new shed will be ~638m2. The two new roller doors will allow access into the industrial shed. A 9m above ground weighbridge will be installed on the hardstand area close to the access point of the Site. The Site will have new markings to show the loading bay area and five car spaces for staff. The Site will receive an average of 15 tonnes of used whole tyres per day, approximately 4,500 tonnes per annum. No other material will be received on-site. All incoming whole tyre deliveries are delivered into the Site by a 7.5 tonnes medium rigid vehicle (MRV), with access onto Site from Burlington Place. There will be four (4) deliveries of tyres per day. The MRV will proceed to the 9m above ground weighbridge to be weighed before proceeding to the loading area. The loading area is located outside the roller doors to the industrial shed and tyres will be unloaded by hand and immediately stacked in the Whole Tyre Storage Area. The MRV will be backloaded with products produced onsite before exiting the Site by proceeding further onto site, reversing back through the industrial building roller doors and turning right onto the weighbridge. The MRV will be weighed on the weighbridge to track the amount of product being removed from Site and will then exit the Site via the driveway access onto Bulington Place. An average of 18 vehicle movements (9 inbound and 9 outbound) will be generated by the Site per day. This includes up to five (5) staff vehicles and two trips by two 7.5 tonnes medium rigid vehicle (MRV) trucks. There will be one weekly waste collection on site.

All tyre recycling activities will occur inside the shed, including storage of all materials. No tyres or residual materials will be stored outside on the hardstand area. The used whole tyres are turned into crumb rubber on the Waste Tyre Recycling Production Line, which has a 98% efficiency. The first step involves the tyre de-beader to remove the metal wiring from inside the tyre. The tyre is then cut into a long rubber strip using the tyre strip cutter before being placed onto a conveyor belt and loaded into the whole tyre shredder. The next stage involves crushing the rubber blocks into mesh rubber powder using the double roller rubber breaker. A vibration screen is then used to separate the different sized pieces of crumb rubber. The Waste Tyre Recycling Production Line produces crumb rubber, residual steel and residual cotton from the whole tyres.

Some of the crumb rubber produced on-site will be used to produce rubber tiles and rubber mats in the Rubber Tiles Production area. This involves a small thermal-moulding process that coverts crumb rubber into rubber matting or rubber tiles. The first step involves mixing the rubber crumb with glue to create the bottom of the rubber tile. The top part of the rubber tile involves mixing rubber crumb, pigment and glue together in a barrel mixer. A vulcanizing machine is used to create vulcanized rubber tiles by compressing the rubber into dense, ultra durable, non-porous rubber tiles. The production of tiles or mats depends on the size of the mould used.

The facility will have two storage areas, both located on the eastern side of the industrial building. The Whole Tyre Storage Area will be used to stack the whole tyres after they have been delivered to the Site. The area capacity is 24m3 with a maximum height of 3.5m. The Crumb Rubber Storage Area is used to store materials produced on site, including crumb rubber, recovered steel and cotton from the tyre recycling process and rubber tiles and mats produced on site. The rubber tiles and mats will be stored on pallets. The area capacity is 24m3 with a maximum height of 3.5m. The storage areas will be marked on the concrete floor using hard wearing paint.

The tyre recycling facility will operate 6 days a week, with times varying for deliveries and recycling operations. A breakdown of the weekly operation is as follows:

- Crumb Rubber Production
  - Monday – Friday: 5am – 6pm
  - Saturday: 8am – 1pm
  - Sunday & Public Holidays – Closed
- Tyre Delivery
  - Monday – Friday: 7am – 6pm
  - Saturday: 8am – 1pm
  - Sunday & Public Holidays – Closed

the proposal

Terras Landscape Architects have been approached to conduct a Visual Impact Assessment (VIA) along with a landscape proposal to mitigate and soften the street frontage view of the site. The proposal will implement a 5m landscaping setback in accordance with Maitland Development Control Plan ***Section C.5 Industrial Land; Development Guidelines; Section 2.a.i - Landscaping.***

Existing established trees are to be retained to maintain established screening on site. New understory vegetation are proposed in the landscape development application which will provide visual relief to the street frontage leading to a positive visual impact.

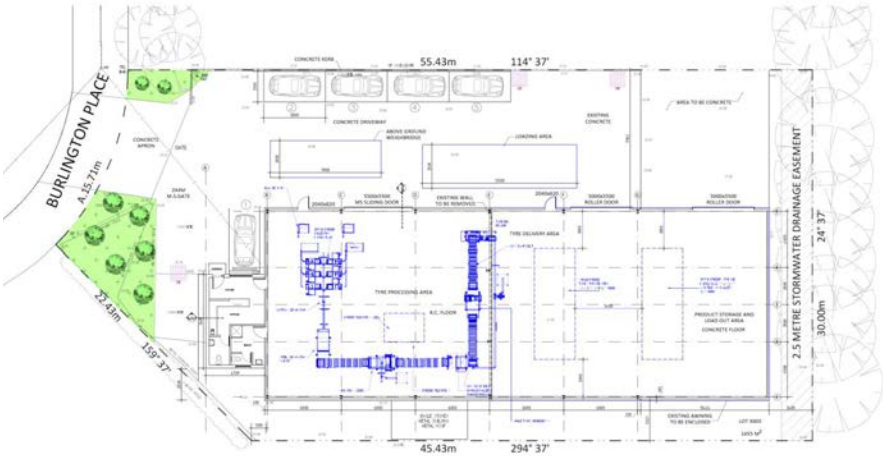

Image 15 Proposed site plan, Revision C.

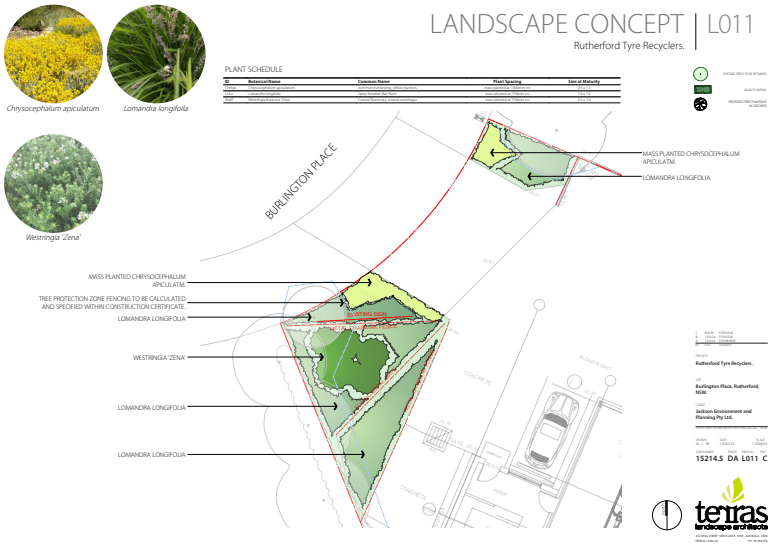

Image 16 Proposed landscape concept plan, Revision C.

viewpoint data sheets

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 250 metres.

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. All desktop study viewing locations were investigated on site (see image 17), where no views of the project site could be obtained due to existing site conditions and visual obstructions these have been shown in red.

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 (closet equivalent to the human eye), at eye level which is approximately 1600mm 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, where images have been stitched this has been noted on the image.

- Canon EOS 760D
- Summer/10:00am/05-02-24
- Camera used inc. focal length 31mm at 1.61x crop factor
- Taken by Josh Allan

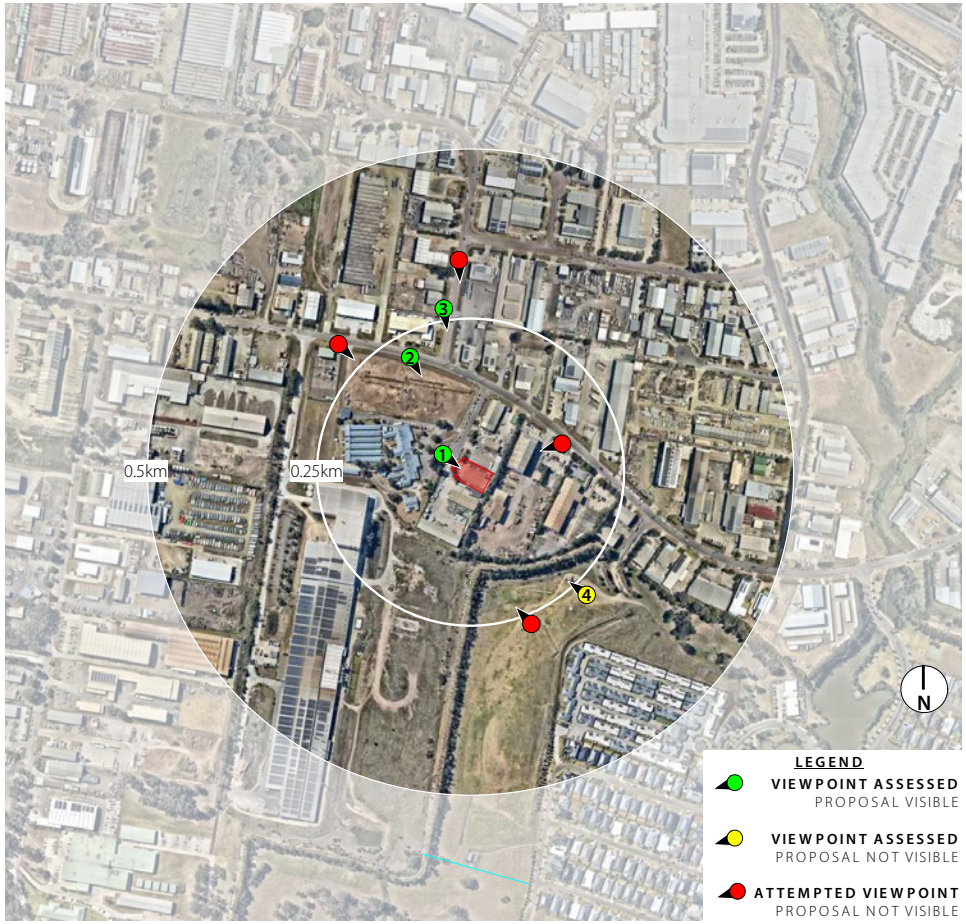

Image 17 Viewpoint locations

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 development the viewshed area is very restricted to a maximum distance of about 250m.

The most prominent views afforded into the site will be for vehicles using Burlington Place, this is a cul-de-sac so has limited users. There is currently minimal planting along the street frontage boundary to soften this view into site. This viewpoint is shown in further detail as image 19 viewpoint 1.

The remaining viewsheds are on low to moderate use roads and are screened by vegetation and existing buildings. There are no footpaths along these roads and all filtered views would be from within moving vehicles.

It is noted that the site is within General Industrial Zone E4 and would not stand out among buildings within its immediate surrounds.

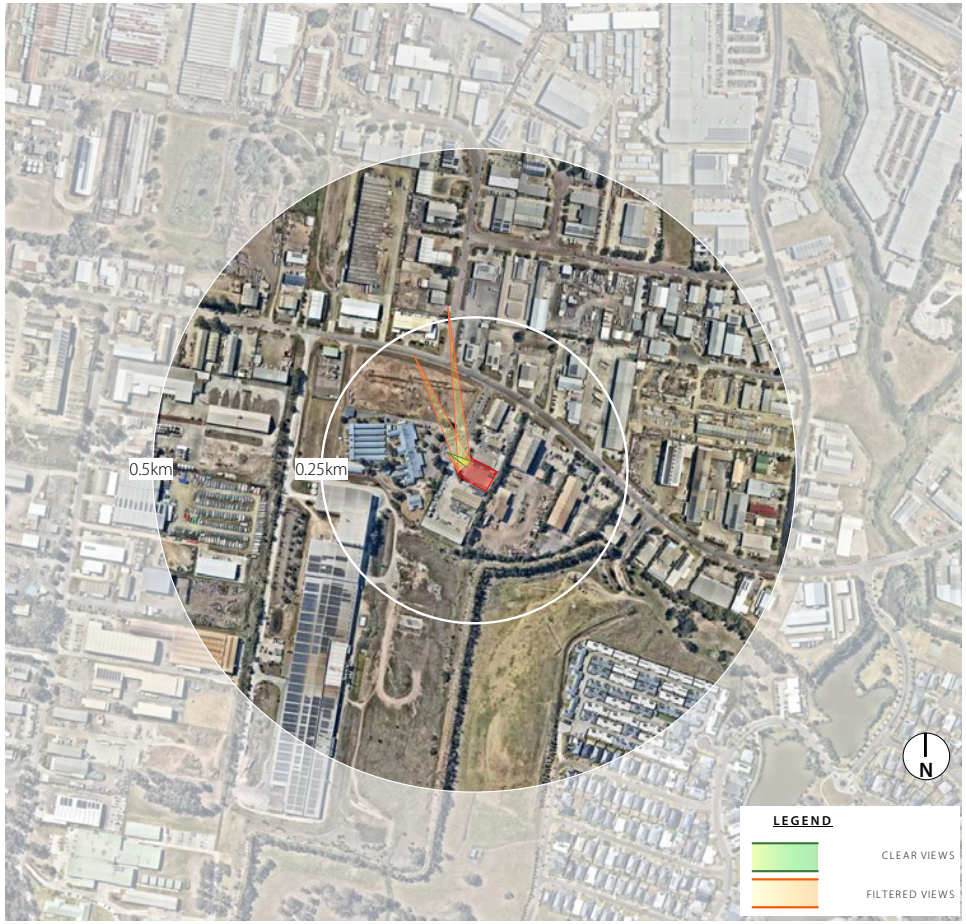

Image 18 Viewshed diagram.

assessment criteria

7. ASSESSMENT CRITERIA

7.1. 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.

Source: After Clouston & Brouwer, 1995

assessment criteria

7.2. Viewer Access

This 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.

VIEWER ACCESS MATRIX

		VIEWER DISTANCE											
		VERY SHORT (<1km)			SHORT (1-2km)			MEDIUM (2-3km)			LONG/DISTANT (>3km)		
		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	M	L	L	M/L	L	L	L
	LOW (50-149 PEOPLE PER DAY)	L	M	H	L	M	M	L	L	M	L	L	L
	MODERATE (150-199 PEOPLE PER DAY)	M	H	H	M	M	H	L	M	M	L	L	L
	HIGH (>200 PEOPLE PER DAY)	H	H	H	M	H	H	H	M	H	L	L	M

Source: Adapted from Urbis, 2008

7.3. Visual Effect

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.

This is particularly important should any proposed development extend above the skyline unless, once again, there are particular circumstances that may influence viewer perception and/or visual impact.

It should be noted that a high visual effect does not necessarily equate with a reduction in scenic quality. It is the combination of both visual sensitivity and visual effect that results in visual impact.

VISUAL EFFECT TABLE

LEVELS	HIGH	RESULTS WHEN A PROPOSAL PRESENTS ITSELF WITH HIGH VISUAL CONTRAST TO ITS VIEWED LANDSCAPE WITH LITTLE OR NO INTEGRATION AND/OR SCREENING.
	MODERATE	RESULTS WHERE A PROPOSAL NOTICEABLY CONTRASTS WITH ITS VIEWED LANDSCAPE, HOWEVER, THERE HAS BEEN 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).
	LOW	OCCURS WHEN A PROPOSAL BLENDS IN WITH ITS 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.
	NEGLIGIBLE	THERE ARE NO VIEWS OF THE PROPOSAL COMPONENTS AND AS SUCH THERE IS NO IMPACT

Source: Adapted from EDAW, 2000

assessment criteria

7.4. Visual Sensitivity

Another aspect affecting visual assessments is visual sensitivity. This 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 characterise 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

		DISTANCE ZONES				
		FOREGROUND 0-0.5km	0.5-1km	MIDGROUND 1-1.5km	1.5 - 2km	BACK-GROUND (>2km)
LAND USE	RESIDENTIAL: RURAL OR URBAN	MODERATE SENSITIVITY	MODERATE SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY
	NATURAL AREAS	HIGH SENSITIVITY	HIGH SENSITIVITY	HIGH SENSITIVITY	MODERATE SENSITIVITY	LOW SENSITIVITY
	TOURIST OR PASSIVE RECREATION	HIGH SENSITIVITY	HIGH SENSITIVITY	MODERATE SENSITIVITY	MODERATE SENSITIVITY	LOW SENSITIVITY
	MAJOR TRAVEL CORRIDORS	HIGH SENSITIVITY	MODERATE SENSITIVITY	MODERATE SENSITIVITY	MODERATE SENSITIVITY	LOW SENSITIVITY
	TOURIST ROADS	HIGH SENSITIVITY	MODERATE SENSITIVITY	MODERATE SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY
	MINOR ROADS	MODERATE SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY
	AGRICULTURAL AREAS	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY
	INDUSTRIAL AREAS	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY	LOW SENSITIVITY

Source: Adapted from EDAW, 2000

assessment criteria

7.5. 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 and visual effect 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 Effect and Visual Sensitivity levels combine to produce varying degrees of Visual Impact. The overall project assessment summary is assessed as LOW. Further assessment is provided in the Visual Evaluation for selected viewpoints.

VISUAL IMPACT TABLE					
		VISUAL EFFECTS LEVELS			
		HIGH	MODERATE	LOW	NEGLIGIBLE
VISUAL SENSITIVITY LEVELS	HIGH	HIGH IMPACT	HIGH IMPACT	MODERATE IMPACT	NEGLIGIBLE IMPACT
	MODERATE	HIGH IMPACT	MODERATE IMPACT	LOW IMPACT	NEGLIGIBLE IMPACT
	LOW	MODERATE IMPACT	LOW IMPACT	LOW IMPACT	NEGLIGIBLE IMPACT
	NEGLIGIBLE	NEGLIGIBLE IMPACT	NEGLIGIBLE IMPACT	NEGLIGIBLE IMPACT	NEGLIGIBLE IMPACT

Source: EDAW, 2000

7.6. Visual Absorption

Visual absorption capacity (VAC) is the physical capacity of a landscape to accept human alterations without loss of its inherent visual character or scenic quality.

viewpoint 1

Location: End of Burlington Place Looking East

Image 19 View east towards site ***(Photostitched Image).***

Site
Distance: 20m west
View position: Neutral
Visual Quality: Low

Viewpoint 1	
Viewer Access	Despite the close proximity the proposal site is at the end of a cul-de-sac within an industrial zone and the low viewer number sand viewing time, viewer access is considered LOW.
Visual Effect	The visual effect is assessed as VERY LOW, as the proposal will largely present as an existing view along with its low contrast from the buildings around it.
Visual Sensitivity	The visual sensitivity of the site is considered LOW as it is located within a General Industrial (E4) Zone and its situated on a low-use minor road
Visual Impact	As the proposal will not have any alterations to the outside of the building along with its inability to stand out from the buildings around it the visual impact is assessed as LOW.
Professional Comment	Views from Viewpoint 1 are only visible to users from Burlington Place. The visual impact will be VERY LOW as additional planting will not screen new works however, the minor changes to the building will provide minimal visual impact and the proposal will largely present as the existing viewed landscape. The additional planting at the street frontage will provide a positive visual relief to the existing viewed landscape.

Visual Evaluation Criteria

	NEGLIGIBLE / VERY LOW	LOW	MODERATE / MEDIUM	HIGH
Viewer Access				
Visual Effect				
Visual Sensitivity				

Visual Impact - Significance rating based on above criteria:

Negligible / Very Low

Reassessment based on Professional Opinion:

N / A

viewpoint 2

Location: Roadside on Racecourse Road Looking South-East

Image 20 View south-east towards site. ***(Photostitched Image).***

Site
Distance: 230m north-west
View position: Neutral
Visual Quality: Low

Viewpoint 2	
Viewer Access	Viewpoint 2 along Racecourse Road has a HIGH viewer access rating as a result of the number of vehicles due to its use as a prominent thoroughfare through the industrial zone, however, viewer access is considered NEGLIGIBLE as no views of the proposed works are visible from this location.
Visual Effect	The visual effect is assessed as NEGLIGIBLE, as proposed external alterations will not be visible from this location. Existing built form is visible but negligible visual impact due to the fencing in the foreground and existing vegetation.
Visual Sensitivity	The visual sensitivity is not applicable and assessed as NEGLIGIBLE as proposed external works will not be visible from this location. Existing built form presents as low sensitivity as it is viewed in an established, industrial zone.
Visual Impact	The visual impact is NEGLIGIBLE from this location due to the above factors.
Professional Comment	The visual impact from this viewpoint will be NIL as proposed external alteration works will not be visible from this location.

Visual Evaluation Criteria				
	NEGLIGIBLE / VERY LOW	LOW	MODERATE / MEDIUM	HIGH
Viewer Access				
Visual Effect				
Visual Sensitivity				
Visual Impact - Significance rating based on above criteria:				
Negligible				
Reassessment based on Professional Opinion:				
NIL				

viewpoint 3

Location: Roadside on Bradmill Ave Looking South

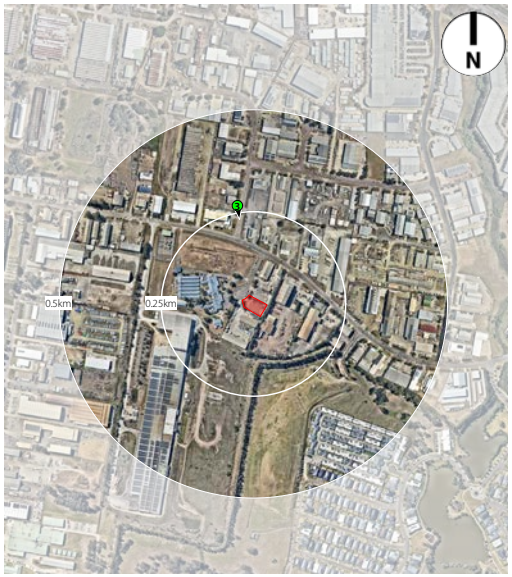

Image 21 View south-east towards site. ***(Photostitched Image).***

Site
Distance: 255m north-west
View position: Neutral
Visual Quality: Low

Viewpoint 3	
Viewer Access	Viewpoint 3 has a LOW viewer access rating as a result of the limited number of vehicles as a minor road in an industrial zone, however, viewer access is considered NEGLIGIBLE as no views of the proposed works are visible from this location.
Visual Effect	The visual effect is assessed as NEGLIGIBLE, as proposed external alterations will not be visible from this location. Existing built form is visible but negligible visual impact due to the fencing in the foreground and existing vegetation.
Visual Sensitivity	The visual sensitivity is not applicable as proposed external works will not be visible from this location. Existing built form presents as low sensitivity as it is viewed in an established, industrial zone.
Visual Impact	The visual impact is NEGLIGIBLE from this location due to the above factors.
Professional Comment	The visual impact from this viewpoint will be NIL as proposed external alteration works will not be visible from this location.

Visual Evaluation Criteria				
	NEGLIGIBLE / VERY LOW	LOW	MODERATE / MEDIUM	HIGH
Viewer Access				
Visual Effect				
Visual Sensitivity				
Visual Impact - Significance rating based on above criteria:				
Negligible				
Reassessment based on Professional Opinion:				
NIL				

viewpoint 4

Location: Oak Tree Retirement/Tom's Golf Range

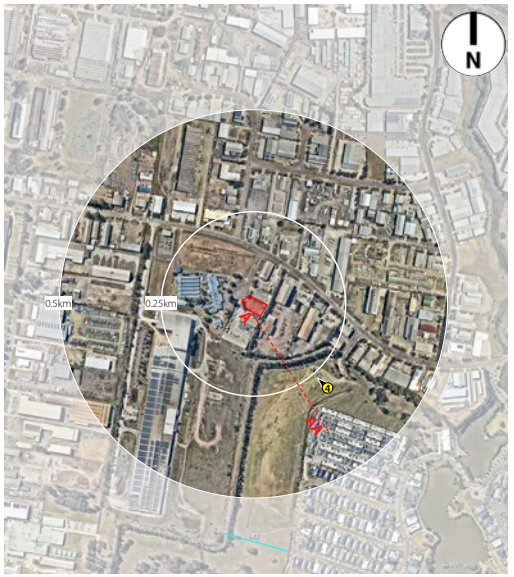

Image 22 View north-west towards site. ***(Photostitched Image).***

Site
Distance: 260m south-east
View position: Neutral
Visual Quality: Low

Viewpoint 4	
Viewer Access	The viewer access is not assessed as the proposal can not be seen from this location.
Visual Effect	The visual effect is not assessed as the proposal can not be seen from this location.
Visual Sensitivity	The visual sensitivity is not assessed as the proposal can not be seen from this location.
Visual Impact	The visual impact is not assessed as the proposal can not be seen from this location.
Professional Comment	The golf range and retirement village located to the south east of the proposal site has no views of any existing or proposed alterations outlined within the proposal description.

Visual Evaluation Criteria

	NEGLIGIBLE / VERY LOW	LOW	MODERATE / MEDIUM	HIGH
Viewer Access				
Visual Effect				
Visual Sensitivity				

Visual Impact - Significance rating based on above criteria:

N/A

Reassessment based on Professional Opinion:

viewpoint summary

8. VIEWPOINT SUMMARY

Viewpoint Summary					
	ACCESS	EFFECT	SENSITIVITY	IMPACT	REASSESSED IMPACT
Viewpoint 1 Burlington Pl. (20m)	LOW	VERY LOW	LOW	VERY LOW	N/A
Viewpoint 2 Racecourse Rd. (220m)	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NIL
Viewpoint 3 Bradmill Ave. (255m)	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NIL
Viewpoint 4 Oak Tree Retirement. (260m)	N/A	N/A	N/A	N/A	N/A

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. Visual effect may be either based on the degree of exposure or the number of people likely to be affected.

There is no impact to any residential dwellings as all local residential areas including and not limited to Oak Tree Retirement Village are completely screened from the proposal site via existing tree lines and industrial warehouses. This can be seen within viewpoint four through the use of nearmaps cross section tool, and images taken from the viewpoint location.

Viewpoint one is considered to have the highest visual impact due to the close proximity to the site, it is unlikely that there would be much viewer access to the site and all viewer access would be within a vehicle and for a short viewing time. The viewpoint is assessed as a VERY LOW impact rating due to proposed alterations of the existing building being partially visible, however, the bulk of the built form is not changing. Proposed understory vegetation will not provide screening from viewpoint one but rather provide a visual relief from the built form.

Viewpoints two and three have a higher viewer access rate but are partially screened through foreground metal fencing from the lot in front along with existing established vegetation. The visual impact has been assessed as NIL as the proposed works are not visible from either of these locations. The roads associated with these viewpoints have no footpath and the site would only be viewed from within a moving vehicle traveling east. The building on the proposed site does not differ from those around it with three identical industrial buildings in succession therefore, the views from these locations are considered established views.

The full scope of the assessment included an offset of approximately 1.5 kilometres from the subject site when looking at local zoning and character units, however the concentration of the assessment occurred within approximately 250 metres as existing development and vegetation limited views beyond this zone.

9.2. Conclusion and Recommendations

A review of the visual catchment of the proposal showed that views of the site were limited to within approximately 250m of the site due to the existing built environment and vegetation.

The viewpoints assessed are viewed within the context of the surrounding landscape, and the existing dwelling on the proposal site integrates with the existing built environment.

The proposal is located within Rutherford General Industrial (E4) zone. The proposal will have a VERY LOW accumulative visual impact on the surrounding area and is noted that the proposal is an existing dwelling and all proposed works on the building would not be seen from viewpoints other than the street frontage. The proposal is consistent with the surrounding industrial buildings.

The proposal will increase the site's visual appeal as proposed planting will provide visual relief from the built form which is currently grass and small to medium trees. Terras Landscape Architects propose the use of native shrubs and grasses in order to embellish and enhance the existing landscaping as outlined in the landscaping documentation.

10. REFERENCES

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