Proposed Wind Farm – Scott River

Landscape and Visual Impact Assessment

SynergyRED

10 January 2025

→ **The Power of Commitment**

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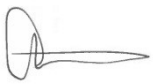
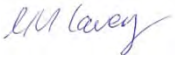
S4	1	S Elton	E van der Velde		M Lavery		10/01/2024

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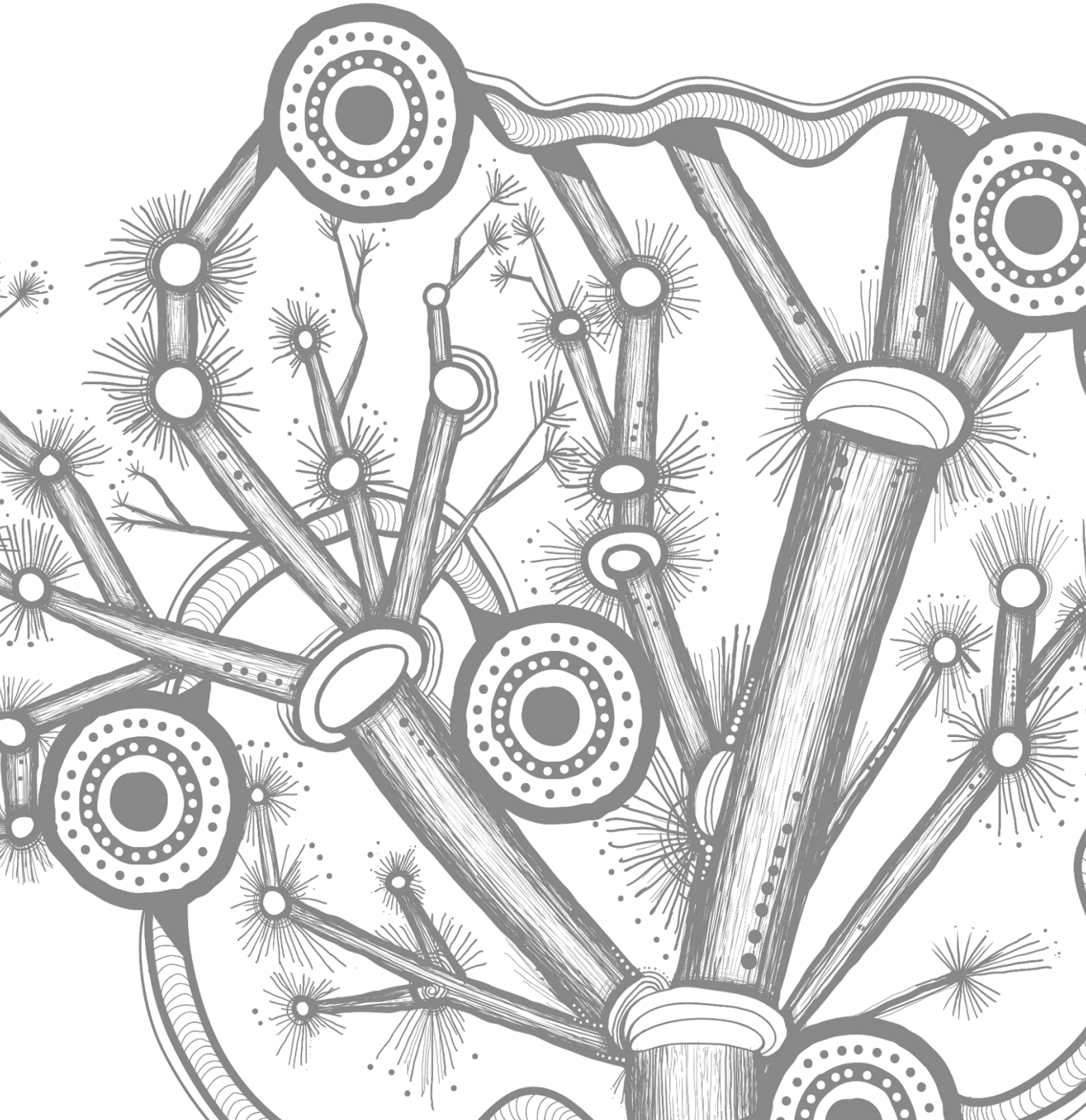
Acknowledgement of Country

GHD acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of the land, water and sky throughout Australia on which we do business. We recognise their strength, diversity, resilience and deep connections to Country. We pay our respects to Elders of the past, present and future, as they hold the memories, knowledges and spirit of Australia. GHD is committed to learning from Aboriginal and Torres Strait Islander peoples in the work we do.



Executive summary

Introduction

SynergyRED engaged GHD Pty Ltd (GHD) to prepare a Landscape and Visual Impact Assessment (LVIA) for a Proposed Wind Farm in Scott River (The Proposal). The Study Area for this assessment is generally confined to the likely extent of visibility of the Proposal, within the surrounding context, being approximately 30 km in each direction of the Proposal site.

The purpose of the LVIA is to support the following:

– Environmental Protection Authority (EPA) referral under Part IV, Section 38 in accordance with *Environmental Factor Guideline –Social Surroundings* (EPA, 2023e) under the Environmental Protection Act 1986.
– Development approval application (Shire of Augusta Margaret River) to commence development of the Proposal described in Section 2.

Method

The LVIA assessment was informed by a desktop review, site inspection (March and August 2024), identified Landscape Character Units (LCU)'s and values, and a review of previous studies within a similar landscape context. It includes an assessment of potential landscape and visual impacts from twelve viewpoints (sensitive visual receptor locations) with four photomontages of the proposed works. Reflective of assessment findings the Report concludes with mitigation and management measures, to lessen the visual impacts of the Proposal, related to the LCU's and viewpoints.

Proposal summary

Primarily located within cleared farmland, the Proposal is envisioned to be built as a single stage project comprising nominally of 20 wind turbines, two meteorological masts, on-site substation, operational and maintenance facility, hard stand areas, transmission line and 33 kilovolt (kV) underground electrical transmission.

LVIA findings

Four LCU's were identified in the Study Area. The significance of impact on LCU1 is high-moderate, as the Proposal will likely affect the characteristics of LCU1, where the Leeuwin-Naturaliste Ridge is recognised as a key landscape feature. The significance of impact on LCU2 is also high-moderate, with contributing factors including scenic qualities and the inclusions of Scott National Park and Gingilup Swamps Nature Reserve, which host highly diverse flora and fauna species. The findings indicate a high-moderate significance of impact on LCU3 due to the high sensitivity and importance of notable drainage features that are registered Aboriginal heritage sites, as well as several national parks and nature reserves. The Proposal will likely result in notable changes to this landscape character. LCU4 would experience a moderate significance of impact, as the changes will be confined to specific locations within LCU4.

Twelve key and representative viewpoints were selected for this LVIA based on the desktop study and community feedback, Zone of Theoretical Visibility (ZTV) analysis and fieldwork conducted in March 2024. Consideration was also afforded to the duration of impact which was considered short term during construction and permanent during operation. This assessment identified the significance of impact for each viewpoint which ranged from negligible to high.

Mitigation and management measures

After conducting a contextual analysis, the visual management objectives for the Study Area were outlined. The focus of the visual management objectives included optimising the siting and design of the Proposal to protect and maintain the distinct landscape characters. The key recommendation, in support of this objective, and as practically possible with regards to flora and fauna is consideration of realignment of the wind turbines into a regular shape, such as a double line or grid, and a reduction in turbine height to reduce visual impact.

Other recommended mitigation and management measures include maintaining the rural landscape character by adopting measures such as retaining as much existing remnant vegetation as possible within the Proposal site and re-establishing any pastural land disturbed during construction. In addition, consideration of Aboriginal heritage

values and engagement with the Wardandi and Bibulmun/Piblemen people was recommended as a measure for protection and maintenance of cultural heritage values.

Concluding remarks

This report is subject to, and must be read in conjunction with, the limitations set out in Section 1.4 and the assumptions and qualifications contained throughout the Report.

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Terminology

Terminology	Definition
Landscape	All aspects of a tract of land, including landform, vegetation, buildings, villages, towns, cities and infrastructure.
Landscape character	The combined quality of built, natural and cultural aspects that make up an area and provide its unique sense of place.
Landscape character unit	Areas of homogenous (similar) patterns of visual characteristics such as landform, vegetation, water form and land use as well as individual features.
Landscape impacts	Changes in the character and quality of the landscape that occur because of change and development, while *visual impacts* relate to the appearance of these changes.
Magnitude	The measurement of the scale, form and character of a development proposal when compared to the existing condition. In the case of visual assessment this also relates to how far the proposal is from the viewer. Combines with sensitivity, magnitude provides a measurement of impact.
Receptor	An aspect of the landscape or view that could be impacted, such as physical resources or viewer groups.
Sensitivity	The sensitivity of the landscape character or view and its capacity to absorb change of the nature of the development proposal. In the case of visual impact this also relates to the type of viewer and number of viewers. Combined with magnitude, sensitivity provides a measurement of impact.
Susceptibility to change	The capacity of the landscape to accommodate a change of a particular type or scale, without adverse effects on the existing landscape character, requirement for baseline situation maintenance, and obtaining new landscape planning policies and approaches.
Study Area	Consists of land in the vicinity of, and including, the Proposal site. The study area is a wider area surrounding the Proposal site as defined in this assessment, including landscape that has the potential to be indirectly impacted by the Proposal.
The Proposal	A proposed wind farm in Scott River
View	Comprises a portion of a landscape seen by an observer.
Viewpoint	The point from which a view is observed.
Visual amenity	The overall quality of views that people enjoy of their surroundings.
Visual impact assessment	The analysis of changes in the appearance of the landscape as a result of development. Impacts may be negative or positive.
Visual receptor	Individuals and/or defined groups of people who have the potential to be affected by the proposal.
Zone of theoretical visibility	A map, usually digitally produced, showing areas of land within which, a development is theoretically visible.

Abbreviations

Abbreviations	Long form
3D	Three dimensional
AHD	Australian Height Datum
AMR Shire	Shire of Augusta Margaret River
DA	Development Approval
BOP	Balance of Plant
EPA	The Western Australian Environmental Protection Authority
GHD	GHD Pty Ltd
GIS	Geographic Information System
km	Kilometre
kV	Kilovolt
LCU	Landscape Character Unit
LGA	Local Government Area
LVIA	Landscape and Visual Impact Assessment
O&M facility	Operation and maintenance facility
m	Metre
SWIS	South West Interconnected System
VP	Viewpoint
WA	Western Australia
WAPC	Western Australian Planning Commission
ZTV	Zone of Theoretical Visibility

Introduction

1. Introduction

GHD Pty Ltd (GHD) engaged by Synergy Renewable Energy Development (Synergy RED) has prepared this report and the accompanying information in support of the proposed development of a Proposed Wind Farm in Scott River (The Proposal), situated within the Scott River region, next to Chester and Pagett Nature Reserves, South Blackwood State Forest and Scott National Park.

SynergyRED is a wholly-owned subsidiary of Synergy (electricity retail and generation corporation) located in Perth, Western Australia. SynergyRED is currently in the process of investigating future renewable energy assets with the potential to connect to the South West Interconnected System (SWIS). The Proposal is one such project being investigated.

1.1 Purpose and scope of this report

This report provides a Landscape and Visual Impact Assessment (LVIA) for the Proposal. The purpose of this report is to meet the requirements of:

– Environmental Protection Authority (EPA) Environmental Factor Guideline –Social Surroundings (EPA, 2023) under the Environmental Protection Act 1986.
– Development Approval (DA) application (Shire of Augusta Margaret River) to commence development of the Proposal described in Section 2.

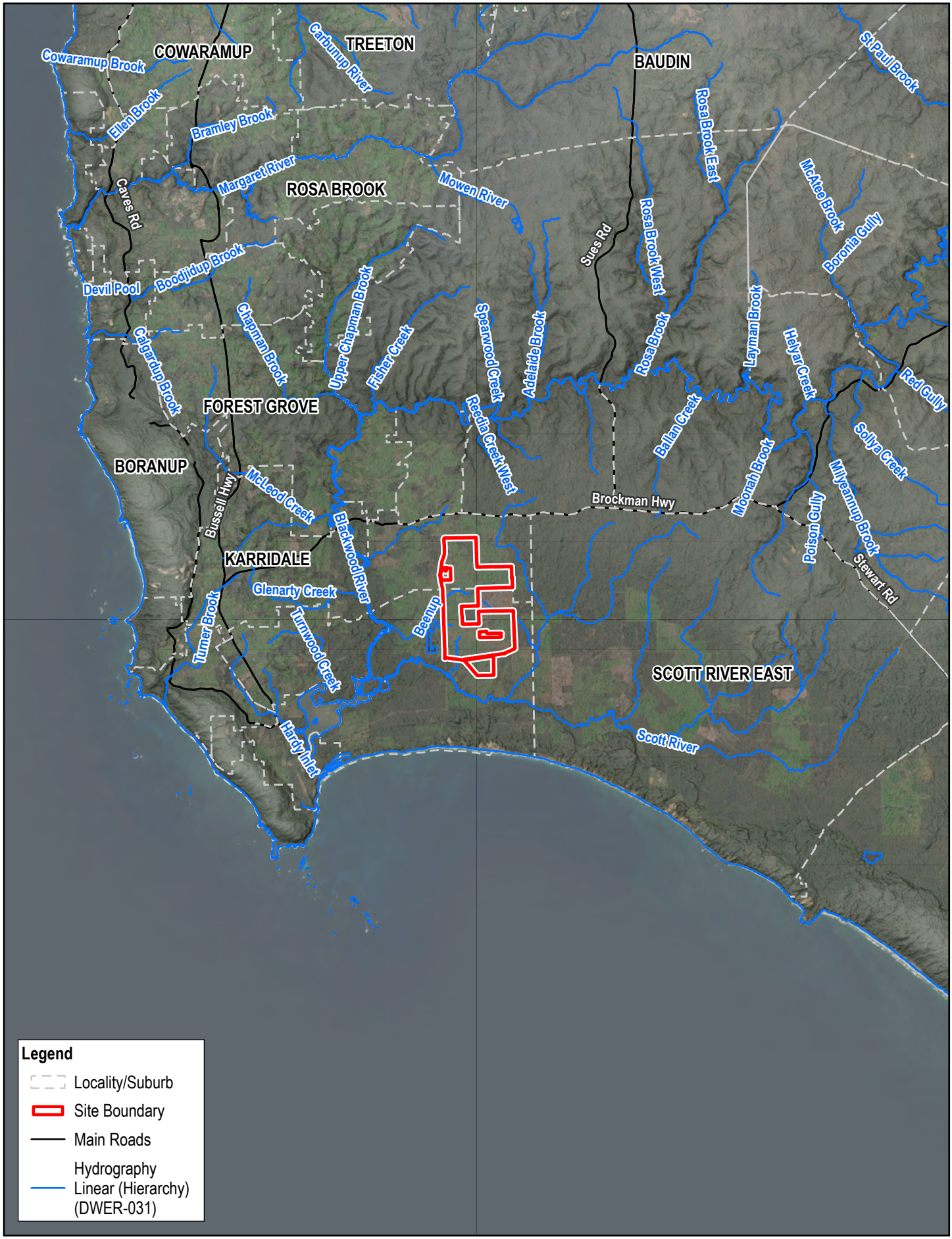
The Proposal has been considered against the relevant planning and environmental regulatory framework applicable to landscape and visual impact.

1.2 Overview of the Proposal

The Proposal is planned within the South West Boojarah, traditional lands of the Bibulmun/Piblemen Noongar language group, in the southwest region of Western Australia (WA). The Proposal site is located approximately 15 kilometres (km) northeast of Augusta, 5 km northeast of Molloy Island, 3 km southeast of Nillup Village General Store and less than 2 km from Brockman Highway, the nearest main road. The Proposal site covers an area of approximately 4,000 hectares located on freehold land owned by multiple landowners. Zoned ‘General Agriculture’ under the provisions of the Shire of Augusta Margaret River Local Planning Scheme No. 1 (LPS1), the majority of the Proposal site has been cleared and is currently used for agricultural purposes with some areas of remnant vegetation remaining.

Scott River, a tributary of the Blackwood River, lies close to the southern boundary of the Proposal and flows in an east-west direction to the Hardy Inlet.

The Proposal is proposed to be built as a single stage project comprising nominally of 20 wind turbines, two meteorological masts, on-site substation, operational and maintenance facility, hard stand areas, transmission line and 33 kV underground electrical transmission. For the Proposal location see Figure 1.



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Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Synergy Renewable Energy Developments Pty Ltd
Proposal Location Plan

Project No. **12632296**
Revision No. **0**
Date **09/01/2025**

Project Location Plan

FIGURE 1

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1.3 Report structure

The report comprises sections itemised in Figure 2.

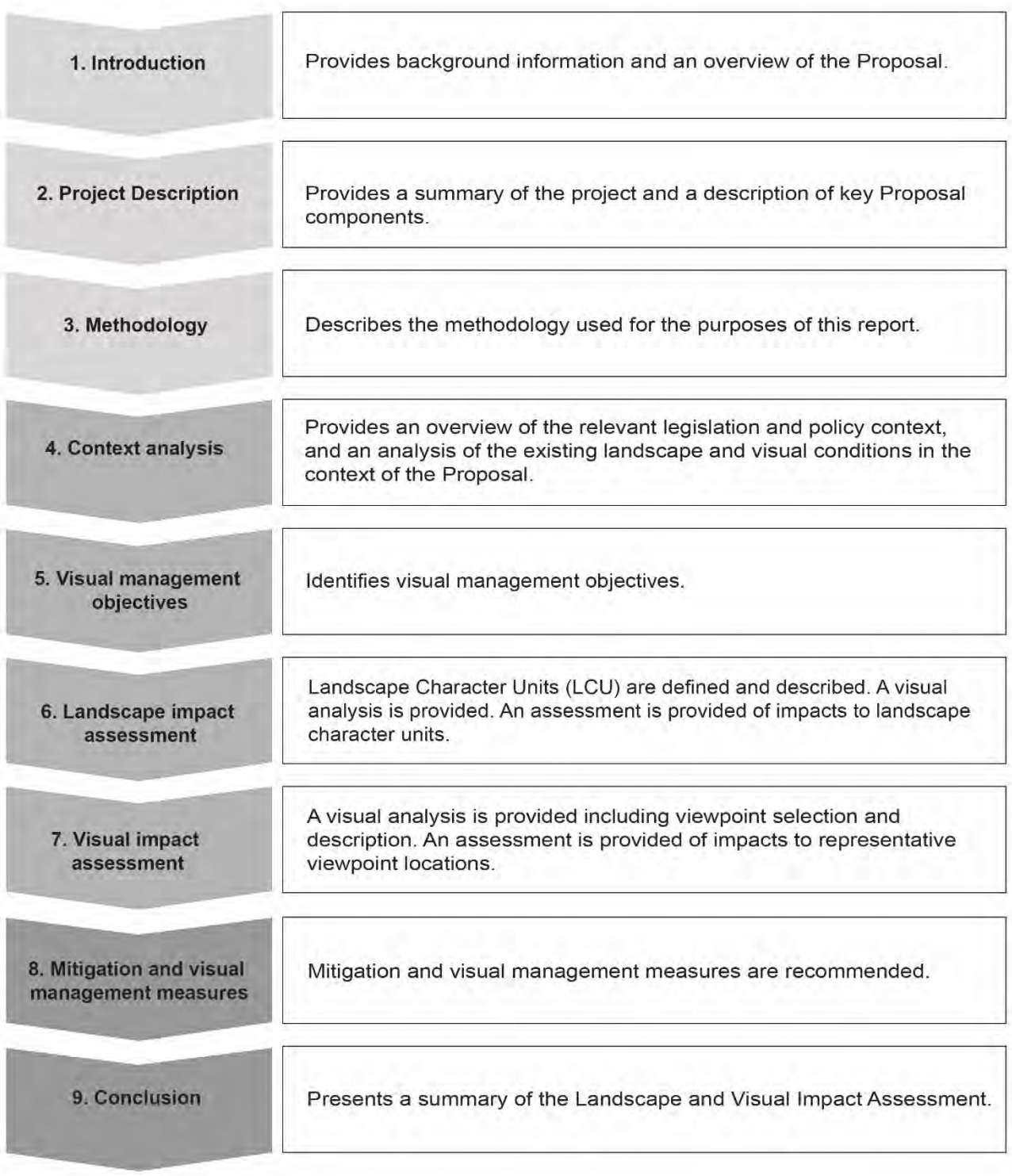


Figure 2 Report structure

1.4 Limitations

This report has been prepared by GHD for SynergyRED and may only be used and relied on by SynergyRED for the purpose agreed between GHD and SynergyRED as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than SynergyRED arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 8 and 9 of this Report). GHD disclaims liability arising from any of the assumptions being incorrect.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

1.5 Assumptions

There is no national guidance on the assessment of landscape and visual impacts specific to Australia. However, in WA, the industry typically refers to *Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting, and design (*Western Australian Planning Commission, 2007). This assessment has also referred to:

– *Guidelines for Landscape and Visual Impact Assessment, Third Edition* (Landscape Institute, 2013)
– *Environmental Factor Guideline: Social Surroundings* (Environmental Protection Authority, 2016)
– *Position Statement: Renewable energy facilities* (Western Australian Planning Commission, 2020)

The assessment aims to be objective and describe any potential changes factually. While potential impacts resulting from the Proposal are defined, the significance of these changes requires qualitative (subjective) judgements. The conclusion of this assessment therefore combines objective measurement and professional interpretation. While this assessment aims to be objective, it is recognised that LVIA can be subjective, and individuals are likely to associate different visual experiences to the study area.

This assessment is based on the information provided to GHD at the time of writing. The scope of this assessment does not include consideration of landscape and visual impacts from lighting or during night time conditions, as these are not included or required in the design of the Proposal.

2. Project description

2.1 Site overview

The Proposal covers an area of approximately 4,000 hectares and is located on freehold land owned by multiple landowners. Zoned ‘General Agriculture’ under LPS1, the majority of the Proposal site has been cleared and is currently used for agricultural purposes with some areas of remnant vegetation remaining. It is possible that a minor level of remnant vegetation clearing, (as approved), may occur during the development of the Proposal. Access to the Proposal site is via Scott River Road.

2.2 Project overview

SynergyRED is currently in the process of investigating future renewable energy assets with the potential to connect to the South-West Interconnected System (SWIS). The Proposal is one such project being investigated.

The Proposal is proposed to be developed as a single stage project. Elements of the Proposal, shown in Figure 3 include nominally up to 20 wind turbines, two meteorological masts, on-site substation, Operational and Maintenance facility (O&M facility), hard stand areas, transmission line and 33 kilovolt (kV) underground electrical transmission. The wind turbines and ancillary infrastructure are described below.

2.2.1 Wind turbines

The final turbine model and design are yet to be confirmed. It is expected that a traditional turbine tower design would be utilised, and the turbines would be light grey to reduce their contrast with the background sky and minimise reflections (Photo 1).

The following maximum dimensions have been used for this assessment to allow selection of wind turbines withing the following criteria:

– Maximum tip height: 250 m
– Maximum hub height: 164 m

Photo 1 ***Example 7.2 megawatt wind turbine***

2.2.2 Ancillary infrastructure

Ancillary infrastructure would include transmission poles, access tracks, underground 33 kV electrical reticulation wind turbine foundations and hard stand areas. Permanent access tracks are required to form a connection between turbines and existing public roads. An onsite substation is also proposed within the site area along with an operational and maintenance facility.

2.2.2.1 Electrical reticulation

Cable routes were selected to utilise similar routes as other collector groups and access roads to minimise trenching and ground disturbance. Further optimisation will need to be completed to verify this design.

2.2.2.2 Electrical transmission line

Transmission from the wind farm substation would tie into the existing MJP-BNP 81 line at the voltage of 132 kV. This tee connection occurs approximately 2 km from the Beenup Substation. The proposed transmission line corridor is approximately 4 km, running through the centre of the Proposal site.

2.2.2.3 Substation

An on-site substation is proposed within the Proposal site, at the centre of the site. The substation would measure approximately 200 m by 200 m and may contains workshops, transformers, and high voltage equipment. The final layout and dimensions are subject to further detailed design.

2.2.2.4 Operational and maintenance facility

An O&M facility is also proposed, at the centre of the site close to the substation. This would typically include areas such as an office, warehouse, car parking and storage facilities.

2.2.2.5 Meteorological masts

Two permanent meteorological mast are proposed within the Proposal site, with a maximum height of 164 m.

2.2.2.6 Batching plant

A temporary batching plant, with a facility footprint measuring 100 m by 100 m is also proposed to produce concrete on-site during the construction phase.

2.2.2.7 Construction and laydown area

A temporary construction and laydown area measuring 400 m by 100 m would also be required and typically consist of a site office, machinery, fuel storage, amenities, and car parking. They would also be suitable to receive and store machinery, wind farm components and materials. If required, to reduce the need for clearing of native vegetation, construction and laydown areas could be partially relocated to previously cleared land.

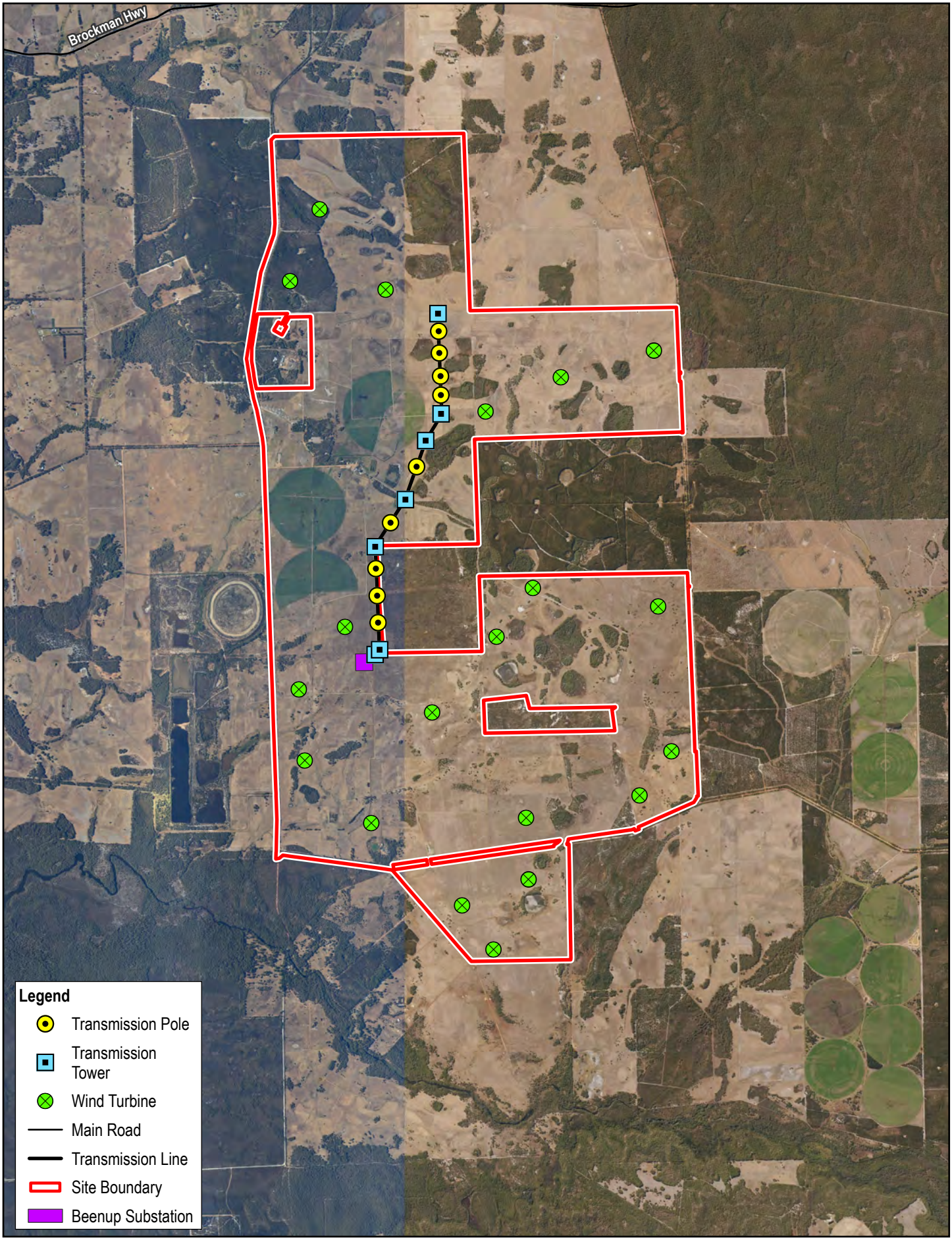
The construction duration is estimated to be approximately 24 months with a peak manning of up to 150 people at peak periods. It is assumed that project accommodation would be met by the utilisation of multiple facilities within an appropriate radius. As part of the feasibility, SynergyRED is considering off-site, mixed onsite and offsite and onsite accommodation options.

Some prior enabling works will be required prior to the commencement of construction. These may include:

– site investigations, such a geotechnical investigations or surveys
– establishing water supply options
– possible offsite road works
– installation of wind monitoring towers and establishment of roads and clearing for their installation.

The following activities are likely to occur during construction:

– potential construction of temporary compounds, works accommodation, laydown, and storage areas
– civil works, including construction of new site access tracks, associated earthworks, and vegetation clearance within the Proposal site and excavation for the foundations
– transportation of wind farm and transmission line components
– installation of wind turbine transformers, in parallel with electrical reticulation works
– construction of wind turbines, and ancillary infrastructure including meteorological masts, and electrical reticulation
– electrical balance of plant works including overhead transmission line, substations and switching stations
– rehabilitation of the site.



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Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Synergy Renewable Energy Developments Pty Ltd
Proposal Location Plan

Project No. **12632296**
Revision No. **0**
Date **09/01/2025**

Proposal Site and Components Plan

FIGURE 3

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3. Methodology

This section outlines the methodology used to assess the impacts of the Proposal on landscape character and visual amenity (Figure 4).

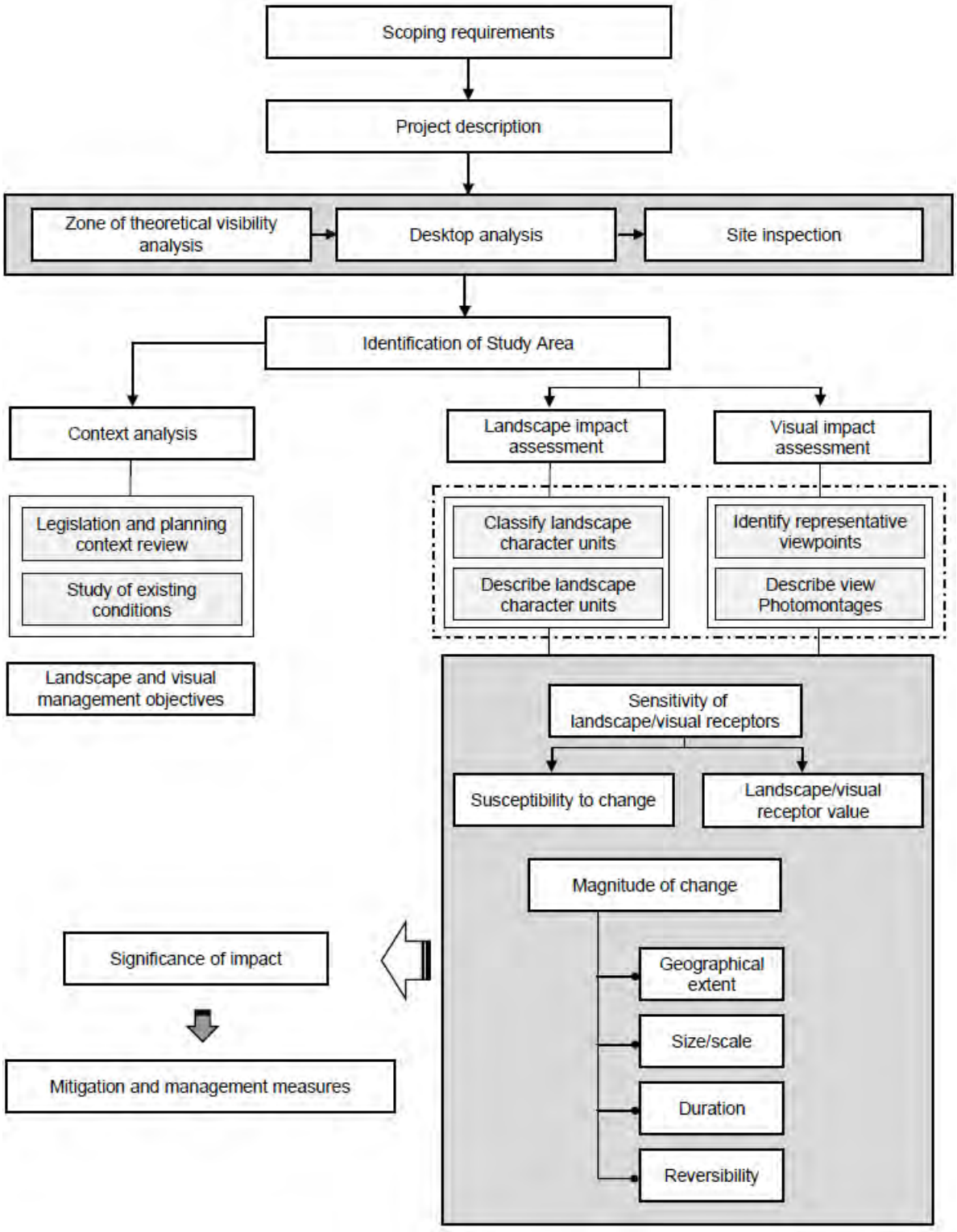


Figure 4 *Landscape and visual impact assessment process*

The methodology for the LVIA has been set out to respond to specific project requirements and constraints including the scale and nature of the Proposal.

There is no general and/or legislated guidance on the assessment of landscape and visual impacts produced by an independent body specific to Australia. Where practicable, the landscape and visual impacts associated with the Proposal have been assessed in accordance with the advice provided in international, national and state recognised resource documents and in accordance with all relevant legislation. These include but are not limited to the following:

– The Western Australian Planning Commission (2007) *Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting and design.* This manual provides guidance for the practice of visual impact assessment in Western Australia; however, it is not a statutory procedure or prescriptive policy.
– The Landscape Institute and the Institute for Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment, Third Edition* (GLVIA3).
– Environmental Protection Authority (2023) *Environmental Factor Guideline: Social Surroundings*
– Natural England (2014) *An Approach to Landscape Character Assessment*

3.1 Zone of theoretical visibility

Zone of theoretical visibility mapping is a computer-generated analysis which identifies land from which it is theoretically possible to view the components of the Proposal. These have been used primarily to guide determination of the Study Area and representative viewpoint selection as well as to inform the site inspection.

ESRI ArcGIS was used to model the ZTV of the Proposal. A digital elevation model was produced using DEM data and a resolution of 30 m. The ZTV was mapped using the following parameters:

– A viewing height of 1.7 m, which is the average within the typical viewing level range of an adult.
– Maximum tip height of 250 m
– Maximum hub height of 164 m

The GIS software then digitally determines the likely extent over which the component would be visible or not visible. In interpreting the ZTV, the following considerations must be made:

– The ZTV only considers the landform and does not include land cover factors such as the presence of buildings and trees. It therefore represents the worst-case scenario of potential visual impacts.
– The ZTV does not consider the effect of distance. The greater the distance from the Proposal, the lower the impact, as the development will take up a smaller portion of the view, and atmospheric conditions may reduce the visual prominence of the Proposal.
– The ZTV is only accurate to the resolution of the elevation model.

3.2 Desktop analysis

As specified in Section 4, existing data focused on the proposed Study Area and the Proposal was gathered and reviewed, including:

– Proposal design information and site photographs
– Topography, land use, hydrology, and vegetation maps
– Available data on heritage sites
– Google Earth and Google Street View

Using this data, a preliminary assessment of the landscape and visual environment was undertaken to inform the site inspection and impact assessment process.

3.3 Site inspection

Numerous site inspections were undertaken by a Landscape Architect and Landscape Planner on 7, 8 and 27 March and the 28 August 2024 in varied weather conditions from clear, sunny, and high visibility to full cloud, light

rain, and low visibility. During the site inspections, the proposed Study Area was driven and walked to gain representative views of the Proposal from publicly accessible and private viewpoints. The purpose of the inspection was to:

– Inspect the proposed Study Area and appreciate views to and from the Proposal
– Inspect publicly accessible locations identified in the desktop analysis as likely to provide views of the Proposal
– Identify sensitive visual receptor locations (identified in Section 7.3)
– Assess the landscape character of the Study Area and identify landscape sensitivities
– Undertake site photography for the visual assessment and for the preparation of photomontages

3.4 Study Area

The Study Area for this report is generally confined to the likely extent of visibility of the Proposal within the surrounding context. This has resulted in an indicative study area of approximately 30 km from either side of the Proposal boundary, based on an understanding of the Proposal and informed by a comprehensive analysis. This includes a desktop review and site inspection of the existing landscape context, and previous studies of a similar type and/or within a similar landscape context. Refer to Figure 5 Study Area for the Study Area extent.

Located within South West Boojarah, the Study Area encapsulates the traditional lands of the Wardandi and Bibulmun/Piblemen Noongar language group with the Proposal site located within Bibulmun/Piblemen Country.

3.5 Legislation and planning context review

A review was conducted to assess essential planning designations, policies, and guidance concerning landscape and visual environment relevant to the Study Area. The focus of this review was to identify designations, protections, values, and objectives pertinent to the landscape and visual environment of the Study Area, including scenic amenity values (refer to Section 4).

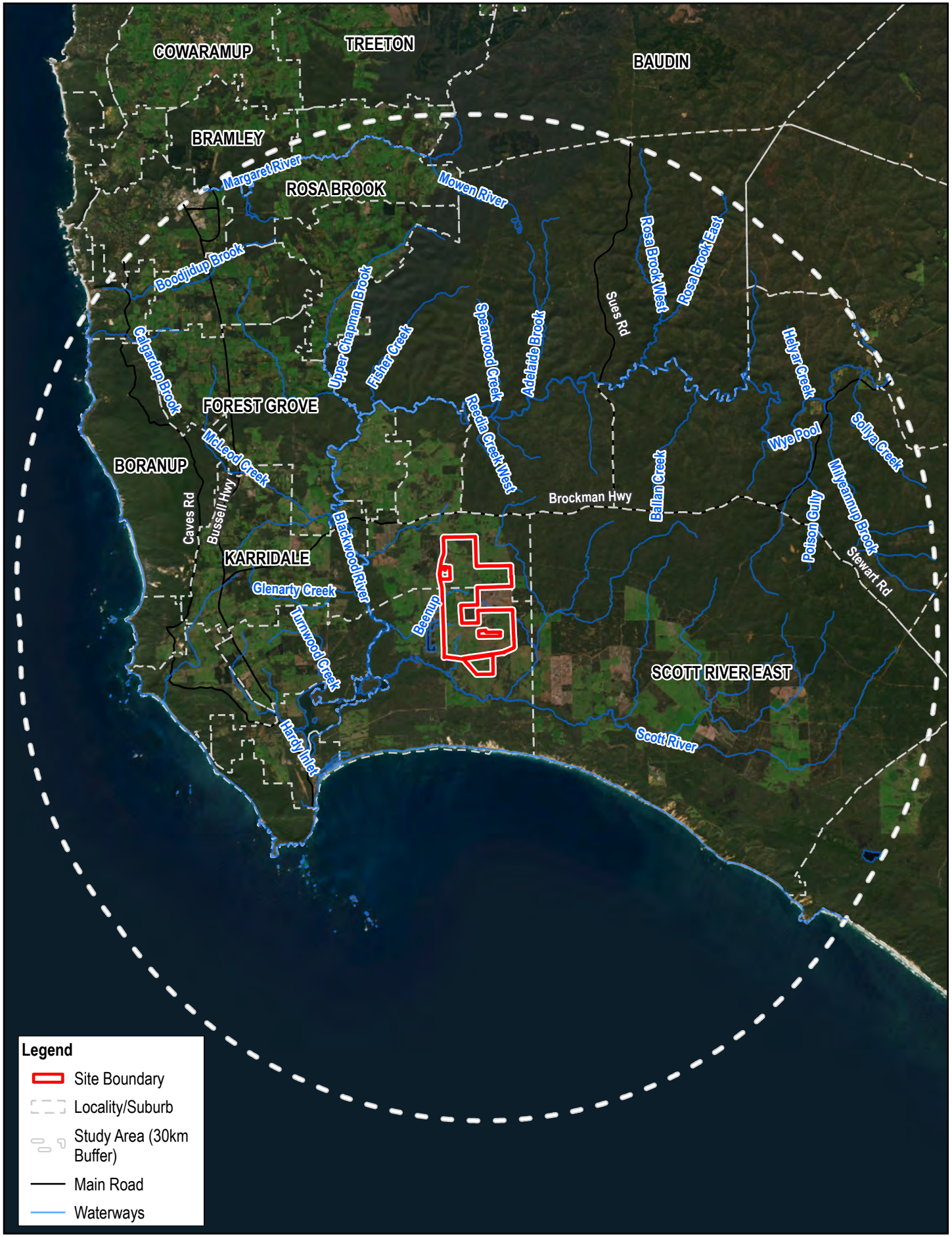
3.6 Existing landscape and visual conditions

An assessment of the landscape was undertaken to determine the existing natural, cultural, and visual features within the Study Area. This includes determination of key landscape and spatial elements, features, and values. Visual analysis of the existing conditions involves identifying viewing locations, identifying who the viewers are and how they experience the landscape, identifying key views, and determining visibility. This assists in understanding how the proposed changes may impact the viewing experience and values. Aspects considered include:

– Land use and built form
– Landform, topography, and hydrology
– Vegetation
– Heritage features
– Aboriginal cultural heritage

3.7 Landscape and visual management objectives

The purpose of landscape and visual management objectives is to manage the character of the landscape and visual amenity within the Study Area. The legislation and policy review and context analysis form the basis of development of appropriate management objectives and strategies. Refer to Section 5.



Paper Size ISO A4

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Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Synergy Renewable Energy Developments Pty Ltd
Proposal Location Plan

Study Area

Project No. **12632296**
Revision No. **0**
Date **09/01/2025**

FIGURE 5

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3.8 Landscape impact assessment

The assessment of landscape impacts includes an identification of Landscape Character Units (LCU's) defined within the Study Area and an assessment of potential impacts from the Proposal provided for each LCU. Refer to Section 6.

3.8.1 Landscape character units

LCU's generally comprise of homogenous patterns of characteristics such as landform, vegetation, water features and land use as well as individual features, as identified during the context analysis and site inspection.

The blend of elements shown in Figure 6 contributes to shaping a landscape character which defines distinct landscapes with unique attributes and sense of place.

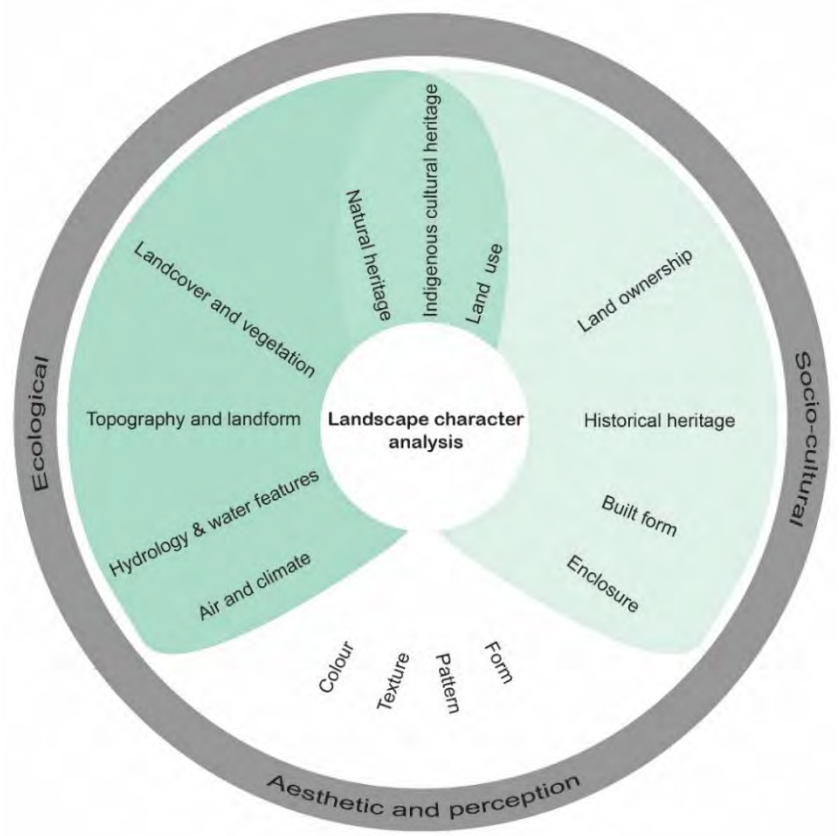


Figure 6 Landscape character elements

These elements have been considered to establish the existing landscape character of the Proposal and Study Area and serve to provide a framework for measuring the impact of the Proposal. This assists in:

– Identifying landscape elements that contribute to defining character
– Defining landscape character attributes
– Identifying landscape value

The assessment of the existing landscape also considers factors which have influenced landscape change in the past and those that are likely to do so in the future. The identified LCU's in the Study Area are defined in Section 6.1.

Values associated with the landscape have also been identified for each LCU. Landscape value considers designated and undesignated landscapes and all elements such as the environmental, cultural, historical, and visual elements that form the landscape. When defining landscape value considerations include landscape quality, scenic quality, rarity, representativeness, conservation value, recreation value, and associations. Refer to Table 1 for the criteria used to determine the landscape value.

3.8.2 Assessment of impacts to landscape character

Landscape impact assessment deals with the effects of change and development on landscape as a resource. The assessment focuses on how the Proposal could affect the elements that make up the landscape, including the aesthetic and perceptual aspects and its distinctive characteristics.

The consideration of potential impacts to landscape character is determined based on the sensitivity of the existing landscape to the proposed change, and the magnitude of change that is likely to occur.

The sensitivity of a landscape is determined on the capacity of the landscape to accommodate the change of a particular type and scale, without impacts on existing landscape character, and the value of the existing landscape. A judgement on the level of sensitivity is made and a rating of high, medium, low, and negligible applied.

The magnitude of change to landscape character depends on the nature, scale and duration of the change expected to occur. It also depends on the loss, change or addition of any feature to the existing landscape.

3.8.2.1 Sensitivity to landscape impacts

The sensitivity of landscape impacts addresses the following specific criteria:

– Sensitivity of landscape to proposed change, is based on the landscapes susceptibility to change, and the value of the landscape. Refer to Table 1 for landscape sensitivity, landscape value criteria and landscape susceptibility to change criteria. Professional judgement on the level of sensitivity is made and a rating of high, moderate, low, or negligible applied.

Table 1 Landscape sensitivity

Landscape sensitivity	Criteria	
	Landscape value	**Landscape susceptibility to change**
High	Landscapes located within, or contributes to the value of, landscapes designated and/or recognised at state, national and/or international level such as designated National Park, World Heritage Area, or State Heritage Place. May include nationally important features and landscapes that are valued by the community such as: – Conservation areas and designated landscapes. – Visually prominent landforms with elevated features such as ridges, hills and escarpments. – Waterways such as rivers, lakes and coastal areas. – Areas with a high degree of naturalness and/or areas subject to active rehabilitation or landscape treatments. – Cultural and heritage sites, features or designations including Aboriginal heritage sites of state, regional or local significance. – Residential areas and areas of recognised community value and amenity.	– Landscape of high quality and condition with consistent, intact, well-defined attributes – The landscape is well managed. – The proposed development would be incompatible with the existing characteristics of the area. – Mitigation measures are unlikely to reduce the impacts of the change.
Moderate	– Landscapes that are not explicitly recognised for a heritage significance or a value but are well-used by local communities. – Landscapes dominated by agricultural or other modified land uses, although with some degree of relative wilderness	– Landscapes of moderate quality and condition – Some of the key characteristics of the landscape relate well to the proposed development. – Any change caused by the type of development would be unlikely to have a significant adverse effect on the landscape character, condition or value that cannot be effectively mitigated.

Landscape sensitivity	Criteria	
	Landscape value	**Landscape susceptibility to change**
	– Landscape where there is evidence of some value associated with natural heritage, recreational activity, cultural associations, or other special interests.	
Low	– Landscapes with few specific natural features and cultural associations – Limited distinctive local features.	– Landscapes of low quality and poor condition – Attributes poorly managed and in poor state of repair – Landscape intrinsically able to accommodate the proposed change with many of the key characteristics relating well to the proposed development or unlikely to be diminished. – Mitigation measures would be effective in neutralising adverse effects.
Negligible	– Landscapes with no specific features of natural heritage, cultural associations, or other special interest. – No distinctive local features	– Degraded landscapes with poor quality and condition – Neglected landscapes without management and maintenance of natural features – None of the key characteristics are likely to be diminished by the proposed change. – Mitigation measures are not required.

3.8.2.2 Magnitude of landscape impacts

The magnitude of landscape impacts addresses the following specific criteria:

– The magnitude of change to landscape character is based on the size or scale of change, the geographical extent of effects, and the duration and reversibility of effects (Table 2). It also depends on the loss, change or addition of any feature to the existing landscape. It is based on the part of the LCU which is likely to be impacted to the greatest extent by the Proposal.
– An assessment is made on the overall level of significance of landscape impacts in relation to the existing conditions as per the significance of impact matrix defined in Section 3.9.4.

Table 2 Landscape magnitude of change criteria

Rating	Criteria
High	A substantial/obvious change to the landscape character due to total loss of, or change to, elements, features or characteristics of the landscape. Would cause a landscape to be permanently changed and its perceived quality diminished. Mitigation measures are unlikely to reduce the impacts of the change.
Moderate	Discernible changes in the landscape character due to partial loss of, or change to elements, features or characteristics of the landscape, however, has potential to be partly mitigated. The change would appear to have an adverse effect on the landscape character since it would be out of scale with the local pattern and landforms.
Low	Minor loss or alteration to one or more key landscape character elements, features or characteristics, or the introduction of components that may be new but may not be uncharacteristic within the existing landscape character. Mitigation measures would be effective in neutralising perceived adverse effects.
Negligible	Almost imperceptible or no change in the landscape character as there is little or no loss of/or change to the elements, features, or characteristics of the landscape. Mitigation measures would be effective in neutralising perceived adverse effects and/or improve the landscape character.

3.9 Visual impact assessment

Assessment of visual impacts deals with the effects of change and development on the views available to people and their visual amenity. It assesses how the surroundings of individuals or groups of people may be specifically affected by changes in the context and character of views as a result of the change or loss of existing elements of the landscape and/or the introduction of new elements.

How a landscape is viewed is of critical importance in understanding changes in the landscape and how people perceive them. Visual landscapes are related to peoples' sense of place and quality of life. How people view, perceive, experience, and interact with landscape can be varied and diverse.

3.9.1 Viewpoint selection

A visual analysis of the Study Area was conducted. Via this process 12 sensitive visual receptors were identified, and their level of significance given, in line with guidance provided within the *Visual Landscape Planning in Western Australia* guidelines (WAPC, 2007) and *Guidelines for Landscape and Visual impact Assessment (IEMA, 2013).* Refer to Table 3 for visual sensitivity criteria and Section 7.2 for description of sensitive receptors

Level of significance generally increases with the importance of the view, the degree of sensitivity of the viewers, the degree to which experiencing the landscape is integral to the enjoyment of a travel route or site, and the length of duration of a view. These criteria were used to assist in determining which sensitive visual receptor locations to consider for assessment.

Sensitive visual receptors have been considered in terms of the views they are likely to obtain from within the Study Area including consideration of any key vantage points, such as lookouts, where there is particular interest in the view. Visual receptors are identified based on:

– Proximity of the sensitive visual receptors to the Proposal, as the most affected sensitive visual receptors are anticipated to be closest to the Proposal, unless located at an elevated vantage point.
– Type of sensitive visual receptor, as different viewer types would have different perceptions of the change.

Based on the analysis of the existing landscape and visual environment, viewpoint locations were selected for assessment as representative of sensitive visual receptor locations. To best illustrate the likely visual impacts of the Proposal, where appropriate, these viewpoint locations aim to represent a balance of:

– The most sensitive visual receptors.
– A range of sensitive visual receptor types.
– A range of distances from the Proposal.
– A range of view directions towards the Proposal within the Study Area.

3.9.2 Assessment of visual impacts

A series of 12 representative viewpoint locations were selected for assessment based on the visual analysis of the Study Area and understanding of the Proposal. Existing views were represented using a panorama technique (refer Section 3.9.5). An assessment of each viewpoint is provided which includes assessment of the sensitivity of the viewpoint to change, identification and description of the likely changes to the view, assessment of the magnitude of change that is likely to occur, and overall level of significance of impact on the visual environment or representative viewpoint.

The sensitivity of each viewpoint is considered to be dependent on the importance of the view, its existing scenic qualities, the presence of other existing built elements in the view, and the type of sensitive visual receptor and their likely interest in the view. The magnitude of change to views and visual amenity depends on the nature, scale and duration of the change that is expected to occur. This depends on the loss, change or addition of any feature in the field of view of the sensitive visual receptor including an assessment of the level to which the change contrasts with the existing view or expected view of the landscape.

The assessment considers the likely impacts of the Proposal, refer to Section 6. The level of impact on a view depends on factors such as the extent of visibility, degree of obstruction of existing features, degree of contrast with the existing view, angle and duration of the view, and the distance from the Proposal.

The sensitivity and magnitude of visual impacts address the following specific criteria:

– Sensitivity of the visual receptor to the proposed change, based on the susceptibility of visual receptors to change, and the value attached to the view (Table 3).
– Magnitude of change, based on the size or scale of the change, geographical extent of effects, and duration and reversibility of effect (Table 4).

Table 3 Visual sensitivity criteria

High	– Occupiers of residential properties, at home or going to or from, with long viewing periods, within close proximity to the proposed development – Communities that place value upon the urban landscape and enjoyment of views of their setting. – Users of designated tourist routes or scenic drives – Users of recreation, conservation, or scenic areas – Users of viewpoints and lookouts of state or national significance including their access routes – Viewers of scenic views, city views, rural views, elevated views, long or wide views, or views that include water bodies. – Viewers of views of national or state importance
Moderate	– Viewers at schools, or similar, when outdoor play and recreation areas are located within close proximity but viewing periods are limited – Occupiers of residential properties with long viewing periods, at a distance from or screened from the Proposal – State or main road users – Viewers who have intermittent views of the Proposal
Low	– Road users in motor vehicles, trains or on transport routes that are passing through or adjacent to the Study Area and therefore have short term views – Viewers indoor at their place of work, schools or similar – Local roads users
Negligible	– Viewers from locations where there is screening by vegetation or structures where only occasional screened views are available and viewing times are short – Road users in motor vehicles, trains or on transport routes that are passing through/adjacent to the Study Area and have partially screened views and short viewing times

Table 4 Visual magnitude of change criteria

High	A substantial/obvious change to the existing view due to total loss of, or change to, elements, features or characteristics of the view. Would cause a view to be permanently changed and its perceived quality diminished
Moderate	Discernible changes in the existing view due to partial loss of, or change to elements, features or characteristics of the view, however, has potential to be partly mitigated. The change would appear to have an adverse effect on the view since it would be out of scale with the existing view.
Low	Minor loss or alteration to one or more key view elements, features or characteristics, or the introduction of components that may be visible but may not be uncharacteristic within the existing view.
Negligible	Almost imperceptible or no change to the view as there is little or no loss of/or change to the elements, features, or characteristics of the view.

3.9.3 Duration of impact

Landscape and visual impacts can be temporary or permanent in nature. The duration of impact as used in this assessment is outlined in Table 5. This was used to assess the landscape and visual impacts associated with the construction and operation phase of the Proposal.

Table 5 Duration of impact

Temporary	Impacts lasting 1 year or less
Short term	Impacts lasting 1 to 5 years
Medium term	Impacts lasting 5 to 10 years
Long term	Impacts lasting 10 to 25 years
Permanent	Impacts lasting over 25 years

3.9.4 Significance of impacts

The combination of sensitivity and magnitude of change determines the significance of impact on the visual environment or representative viewpoint. Refer to Table 6 which illustrates the matrix used to determine the significance of impacts.

Table 6 ***Significance of impact matrix***

		Magnitude of change			
		High	**Moderate**	**Low**	**Negligible**
Sensitivity	**High**	High	High-moderate	Moderate	Negligible
	Moderate	High-moderate	Moderate	Moderate-low	Negligible
	Low	Moderate	Moderate-low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

3.9.5 Panorama and photomontage

All photographic images were captured using a 50 millimetre fixed focal length lens on a 35 millimetre full frame format camera at a camera height of 1.7 m. All photograph locations were recorded and mapped.

A series of 12 representative viewpoint locations were selected and existing views represented using a panorama technique. This technique involves the stitching together of a number of adjoining images using the Adobe Photoshop software program.

Photomontage images were prepared for all 12 viewpoints to represent proposed views following the completion of the Proposal. The software used to model and render the photomontages was Autodesk 3D Studio Max. In order to achieve an accurate photomontage of the Proposal and surrounding landscape, with a digital terrain model to a resolution of 10 m was used to model the surrounding landform.

Once the 3D model incorporating both the landscape and new Proposal elements was created, a virtual camera was placed in the software at the same location the photographs were taken. The film, focal lens and height of the virtual camera matches the real camera utilised to take the photographs. The photographs of the site were used in 3D Studio Max as a background to accurately match the 3D model with the Proposal elements to the perspective of the photographs. From the camera view, rendered images of the Proposal were produced to match the daylight exposure of the photographs. The rendered images were imported into Adobe Photoshop for post-production editing and collation of the photomontages.

The final result is the 3D model of the Proposal shown in the correct 3D location in the photographs (Appendix A). The final images were produced to a high resolution, suitable for printing.

3.10 Mitigation and management measures

GHD has proposed mitigation and management measures for SynergyRED's consideration, focusing on landscape character units and visual amenity. Determining these measures involves reviewing the achievability of visual management objectives and addressing impacts identified through the assessment. The feasibility of proposed measures has not been analysed.

Context analysis

4. Context analysis

4.1 Legislation and planning context

A detailed review of government legislation and policies relevant to the Proposal and adjoining Study Area are summarised below. This is not intended to be a thorough review of planning scheme, mechanisms and planning related triggers. The emphasis of the review is to identify designations, protections, values, and objectives relevant to the landscape and visual environment of the Study Area, including scenic amenity values.

Summary of findings

The assessment of relevant legislation, policies and guidelines has identified that the Study Area's existing landscape character and views are valued, and some areas are protected. A review of these key values informed the understanding of the existing landscape and the overall impact assessment.

A key reoccurring value was the protection of the natural character of Leeuwin-Naturaliste Ridge due to its unique social, ecological and landscape values and character and the Scott Coastal Plain which is known for its high and varied visual landscape values. In addition, the importance of the rural character, amenity, and landscape viewed from Brockman Highway was identified through the review.

4.1.1 State legislation and policy

State Planning Policy 2.0: Environment and Natural Resources Policy (WAPC, 2003)

This policy applies throughout the State of WA and includes specific objectives for the protection of landscapes.

Policy *5.9 Landscape* highlights WA's diversity of high value landscapes and scenic areas. It recognises that as the State grows, it will be increasingly important to ensure that landscapes valued by the community are protected. To do this, it is necessary to identify the landscape types and features requiring special attention and develop appropriate management and planning policies that can positively contribute to their maintenance and enhancement. To achieve this, planning strategies, schemes and decision-making should:

i. Identify and safeguard landscapes with high geological, geomorphological, or ecological values, as well as those of aesthetic, cultural or historical value to the community, and encourage the restoration of those that are degraded.

ii. In areas identified in 5.9 (i) above, consider the level or capacity of the landscape to absorb new activities and incorporate appropriate planning, building design and siting criteria to ensure that new development is consistent and sensitive to the character and quality of the landscape.

iii. Consider the need for a landscape, cultural or visual impact assessment for land use or development proposals that may have a significant impact on sensitive landscapes.

Position Statement: Renewable energy facilities (WAPC, 2020)

This document outlines the Western Australia Planning Commission (WAPC) requirements to '*support the consistent consideration and provision of renewable energy facilities within WA. The policy identifies assessment measures to facilitate appropriate development of renewable energy facilities' (WAPC, 2020).*

It states that landscape and visual impact assessments should address:

– *Landscape significance and sensitivity to change, earthworks, topography, extent of cut and fill, the extent and type of vegetation, clearing and rehabilitation areas, land use patterns, built form character, public amenity, and community values.*

– *Likely impact on views including visibility of the facility using view shed analysis and simulations of views from significant viewing locations including residential areas, major scenic drives, and lookouts.*

– *Layout of the facility including the number, height, and scale, spacing, colour, surface reflectivity and design of components, including any ancillary buildings, signage, access-roads, and incidental facilities.*

– *Measures proposed to minimise unwanted, unacceptable, or adverse visual impacts.*

Government of Western Australia, State Planning Strategy 2050 (WAPC, 2014)

The State Planning Strategy 2050 is WA's strategic planning response to the challenges WA is likely to face over the next 30 years. The strategy provides a guide for the future land-use planning and development of the State. The Study Area is part of the south-west sector. It is identified as the population centre for the State and a global biodiversity hotspot with endemic native flora and rare and threatened species.

State Planning Policy No 2.6 State Coastal Planning Policy (WAPC, 2013)

This policy recognises the importance of the WA coastal zone as a significant asset in terms of its environmental, economic, social, and cultural resources and recognises the varied pressure on the coastal zone for use by different groups in the community for a variety of purposes. Planning for coastal zone land is about balancing competing needs and desires in a manner that considers the value of the coastal zone which includes its scenic, aesthetic, and ecological qualities in addition to recreational opportunities and social, indigenous, culture and economic importance.

Development and settlement policy measure (v) identifies the importance of ensuring use and development, adjacent to the coast is designed and sited to complement and enhance the coastal environment in terms of its visual, amenity, social and ecological values.

4.1.2 Region and sub-region schemes and policies

Augusta-Walpole Coastal Strategy (WAPC, 2009)

A component of coastline between Augusta and Walpole is included in the Study Area. The Augusta-Walpole Coastal Strategy provides guidance on how various issues affecting the coastline in this vicinity can be managed. It addresses coastal tenure and management, settlement, tourism, coastal access, infrastructure, subdivision, development and the protection of the environment and biodiversity.

The strategy states that alternative power generation within the strategy area, such as solar or wind, may be applicable in isolated areas provided that infrastructure is consistent with the surrounding landscape and does not affect the visual amenity.

As affirmed in the strategy as the Study Area has low levels of development it has a very high level of natural landscape amenity.

Scott Coastal Plain – A Strategy for a Sustainable Future (DPIRD, 2001)

This document provides a broad strategy and vision for the future development and use of the Scott Coastal Plains recognising the importance of the region's potential, environmental values and receiving water bodies such as Hardy Inlet.

The strategy identifies the area south of Scott River be zoned as Rural Landscape and Conservation to protect significant landscapes and environmental features and provide for development which is compatible with and will enhance the landscape and environmental qualities of this location. As stated, this zone has high and varied visual landscape values and as such development or use should be designed and located as to be compatible with and complimentary to the visual landscape and in particular not be placed on exposed dunes or in visually conspicuous positions.

State Planning Policy 6.1 Leeuwin-Naturaliste Ridge Policy (WAPC, 2019)

Utilising a regional planning approach the purpose of this policy is to protect the unique ecological, social and landscape values and character of the Leeuwin-Naturaliste Ridge. This policy applies to all land use and development within the policy area which stretches from Cape Naturaliste to Cape Leeuwin, inland to Bussell Highway and the eastern extent of townsites along the highway.

The policy states that this is an extraordinary landscape and development needs to have due regard for the landscape integrity and value of the Ridge backdrops when viewed from the coastline, bays, or travel route corridors. In areas of natural landscape significance, the significant natural characteristics will be protected and provide adequate development setbacks. In areas of Rural Landscape Significance and General Character development should protect the rural character of the land.

4.1.3 Local planning framework

Shire of Augusta Margaret River Local Planning Strategy (DPLH, 2022)

The Shire of Augusta Margaret River (AMR Shire) Local Planning Strategy (LPS) specifies the inherent landscape values and visual character of agricultural land and the visual management controls relevant to travel route corridors such as Brockman Highway, located within close proximity to the Proposal. In these areas large visually obtrusive developments on sites that are prominently located along travel route corridors and contribute to the natural and rural landscape amenity of the Shire are discouraged (DPLH, 2022).

The strategy also stipulated that all development within the Shire should preserve and celebrate those elements of the built and natural environment that are of cultural heritage significance to the local Wardandi and Bibulmun/Piblemen people and are representative of the special character and heritage of the Shire and that the Shire will guide against inappropriate development of visually sensitive sites (DPLH, 2022).

This document also specifies the importance of the Leeuwin Naturaliste Ridge as one of the key landscape features within this area. Development within and surrounding this landform is required to be appropriate and visually sensitive (DPLH, 2022).

Shire of Augusta Margaret River Local Planning Scheme No 1 (DPLH, 2024)

Of relevance to this assessment AMR Shire Local Planning Scheme No 1 (LPS1) recognises the importance of the area included in the Leeuwin Naturaliste Ridge Landscape Amenity Zone as being of high landscape value and vital to the preservation of the visual and landscape amenity of the Ridge. In the Southern Ocean Foreshore Protection zone development shall be designed and sited to minimise impact on the rural character, amenity, and landscape elements of the locality. Within varying agricultural zones LPS1 identifies that established rural character and amenity within these zones is preserved and is consistent with the ongoing use and development of that land for agricultural purposes **(**DPLH, 2024).

In addition, development adjacent to a travel route corridor shall be designed and sited to minimise any adverse impacts on rural character, amenity, and landscape values **(**DPLH, 2024).

Draft Shire of Augusta Margaret River Local Planning Scheme No 2 (AMR Shire, 2024)

Currently under review AMR Shire draft Local Planning Scheme No 2 (LPS2) seeks to implement an environment first approach to development whilst also ensuring that development is sensitively located and constructed in a manner that maintains the natural and rural landscape and visual qualities of the scheme area.

LPS2 specifies that within visual management areas development is required to be located on lower contours to avoid sky lining. Vegetation backdrops may be required to be planted where they will lessen visual impact.

In Environmental Conservation Zones (previously the Southern Ocean Foreshore Protection Zone) development shall be designed and sited to minimise impact on the rural amenity, character, and landscape elements of the locality.

At the time of writing, LPS2 remains draft in its status having concluded its public consultation phase earlier in the year (28 February 2024).

Shire of Nannup Local Planning Strategy (DLPH, 2018)

One objective of the Shire of Nannup (Nannup Shire) Local Planning Strategy is of relevance to this LVIA being create sustainable communities and sustainable development which aims to retain the unique sense of place that values its culture and heritage.

Specific actions related to landscape protection include maintaining the outstanding visual amenity within the region inclusive of key landscape and vistas through ensuring that development is designed and located in a manner that does not detrimentally impact on the landscape values of the area and ensure the landscape and scenic quality is protected through the use of appropriate development criteria and development controls. Specific strategies aligned to these actions include:

– *Ensure development reflects and enhances the natural, cultural, visual and built character of the regions landscape.*

– *Protect and enhance landscapes and associated visual amenity and character 'viewsheds' associated with tourist routes and major roads.*
– *Do not support development that will unacceptably impact the views from tourist routes and major roads.*
– *Within rural and priority agriculture areas rural character, environmental and vista qualities of the area are to be protected.*

Shire of Nannup Local Planning Scheme No 4 (DPLH 2022)

Nannup Shire Local Planning Scheme No 4 (LPS4) outlines aims relevant to this LVIA including:

– *Manage development by means of development controls and zoning to achieve compatibility between land use and the preservation, and where possible enhancement of visual amenity of rural environs.*
– *Promote sustainable use of rural land for agricultural purposes whilst accommodating other rural activities.*
– *Safeguard and enhance the amenity and character of the built and natural environment of the scheme area.*

4.1.4 Other guiding documents

Landscape character types for WA (CALM, 1994)

The landscapes of WA have been classified into landscape character types as part of the Reading the Remote - Landscape Characters of Western Australia study (CALM, 1994). This study classifies the landscapes of WA into broad landscape character types in terms of common distinguishing visual landform, vegetation, water form and land-use characteristics.

The following landscape character types are relevant to the Study Area and will help inform the LCU's:

– Leeuwin Naturaliste Coast
– Scott Coastal Plains
– Darling Plateau | Darling Uplands subtype

4.2 Landscape and visual existing conditions

4.2.1 Land use and built form

The Proposal is located in the Warren Bioregion (Figure 7) within the locality of Scott River in the AMR Shire Local Government Area (LGA) which is situated approximately 294 km south-east of Perth. The AMR Shire includes the townsites of Margaret River, Augusta and Cowaramup and the settlements of Gracetown, Karridale, Kudardup and Witchcliffe. In addition to Scott River the region also includes the rural localities of Alexandra Bridge, Baudin, Boranup, Bramley, Burnside, Courtenay, Deepdene, East Augusta, Forest Grove, Gnarabup, Hamelin Bay, Leeuwin, Molloy Island, Nillup, Osmington, Prevelly, Redgate, Rosa Brook, Rosa Glen, Schroeder, Treeton and Warner Glen.

AMR Shire LGA has a population of approximately 16,791 (Australian Bureau of Statistics, 2021) which is expected to grow to approximately 25,000 people by 2036 (DPLH, 2022). The townsites include a variety of land uses and infrastructure such as parks, hospital, schools, light industry and town centre with cafés and shops with the settlements incorporating small town centres, residential areas, and parks.

The Proposal site is situated next to Chester and Pagett Nature Reserve and Scott National Park approximately 15 km northeast of Augusta, 5 km northeast of Molloy Island, 3 km of south-east of Nillup Village General Store and less than 2 km from Brockman Highway, the nearest main road.

The land use within the Study Area, which covers a 30 km area (in each direction) from the Proposal site, contains the townsites of Augusta and a proportion of Margaret River in addition to the settlements of Karridale, Kudardup and Witchcliffe. It also contains national parks, nature reserves, state forests, agricultural land, and tourism land uses (Figure 8).

Brockman Highway and Bussell Highway are important arterial roads traversing through the Study Area with Caves Road being another important road.

4.2.2 Landform, topography, and hydrology

As indicated in Figure 9 the Study Area terrain is diverse ranging from ridges, rugged cliffs and capes, exposed slopes, rounded hills, and valleys to an almost flat to gently undulating plains. The high points of the topography are located on the Leeuwin Naturaliste Ridge and have a peak elevation of 220m Australian Height Datum. One is situated to the south-west, towards Cape Leeuwin, approximately 18 km from the Proposal and the other further north, within Boranup, adjacent to Boranup Lookout approximately 28 km from the Proposal.

The Study Area encompasses a variety of watercourses, such as the Blackwood River (Goorbilyup Buerle) located to the west and north of the Proposal, Scott River located directly south and the Margaret River (Wooditjup Bilya) and Mowen River, both of which are located to the north of the Proposal. Blackwood River and Scott River connect to Hardy Inlet near Augusta and have tributaries within the Proposal site.

4.2.3 Vegetation

Vegetation cover within the Study Area consists of coastal heathland and rushes, low forest, woodland, and open forest interspersed with areas of cleared pastureland (irrigated and unirrigated) and farming lands, including areas of tree plantations.

The native vegetation within the Study Area includes the pre-European vegetation complexes, as identified in the Leeuwin Naturaliste Coast, Scott Coastal Plains and Darling Plateau | Darling Uplands Vegetation Complexes (Department of Parks and Wildlife, 2016). The region comprises a combination of uplands, valleys, depressions and swamps on uplands, estuaries and valley floors and swamps. Vegetation complexes are itemised in Table 7 and included in Figure 10. The Proposal is located within the Scott vegetation complex definition but is comprised predominantly of cleared farmland.

Table 7 Vegetation complexes located within the Study Area

Vegetation complex	Description
Bidella	Low woodland of *Melaleuca preissiana-Banksia littoralis-Hakea lasianthoides* on valley floors and open forest to woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Eucalyptus* patens on slopes in per humid and humid zones.
Blackwood 1	Woodland to open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Xylomelum occidentale-Agonis flexuosa* on raised river terrace in the per humid zone.
Blackwood 2	Low open woodland of *Banksia attenuata-Nuytsia floribunda-Eucalyptus marginata subsp. marginata* on low dunes in the per humid zone.
Blackwood 3	Tall open forest of *Eucalyptus diversicolor-Corymbia calophylla* with some *Eucalyptus marginata subsp. marginata* on undulating uplands in the per humid zone.
Blackwood 4	Open forest of *Corymbia calophylla-Eucalyptus marginata subsp. marginata* on the variable slopes in per humid and humid zones.
Blackwood 5	Woodland to low forest of *Melaleuca rhaphiophylla, tall shrubland of Melaleuca incana* and closed heath of *Agonis spp.* on depressions in the per humid zone.
Blackwood 6	Woodland of *Melaleuca cuticularis* and sedgelands of *Cyperaceae-Restionaceae spp*. on estuarine flats in the per humid zone.
Coate	Low open woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana-Banksia ilicifolia* and low open woodland of *Melaleuca preissiana-Banksia littoralis* on broad depressions in upper gullies in per humid and humid zones.
Cowaramup 1	Open to tall open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis* on lateritic uplands in the hyper humid zone.
Cowaramup 2	Open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis* on lateritic uplands in perhumid and humid zones.
Cowaramup 3	Woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia ilicifolia* on sandy rises and low woodland of *Melaleuca preissiana* on lower slopes in the hyperhumid to humid zones.
Cowaramup 4	Woodland of *Corymbia calophylla-Eucalyptus marginata subsp. marginata-Agonis flexuosa*, woodland of *Banksia littoralis* and closed heath on rocky slopes in hyperhumid and perhumid zone.
Cowaramup 5	Mixture of open forest to woodland of *Eucalyptus diversicolor-Corymbia calophylla* and woodland of *Eucalyptus marginata subsp. marginata -Corymbia calophylla* on slopes and low woodland of *Melaleuca preissiana-Banksia littoralis* on depressions in the hyperhumid zone.
Cowaramup 6	Woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on slopes and low woodland of *Melaleuca preissiana-Banksia littoralis* on depressions in perhumid and humid zones.
D'Entrecasteaux 1	Tall shrubland and woodland of *Agonis flexuosa-Acacia saligna* on flats between dunes in the perhumid zone.

Vegetation complex	Description
D'Entrecasteaux 2	Mosaic of low woodland of *Agonis flexuosa* and closed heath of *Olearia axillaris-Spyridium globulosum-Acacia littorea* on steep dunes on calcareous deep sands in the perhumid zone.
D'Entrecasteaux 3	Woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla- Agonis flexuosa-Banskia grandis* with some *Eucalyptus megacarpa* on recent low dunes with dense shrub understorey in hyperhumid and perhumid zones.
D'Entrecasteaux 4	Woodland to low forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla- Agonis flexuosa-Banskia grandis* with some *Eucalyptus megacarpa* on stabilised higher dunes in hyperhumid and perhumid zones.
D'Entrecasteaux 5	Coastal complex and closed heath of *Olearia axillaris* and *Senecio spp.* on recently stabilised dunes in hyperhumid and perhumid zones.
D'Entrecasteaux 6	Tall shrubland of *Agonis flexuosa* and closed heath of *Olearia axillaris-Spyridium globulosum* on coastal low dunes in the perhumid zone.
D'Entrecasteaux 7	Woodland of *Agonis flexuosa* and closed heath of *Olearia axillaris-Spyridium globulosum* on coastal low dunes in the perhumid zone.
D'Entrecasteaux 8	Coastal complex and closed heath of *Phyllanthus calycinus-Olearia axillaris-Spyridium globulosum-Pimelea ferruginea -Rhagodia baccata* with some emergents of *Agonis flexuosa* and sedgeland of *Lepidosperma spp.* on steeper exposed dunes in the hyperhumid zone.
Darradup	Open forest to woodland of *Corymbia calophylla* with some *Eucalyptus marginata subsp. marginata* on slopes, woodland of *Eucalyptus rudis-Banksia seminuda-Melaleuca preissiana-Agonis flexuosa* and tall shrubland of *Agonis linearifolia-Callistachys lanceolata* on fringes of streams in perhumid and humid ones.
Glenarty Hills 1	Open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis* with some *Eucalyptus diversicolor* on upland and slopes in hyperhumid and perhumid zones.
Glenarty Hills 2	Open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on undulating uplands in hyperhumid and perhumid zones.
Glenarty Hills 3	Mixture of open forest of Eucalyptus diversicolor-Callistachys lanceolata, woodland of *Eucalyptus patens-Corymbia calophylla* and woodland of *Eucalyptus rudis-Melaleuca rhaphiophylla* on depressions in hyperhumid and perhumid zones.
Gracetown 1	Tall open forest of *Eucalyptus diversicolor-Corymbia calophylla-Agonis flexuosa* on mild slopes in the hyperhumid zone.
Gracetown 2	Mixture of low woodland of *Agonis flexuosa,* open forest of *Corymbia calophylla-Eucalyptus marginata subsp. marginata* and tall open forest of *Eucalyptus diversicolor* with some *Corymbia calophylla* and *Eucalyptus cornuta* on eastward facing slopes in the hyperhumid zone.
Gracetown 3	Closed heath of *Olearia axillaris-Rhagodia baccata-Agonis flexuosa* on seaward slopes in hyperhumid to humid zones.
Gracetown 4	Low woodland of *Agonis flexuosa* with some *Corymbia calophylla* on crests of calcareous dunes in hyperhumid to humid zones.
Gracetown 5	Tall open forest and open forest of *Corymbia calophylla-Eucalyptus marginata subsp. marginata-Eucalyptus megacarpa* and tall open forest of *Eucalyptus diversicolor-Agonis flexuosa* on valley floors in the hyperhumid zone.
Gracetown Karst	Tall open forest of *Eucalyptus diversicolor-Corymbia calophylla -Agonis flexuosa* on karst areas with sink holes in the hyperhumid zone.
Jalbaragup	Open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Eucalyptus patens* on slopes with some *Eucalyptus rudis* on broad terraces in perhumid and humid zones.
Jangardup	Open woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on rises and low open woodland of *Melaleuca preissiana-Banksia littoralis* on depressions in hyperhumid and perhumid zones.
Kilcarnup 1	Mosaic of coastal complex on exposed dunes on seaward slopes in hyperhumid to humid zones.
Kilcarnup 2	Mosaic of coastal complex and closed heath of *Olearia axillaris-Pimelea ferruginea-Melaleuca huegelii* on exposed calcareous dunes on seaward slopes in hyperhumid to humid zones.
Kilcarnup 3	Tall shrubland to closed heath of *Agonis flexuosa-Spyridium globulosum* on exposed slopes of calcareous dunes in hyperhumid to humid zones.
Kilcarnup 4	Tall shrubland of *Agonis flexuosa* on windward slopes, woodland of **Eucalyptus cornuta** on leeside in the hyperhumid zone.
Kilcarnup 5	Tall shrubland to low woodland of *Agonis flexuosa* on leeside of dunes in the hyperhumid zone.
Kilcarnup 6	Tall shrubland of *Agonis flexuosa-Acacia saligna* on leeside of calcareous dunes in hyperhumid to humid zones.
Kingia	Open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana-Banksia grandis-Xylomelum occidentale* on lateritic uplands in perhumid and humid zones.
Layman	Woodland to open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Eucalyptus patens* on slopes and woodland of *Melaleuca preissiana-Banksia littoralis* on valley floors in perhumid and humid zones.

Vegetation complex	Description
Milyeanup	Open forest to tall open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana* with some *Agonis flexuosa* on less undulating slopes in perhumid and humid zones.
Nillup 1	Open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla –Banksia grandis-Xylomelum occidentale-Agonis flexuosa* on low undulating plains in the perhumid zone.
Nillup 2	Woodland to open forest of *Eucalyptus marginata subsp. marginata –Corymbia calophylla - Banksia attenuata-Xylomelum occidentale-Nuytsia floribunda* on low sandy rises above plain in the perhumid zone.
Nillup 3	Mixture of open woodland of *Corymbia calophylla with some Eucalyptus patens and Eucalyptus megacarpa* and tall shrubland of *Agonis spp.* with some emergent *Eucalyptus marginata subsp. marginata, Corymbia calophylla* and *Banksia littoralis* on broad depressions in the perhumid zone.
Preston	*Woodland of Eucalyptus rudis-Agonis flexuosa-Banksia seminuda* along streams, open forest of *Corymbia calophylla-Eucalyptus* patens on slopes in the humid zone.
Scott 1	Low open forest and low woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Agonis flexuosa* with some *Eucalyptus patens* and *Banksia spp.* on low dunes to low woodland of *Melaleuca preissiana-Banksia littoralis* on inter-dune depressions in hyperhumid and perhumid zones.
Scott 2	Low woodland of *Banksia attenuata-Banksia ilicifolia-Nuytsia floribunda-Eucalyptus marginata subsp. marginata* with occasional *Corymbia calophylla* on dunes rising above the plain in hyperhumid and perhumid zones.
Scott 3	Mosaic of sedgeland of *Restionaceae-Cyperaceae spp.* and closed heath of *Myrtaceae-Proteaceae spp*. with occasional *Banksia occidentalis, Melaleuca preissiana* and *Banksia littoralis* on swampy depressions in the perhumid zone.
Scott 4	Mosaic of sedgeland of *Restionaceae-Cyperaceae spp.* and closed heath of *Myrtaceae-Proteaceae spp*. with occasional *Banksia ilicifolia* on swampy depressions and stunted *Eucalyptus marginata subsp. marginata-Banksia attenuata-Xylomelum occidentale* on low sandy rises in hyperhumid and perhumid zones.
Scott 5	Closed heath of *Myrtaceae-Proteaceae spp.* and tall shrubland *of Viminaria juncea* on flats and depressions in the perhumid zone.
Scott Scarp	Open forest of *Eucalyptus megacarpa-Eucalyptus patens* on the lower slopes of escarpment and open forest of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on slopes in the perhumid zone.
Telerah	Low open woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana-Xylomelum occidentale-Banksia ilicifolia* on slopes in perhumid and humid zones.
Treeton 1	Woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* with *some Allocasuarina fraseriana* on mild slopes in the per humid zone.
Treeton 2	Woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on undulating sandy slopes in the perhumid zone.
Treeton 3	Open forest of *Eucalyptus patens-Corymbia calophylla-Eucalyptus marginata subsp. marginata* on lower slopes and on floors of minor valleys in the perhumid zone.
Wilyabrup 1	Tall open forest of *Eucalyptus diversicolor-Corymbia calophylla-Allocasuarina decussata-Agonis flexuosa* on deeply incised valleys in the hyperhumid zone.
Wilyabrup 2	Open forest of *Corymbia calophylla-Allocasuarina decussata-Agonis flexuosa* on deeply incised valleys in perhumid and humid zones.
Wilyabrup 3	Woodland of *Eucalyptus marginata subsp. marginata-Corymbia calophylla* on slight rises on lower slopes in perhumid and humid zones.
Wilyabrup 4	Low woodland and woodland of *Corymbia calophylla-Eucalyptus marginata subsp. marginata* with some *Banksia spp.* on exposed slopes in hyperhumid to humid zones.
Wilyabrup 5	Mosaic of coastal heath and low woodland to woodland of *Corymbia calophylla-Eucalyptus marginata subsp. marginata-Banksia spp.* on westward slope in hyperhumid to humid zones.
Wilyabrup 6	Sedgeland of *Cyperaceae-Restionaceae spp.* on depressions by coast in the hyperhumid zone.
Wilyabrup 7	Woodland of *Corymbia calophylla-Eucalyptus marginata subsp. marginata* with closed heath of *Myrtaceae-Proteaceae-Papilionaceae spp.* on steep rocky slopes in the hyperhumid zone.
Wilyabrup 8	Tall open forest of *Eucalyptus diversicolor-Agonis flexuosa-Callistachys lanceolata* with some *Corymbia calophylla on* flats and valleys in the hyperhumid zone.
Wilyabrup 9	Tall open forest of *Corymbia calophylla-Agonis flexuosa* on flats and valleys in perhumid and humid ones.

4.2.4 Heritage features

Aboriginal cultural heritage

The Proposal and Study Area are located within the South West Boojarah within the traditional lands of the Noongar People - Wardandi and Bibulmun/Piblemen language groups.

Noongar people have lived in the southwest of WA since time immemorial, at least 45,000 years. Noongar connection to country connects everything across the vast landscape with meaning and purpose with the belief that everything is connected, the past, the present, the people, the land, the sea and all of its plants and animals (Integrate Sustainability, 2024).

Approximately 30 Aboriginal cultural heritage sites are identified in the Study Area which are protected under the Aboriginal Heritage Act 1972. Tributaries of the Blackwood River (site 20434) and lodged ACH site (22926) are located within the Proposal site as illustrated in Figure 11**.**

European heritage

AMR Shire LGA is one of the first areas settled by Europeans in Western Australia, over 180 years ago. There are many archaeological and historical places of cultural heritage significance in the region. An overview of the European heritage of the Shire is included in Figure 11. There are 11 properties located within the AMR Shire LGA that are on the State Heritage Register, with 74 places on the Shire's Heritage List. The Heritage Inventory was adopted in July 2012, updated in 2021.

State registered heritage places within the Study Area include Cape Leeuwin Water Wheel, Cape Leeuwin Lighthouse and Quarters, Memorial HMAS Nizam, Cape Leeuwin Lighthouse, Davies Park and Foundry Chimney and Darnell's General Store, Witchcliffe.

4.2.5 Key visual features and experiences

Caves Road

Caves Road is a tourist attraction in its own right located within the western extent of the Study Area. Stretching between Cape Naturaliste and Cape Leeuwin, running parallel to the coast, Caves Road provides views of undulating pastureland and vineyards, olive groves and areas of undisturbed natural vegetation. Towards the south Caves Road has impressive views of the karri trees within Boranup Forest (Tourism Western Australia, 2024).

Cape Leeuwin Lighthouse

Constructed in 1895 from local limestone the Cape Leeuwin Lighthouse is situated at the most south-westerly point of Australia and is still a vital working lighthouse for vessels navigating this cape. Located within the southwest of the Study Area, the lighthouse provides uninterrupted views of the Southern Ocean joining the Indian Ocean. Frequented by approximately 120,000 visitors annually Cape Leeuwin Lighthouse is a key tourist attraction (Sealite, 2024).

Cape-to-Cape Track

The Cape-to-Cape Track is a long-distance trail along the Leeuwin-Naturaliste Ridge between the lighthouses of Cape Naturaliste and Cape Leeuwin, within the western extent of the Study Area. Spanning 123 km the Cape-to-Cape Track provides long ranging elevated views across the Indian Ocean and the windswept heath and the surrounding ever-changing display of vegetation and wildflowers in addition to sheltered woodlands and the towering karri forest at Boranup (Trails WA, 2024).

Leeuwin Naturaliste Ridge

Leeuwin Naturaliste Ridge includes a number of caves, formed approximately 1 million years ago, open to the public such as Jewel Cave, Lake Cave and Mammoth Cave. The ridge also includes the towering karri trees of Boranup Forest and bright white sands and turquoise waters of Hamelin Bay Beach, known for spotting stingrays are typical of the visual features and experiences available within Leeuwin Naturaliste Ridge.

Ellis Street – Dead Finish Walk Trail

The Dead Finish Walk Trail is located between Ellis Street Jetty, within the town centre of Augusta, alongside the Blackwood Rivermouth / Hardy Inlet and the Southern Ocean. The walk includes the scenic locations of Seine Bay, the Landing Place memorial, Flinders Bay, Granny's Pool, Augusta Boat Harbour concluding at Dead Finish, providing long ranging views of the Southern Ocean. Whale watching is a popular activity on the trail between May to August due to Humpback migration patterns and the arrival of the Southern Right Whales who use Flinders Bay as their nursery ground (Whale Watch Western Australia, 2024),

Farmland and agriculture

Farming and agricultural is a prevalent land use type within the Study Area with the agricultural industry prominent in the region. Agricultural land is typically cleared for dairy, beef, sheep, horticulture, grapes, nuts, avocados, and olives (AMR Shire, 2021). Agricultural land is intersected with swathes of remnant vegetation, continuous roadside vegetation corridors, timber reserves, state forests and drainage channels whereby clearings open views into the surrounding farmland framed by remnant vegetation, creating a visual backdrop which establishes a distinct rural setting.

Flinders Bay settlement and beach

Flinders Bay was previously a settlement of coastal shacks used by holiday makers and permanent residents in the interwar years. Located in the southwest of the Study Area, it has retained its informal settlement layout and narrow winding residential streets (Heritage Council of WA, 2021) that lead to Flinders Bay. Flinders Bay is a protected bay, with a grass bank shaded by pine trees, that is popular for swimming with local residents and tourists alike. Wide views of the open Southern Ocean and towards the coastal extent of the Scott Coastal Plain are afforded from Flinders Bay.

Blackwood River

Kayaking, boating, camping, and bushwalking alongside the Blackwood River (Goorbilyup Buerle) are popular recreational pursuits. Spanning the southwest to northeast of the Study Area recreational users avail enclosed views of the river valley, framed by naturally occurring vegetation.

Hardy Inlet

Situated within the southwest of the Study Area Hardy Inlet is a key visual feature of Augusta. As a recreational and tourism location, Hardy Inlet is utilised for a range of recreational pursuits including fishing, swimming, wind foiling, boating, kayaking and houseboat cruising. Bird watching, picnicking and walking are also regular activities associated with the inlet. Long ranging views towards the seemingly undeveloped area of East Augusta, Blackwood River, the Southern Ocean, or Augusta townsite are afforded from the banks of Hardy Inlet.

Scott River

Scott River is a tributary of the Blackwood River (Goorbilyup Buerle). Utilised for recreational purposes, such as kayaking, a component of Scott River is located directly adjacent to the southern extent of the Proposal site.

Augusta town centre

Located in an elevated position above Hardy Inlet Augusta town centre, including large swaths of the residential areas, are positions to take advantage of the step valley that affords views across the riparian vegetation towards Hardy Inlet.

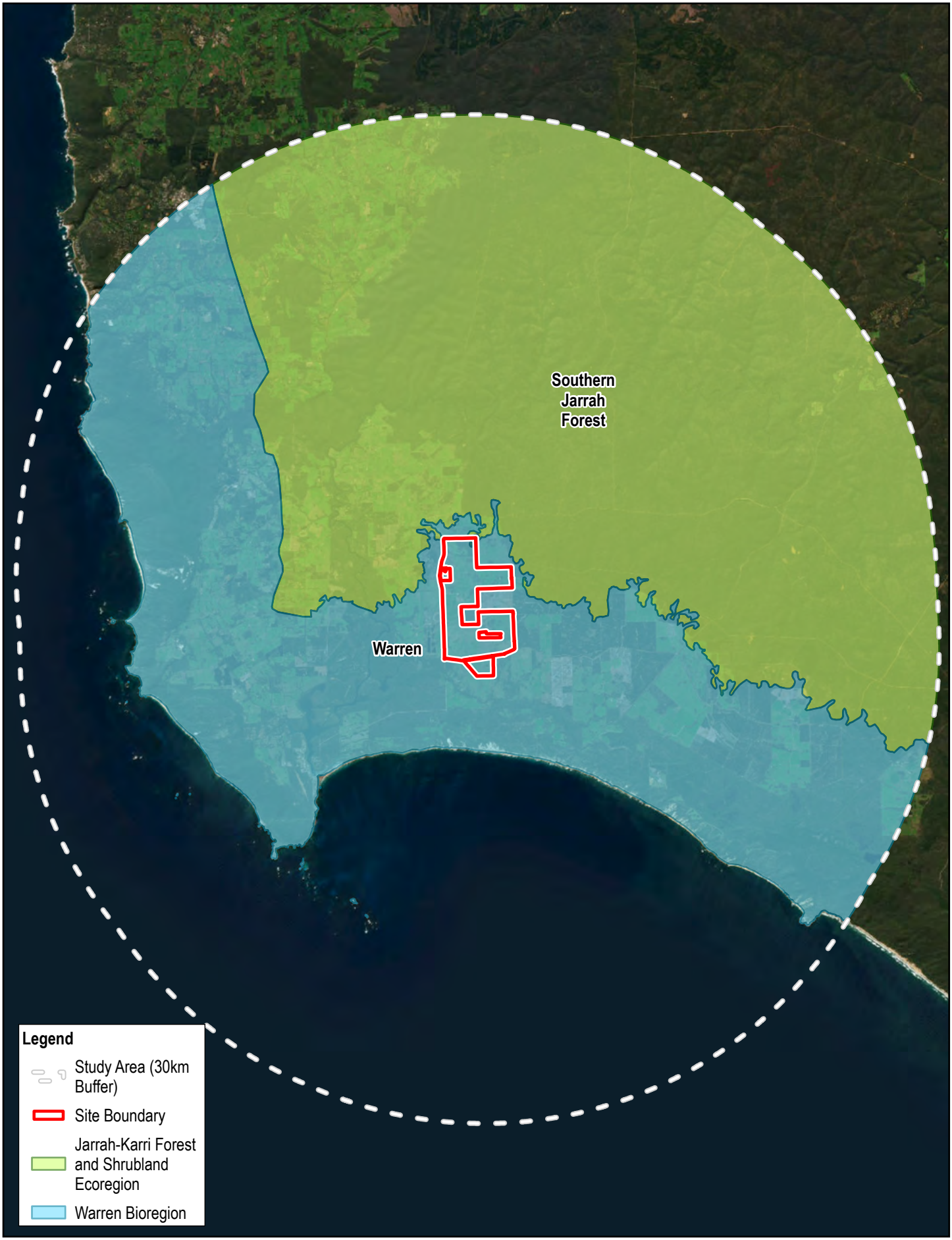
4.3 Community and stakeholder engagement

SynergyRED has engaged the community and stakeholders using best practice methods aligned with IAP2 (International Association of Public Participation) and Clean Energy Council Community Engagement Guideline. The objectives included outlining the proposed wind farm scope and sharing initial findings from the feasibility assessment allowing SynergyRED to gather feedback to inform the remainder of the assessment. This provides SynergyRED with the opportunity to gain feedback from the community and stakeholders to inform the remainder of the feasibility assessment.

The team held four community consultation sessions in Augusta, Scott River, East Augusta, and Margaret River between March 11 and 13, 2024, with 72 community members attending. Feedback was mostly positive or neutral, with some opposition. Some community members were awaiting the feasibility study results before forming an opinion. Prior to these sessions, SynergyRED engaged directly with landowners near the proposed wind farm boundary and continued consultations with community members, groups, and key stakeholders throughout the feasibility phase. An interactive website allows local stakeholders to register their interest and ask questions as the project progresses.

Five additional community consultation sessions were held between December 7 and 12 to share initial findings from the feasibility assessment, including 14 photomontages from the report. These sessions were attended by 152 community members. Feedback was mixed, with visual impact being a significant concern, especially for those living closer to the proposed wind farm and those owning or managing holiday homes.

Engagement with the community continues, including meetings with various community groups and conducting a social impact values assessment. The remaining feasibility assessment outcomes, including visual impact, will be shared with the community and other key stakeholders once finalised.



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Kilometers

Map Projection: Transverse Mercator
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Synergy Renewable Energy Developments Pty Ltd
Proposal Location Plan

Bioregions

Project No. **12632296**
Revision No. **0**
Date **09/01/2025**

FIGURE 7

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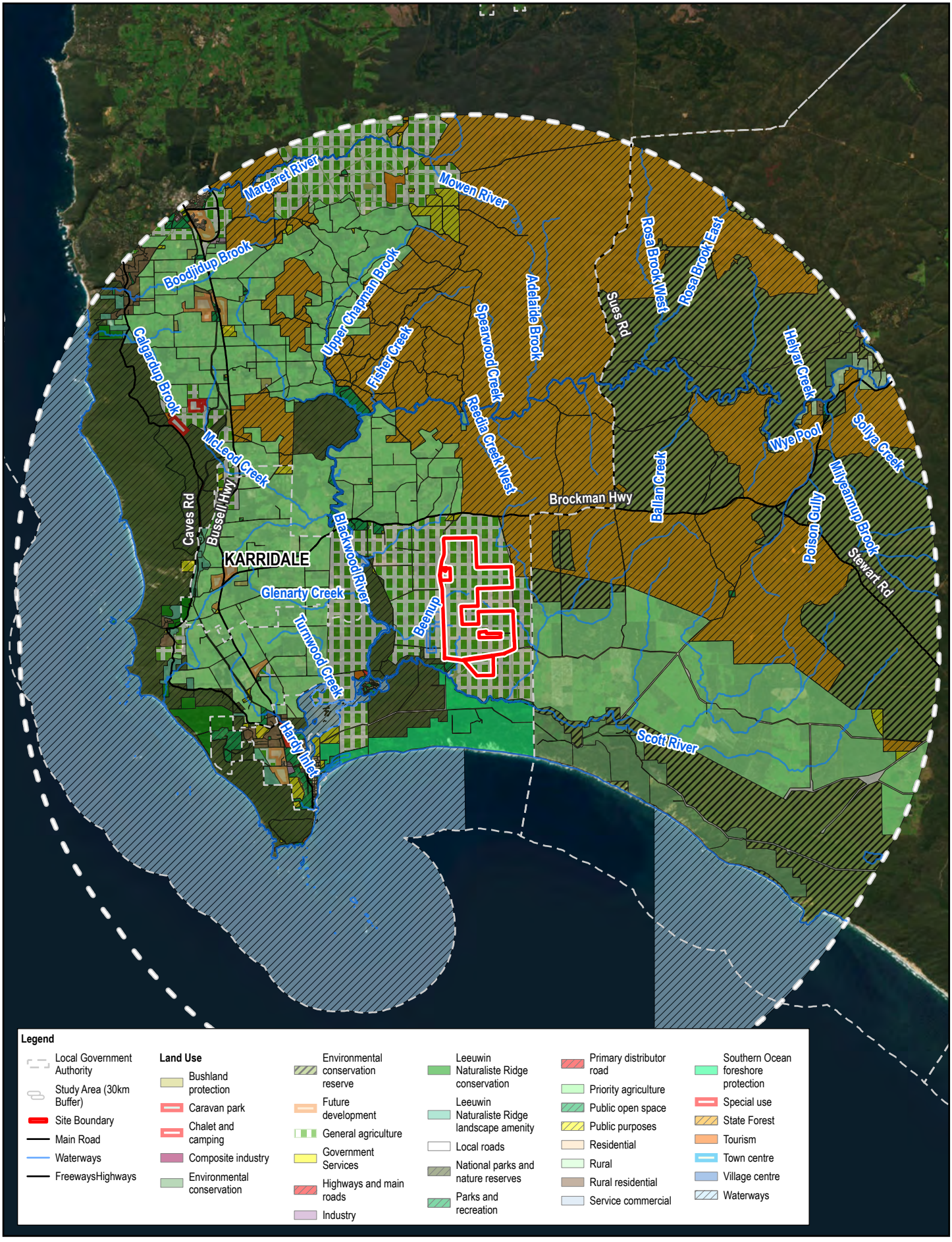

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Planning Zones

FIGURE 8

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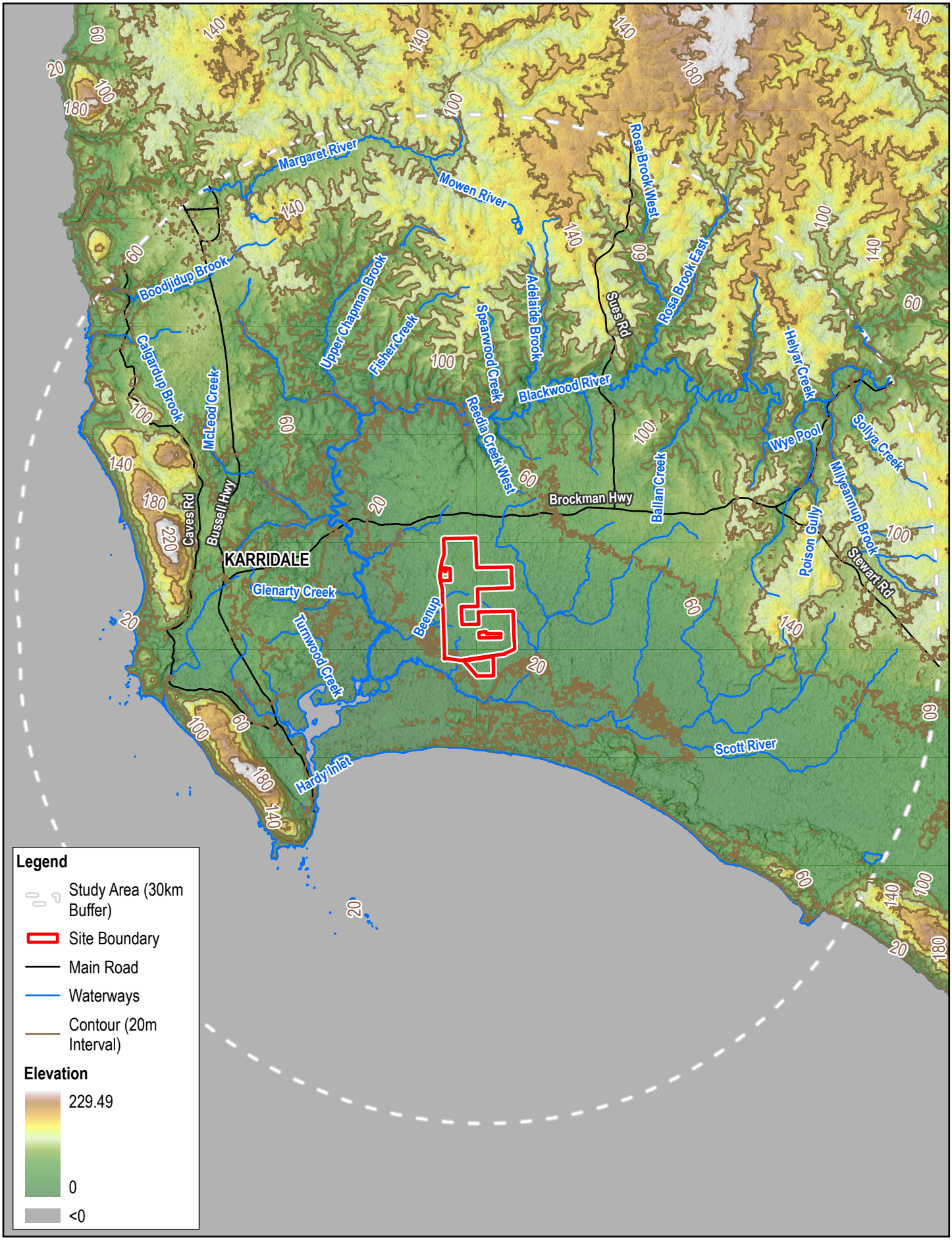

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Proposal Location Plan

Landform, Topography, and Hydrology

Project No. **12632296**
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Date **09/01/2025**

FIGURE 9

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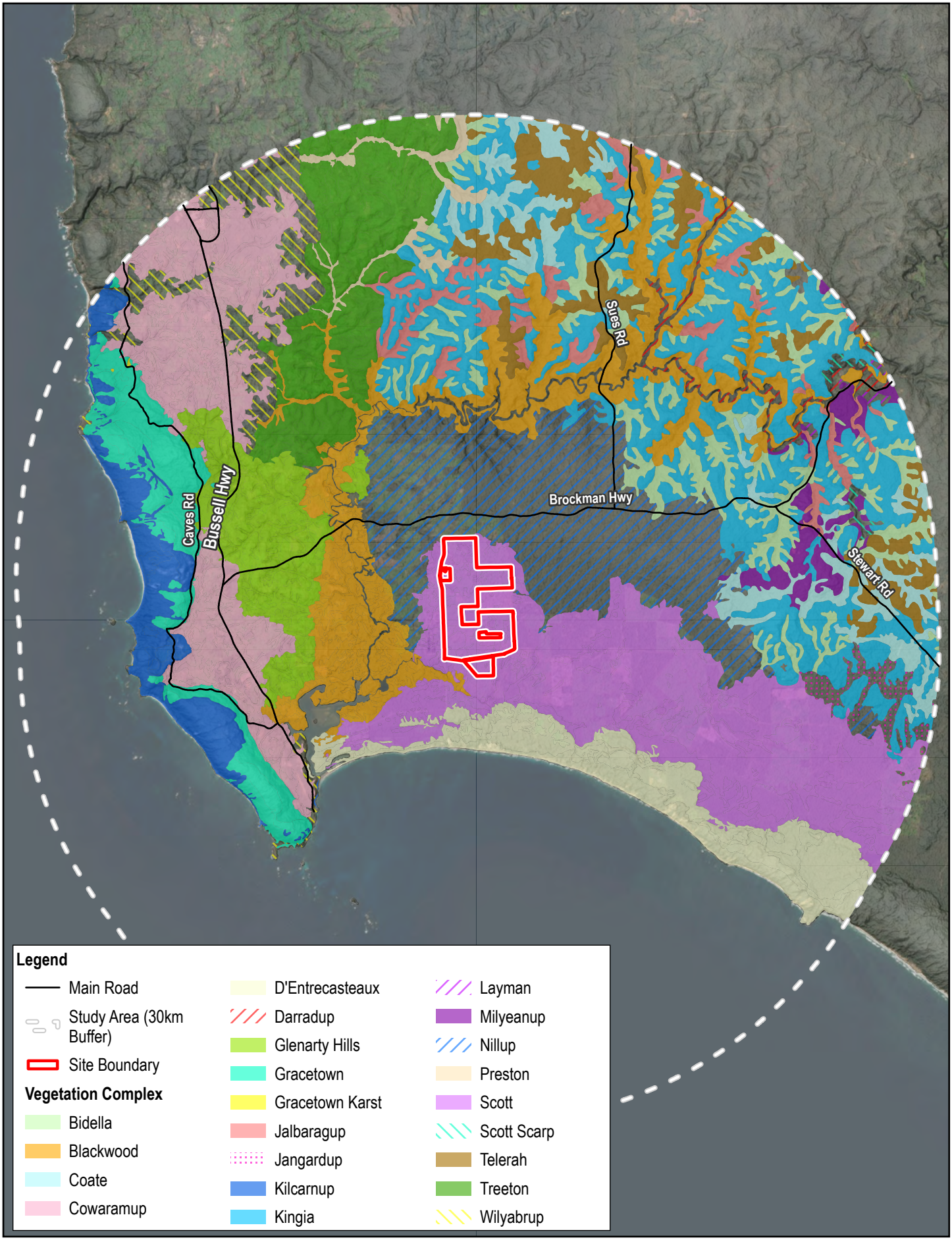

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Proposal Location Plan

Vegetation Complexes

Project No. **12632296**
Revision No. **0**
Date **09/01/2025**

FIGURE 10

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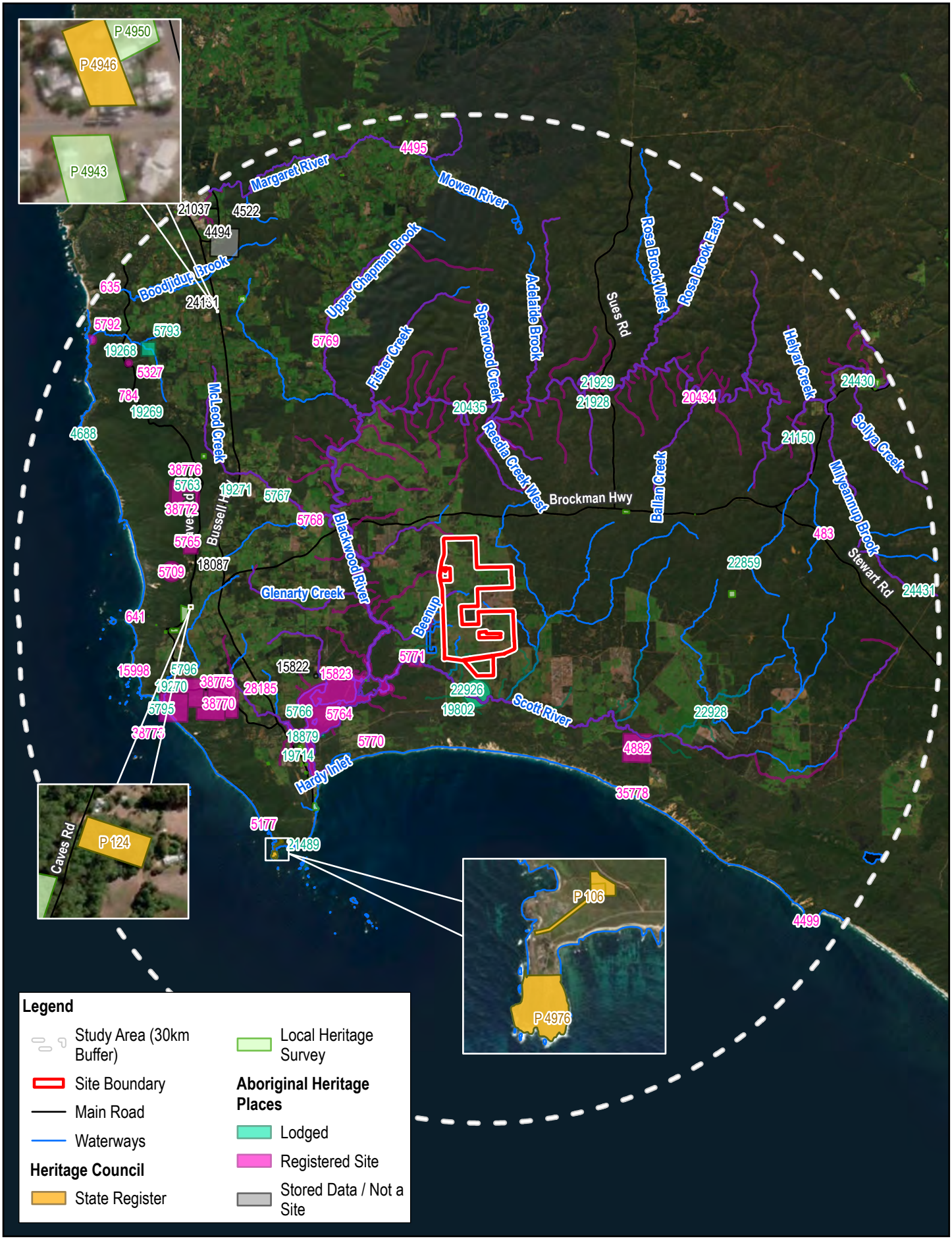

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Synergy Renewable Energy Developments Pty Ltd
Proposal Location Plan

Project No. **12632296**
Revision No. **0**
Date **09/01/2025**

Heritage Places

FIGURE 11

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5. Landscape and visual management objectives

Landscape and visual management objectives have been defined to manage the character of the landscape and visual amenity within the Study Area. The legislation and planning review and context analysis have formed the development of appropriate management objectives. The developed landscape and visual management objectives are generally categorised as follows:

– Best practice siting and design
– Protection and maintenance of landscape character
– Engagement

5.1 Best practice siting and design

– To protect the existing landscape character, the proposed infrastructure should be sited within the natural topographic context of the landscape.
– Vegetation clearance should be kept to a minimum and turbines and associated infrastructure should be carefully sited to minimise impact to areas of remnant native vegetation.
– The design of built form, including finishes and materials selection should respond to the surrounding landscape setting and minimise the facility's visual prominence.
– The layout (e.g. grid pattern or clustered) of the wind farm should consider the existing landscape character (vegetation, waterform, landform and land use) and any variation in the topography of the site.
– Siting should also consider Aboriginal cultural heritage sensitivities that exist within the Proposal site and surrounding landscape.

5.2 Protection and maintenance of landscape character

The valued elements that define the existing landscape character are recommended to be protected. This includes Leeuwin Naturaliste Ridge, wind pruned coastal heath, extensive areas of distinct Jarrah, Marri and Karri forest, agricultural lands, wetland corridors, V shaped river valleys, the coastal landscape of Leeuwin Naturaliste Coast (adjacent to the Indian Ocean), Scott Coastal Plain (adjacent to the Southern Ocean) and the rural amenity of Brockman Highway travel route corridor.

5.3 Engagement

– The significance of the landscape within the Study Area specifically the Blackwood River (Goorbilyup Buerle) and Margaret River (Wooditjup Bilya) and their tributaries to the Wardandi and Bibulmun/Piblemen people should be considered in the design of the Proposal. Where possible engagement with Traditional Custodians to discuss the visual elements of the design should be considered.
– Engagement with the community and stakeholders throughout the design process provides beneficial project outcomes and can improve the perception of additional infrastructure within views and the wider landscape.

Landscape and visual impact assessment

6. Landscape impact assessment

6.1 Landscape character units

Based on the review of the existing landscape context, the site visit and the Department of Conservation and Land Management (1994) *Landscape Character Types of Western Australia*, the LCU's were defined for the Study Area (see Figure 12 below). The locations of the LCUs can be found in Figure 13.

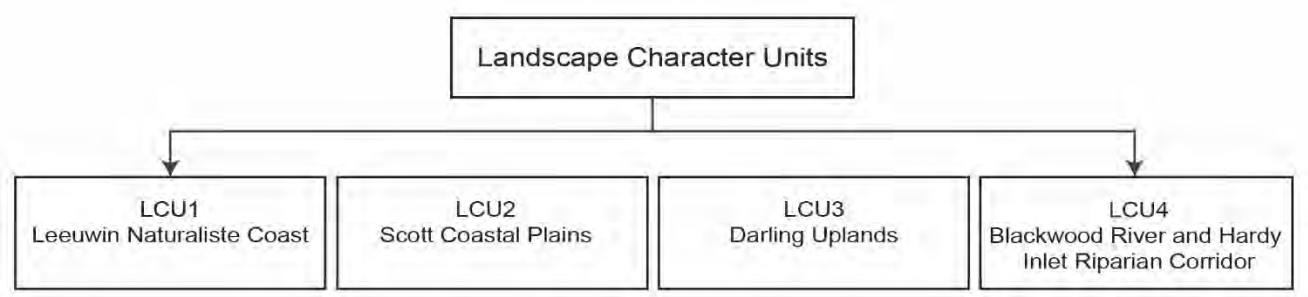
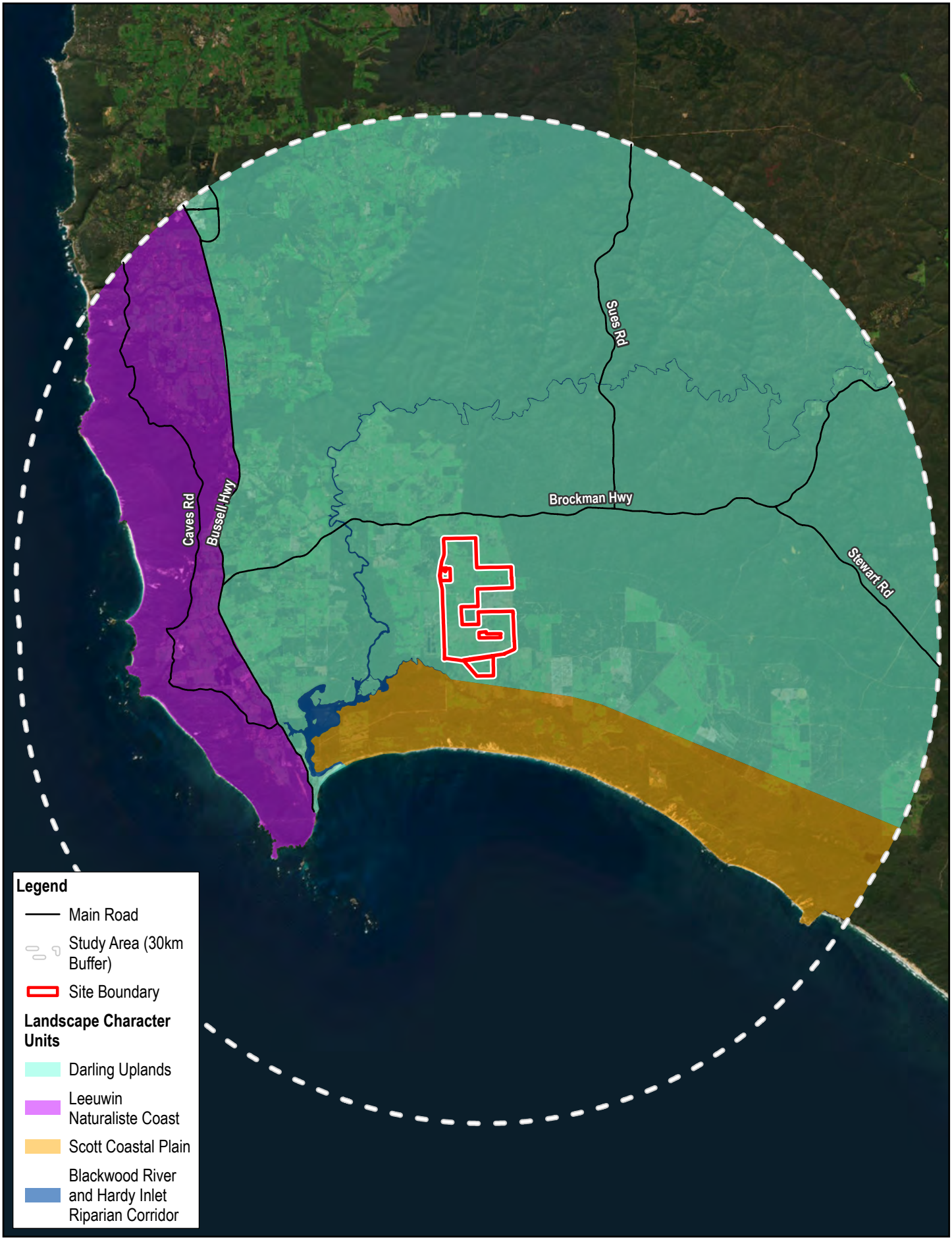


Figure 12 Identified LCU's



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Map Projection: Transverse Mercator
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Synergy Renewable Energy Developments Pty Ltd
Proposal Location Plan

Landscape Character Units

Project No. **12632296**
Revision No. **0**
Date **09/01/2025**

FIGURE 13

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6.2 Landscape impact assessment

The following section includes a description of each LCU and an assessment of impacts to the landscape character within each LCU.

6.2.1 LCU1 Leeuwin Naturaliste Coast

Distinguishing features

– Topography consists of a central ridgeline, uneven beaches, towering sea cliffs and valleys and beyond the ridge an almost flat to gently undulating plain.

– Much of LCU1 encompasses Leeuwin Naturalise National Park and state forest. Vegetation includes wind pruned coastal heathland, stunted Jarrah Marri forest and the towering Karri (*E. divericolor*).

– Set out in a typical grid pattern Augusta town centre lies adjacent to Hardy Inlet and is orientated to take advantage of the views across the inlet from the typical building type of one or two storey commercial and residential properties.

– The local community has strong links to the marine and inlet environment, which are important natural assets that support the local fishing and tourism sectors.

Photo 2 ***Enclosed canopied rural road surrounded by stunted forest.***

Photo 3 ***Uniform wind pruned coastal heath within the open setting of Cape Leeuwin Ridge.***

Photo 4 ***Vast open coastline of the Indian Ocean with rounded undulating hillslopes and wind pruned coastal heath.***

Photo 5 ***Cape Leeuwin Lighthouse, open water of the Southern Ocean with rugged wind pruned coastal heath.***

Photo 6 *Intimate and uniform single storey shops typical of Augusta Main Street.*

Photo 7 *Enclosed bay at Flinders Bay with historical jetty sloping rocky shore and distinctive pine trees.*

6.2.1.1 Key characteristics

The key characteristics of LCU1 are listed in Table 8.

Table 8 *Key characteristics of LCU1*

Criteria	Description
Landform	The topography of LCU1 consists of conical dunes, rocky shorelines, towering sea cliffs, rounded undulating hillslopes punctuated by a discontinuous limestone ridge, known as Leeuwin Naturaliste Ridge. The eastern margin of the Leeuwin Naturaliste Coast, beyond the ridge, is characterised by an almost flat to gently undulating plain, with occasional granitic outcropping and slight gravelly rises or knolls (CALM 1994).
Vegetation	The western slopes of Leeuwin Naturaliste Coast consist of wind pruned coastal heathland vegetation the height and density of which is determined by the prevailing winds and salt spray (CALM 1994). The central ridge includes a stunted Jarrah Marri forest, which grows to its typical size to the east with more sheltered zones consisting of a variety of forests (CALM 1994). Rough barked Banksia and weeping peppermint dominate a range of structural remnant vegetation types, including low forest, woodlands, and open forest (CALM 1994). The vegetation pattern on the gentler eastern slopes is largely dictated by land use where largescale clearing for agriculture and timber has occurred. This, in some areas, has resulted in a colourful pattern of exotic crops, grasses and regrowth forest (CALM 1994). A key landscape feature of the Leeuwin Naturaliste Ridge is the towering Karri (*E. divericolor*), found within the protected depressions and gullies of the southwest proportion of this LCU (CALM 1994).
Waterways / reserves	LCU1 includes Leeuwin Naturaliste National Park, State Forest 45 and Cliff Spackman Nature Reserve. The main drainage feature of the Leeuwin Naturaliste Coast is the Margaret River (Wooditjup Bilya) located in the northern extent of LCU1. Wooditjup Bilya is approximately 60 km in length and comprises a 190 km network of tributaries (Shire of Augusta Margaret River, 2024). The ridge is also cut by a series of westerly flowing brooks with freshwater available on the coast at springs such as Contos and Cape Leeuwin where early settlers integrated the use of a waterwheel. Seasonal swamps and soaks scattered throughout the eastern portion are also evident (CALM 1994).
Land use	Land use within this area includes the expansive coastal landscape located within Leeuwin Naturalise National Park, state forest, agricultural lands (including grazing and vineyards), timber production, residential, town centre and transportation.
Infrastructure	Existing infrastructure within this LCU includes the dominant transport links of Caves Road and Bussell Highway, Augusta Boat Harbour, Cape Leeuwin Lighthouse, Augusta Airport and Augusta townsite.
Cultural and characteristics	LCU1 is located within the land of the Wardandi people. The Wardandi name for the Augusta area is Taalinup. Evidence of human occupation within this area extends beyond 9000 years before the present. Taalinup contains important cultural ecological values that form part of the heritage and identity of Wardandi custodians (Applied Archaeology International in Shire of Augusta Margaret River, 2022). Europeans first explored this area in 1801 and a settlement was set up in Augusta in 1830. European heritage places within LCU1 include Hamelin Bay jetty (DLPH, 2019).

Criteria	Description
	A dominant feature of this landscape is Cape Leeuwin Lighthouse. Cape Leeuwin Lighthouse is the tallest lighthouse on mainland Australia located at the most south-westerly point of Australia at the meeting point of the Southern and Indian Oceans (Margaret River Busselton Tourism Association, 2024). Constructed in 1895 the lighthouse receives approximately 120 thousand visitors annually. The most well-known and high use trail within LCU1 is the Cape to Cape Track. This trail extends 123 km from the Lighthouse at Cape Naturaliste to the Lighthouse at Cape Leeuwin providing a user experience of coastal and forest scenery (Trails WA, 2024). The marine environment of the Leeuwin Naturaliste Coast is a significant natural asset which the local fishing industries and tourism are dependent, and the local communities strongly connected to (DLPH, 2019). This includes Flinders Bay, a very popular swimming beach for community members as well as tourists.
Spatial qualities	The spatial qualities of the Leeuwin Naturaliste Coast include a central ridgeline with varying slopes, uneven beaches, towering sea cliffs and valleys, offshore reefs and wave-cut platforms, narrow sandbars, and U-shaped valleys (CALM, 1994).

6.2.1.2 Landscape impact assessment

Refer to Table 9 for assessment.

Table 9 LCU1 Leeuwin Naturaliste Coast landscape impact assessment

Criteria	Assessment
Anticipated change to landscape character	The Proposal will occur outside of LCU1. The Proposal will be visible from LCU1 and will therefore have the capacity to impact the setting of LCU1. The anticipated change would include views of: – Up to 20 wind turbines with a maximum tip height of 250 m – Two meteorological masts with a maximum height of 164 m
Landscape value	LCU1 has a landscape value of **high**. Values associated with LCU1 include the designated areas within Leeuwin Naturaliste National Park. As recognised in state planning policy 6.1 Leeuwin Naturaliste Ridge is recognised as one of the key landscape features of this area. In addition, LCU1 includes cultural heritage and Aboriginal heritage areas of recognised community value and amenity.
Susceptibility to change	Susceptibility to accommodate the proposed change is **high** as the landscape is of high quality with consistent, intact, well-defined attributes. The proposed development would be incompatible with the existing characteristics of the area and mitigation measures are unlikely to reduce the impacts of the change.
Sensitivity to change	The sensitivity to change is **high** as the susceptibility to accommodate the proposed change is considered high and the landscape value is high.
Magnitude of change	Magnitude of change is **moderate** as the Proposal will result is discernible changes in the landscape character due to partial loss of, or change to elements, features or characteristics of the landscape. The change would appear to have an adverse effect on the landscape character since it would be out of scale with the local pattern and the landforms.
Duration of impact	Permanent
Significance of impact	**High-moderate**

6.2.2 LCU2 Scott Coastal Plains

Distinguishing features

– The topography of LCU2 consists of the Southern Ocean coastline. This includes vertical cliffs, horizontal sandy plains and gently curving beaches. This secluded coastal dune system fronts a low-lying wetland corridor and low rounded hills.

– The wetland corridor includes seasonal swamps, wetlands and the Scott River (a tributary of the Blackwood River) in addition to Swan Lakes and Lake Gingilup.

– LCU2 includes the residential settlement of East Augusta. A small settlement of one to two storey dwellings. The Hardy Inlet has numerous jetties housing small boats used by residents to access Augusta town centre.

– Flora, fauna and landscape conservation is a significant land use of LCU2 as encompasses in Scott National Park and Gingilup Swamps Nature Reserve with privately owned land primarily cleared for farming.

Photo 8 ***Open sandy plain featuring low stunted heath***

Photo 9 ***Limestone rural road through flat plain lined by expanse of uniform vegetation cover.***

Photo 10 ***Intermittent remnant vegetation abutting and within cleared agricultural land.***

Photo 11 ***Cleared flat pastoral land with remnant vegetation.***

Photo 12 ***Lower area of the plain features a flat topography with wild heath and sedge including the bright red swamp bottlebrush.***

Photo 13 ***Sheltered expanse of uniform vegetation cover with variation in colour, texture, and pattern.***

6.2.2.1 Key characteristics

The key characteristics of LCU2 are listed in Table 10.

Table 10 Key characteristics of LCU2

Criteria	Description
Landform	LCU2 lies between the hills delineating the southern extent of the Darling Plateau and the ocean and to the west the Hardy Inlet. Landform characteristics associated with LCU2 include windswept dunes, sandy shoreline deposits fronting a low-lying wetland corridor with low rounded hills and scattered ridges to the north that gradually slope towards the sandy plains below (CALM, 1994).
Vegetation	Vegetation within LCU2 is diverse in structure and composition ranging from sedges to low heath, woodlands, and forests. The taller forest includes Jarrah (*Eucalyptus marginata*), Marri (*E. calophylla*) and Karri (*E. diversicolor*) with the Karri occurring in varies areas of the landscape such as shallow gullies, hill slopes and low plains. The understorey includes a variety of Wattles, Hazels (*Chorilaena spp*.), Water Bush (*Bossiaea aquifolia),* Bull Banksia (*B. grandis*), Snottygobble (*Persoonia longifolia*) and Peppermints (*Agonis flexuosa.)* with the lower areas of the plain influenced by the variability of the water table which effects the vegetation cover surrounding the swamps and lakes. Vegetation in these areas is often heath and sedge (CALM, 1994).
Waterways / reserves	LCU2 includes Scott National Park and Gingilup Swamps Nature Reserve. Terminating at Hardy Inlet the key water feature is Scott River (a tributary of the Blackwood River), with additional rivers, streams and springs also occurring, including Swan Lakes and Lake Gingilup (CALM, 1994).
Land use	Land use within LCU2 is primarily farmland. The remaining areas consist of reserves, national park, and unallocated crown land (Shire of Augusta Margaret River, 2022).
Infrastructure	Infrastructure includes the settlement of East Augusta, East Augusta Jetty, local unsealed roads and 4WD tracks.
Cultural and characteristics	An area of significant environmental and biodiversity value this LCU, incorporating Scott National Park and Gingilup Swamps Nature Reserve, includes highly diverse flora and fauna species. The environmental values are an essential component of both the heritage and wilderness value of this area with previous community engagement outcomes indicating a strong desire to protect the integrity of the environment (WAPC, 2009). Recreational pursuits at Swan Lakes, including fishing and boating and East Augusta residents daily transport needs met by boat are unique to LCU2 (Margaret River Busselton Tourism Association, 2024).
Spatial qualities	The scale of this LCU2, as defined by CALM (1994) includes vertical cliffs, horizontal sandy plains, shoreline, parallel series of dune ridges, horizontal reefs and wave cut platforms, gently curving beaches, swampy corridors and U-shaped valleys and a wetland corridor. Extensive views are provided from high points with long ranging views over the landscape offered by the swampy low-lying plain. Views to the foreground and midground restricted by the coastal dune system (CALM, 1994).

6.2.2.2 Landscape impact assessment

Refer to Table 11 for assessment.

Table 11 LCU2 Scott Coastal Plains landscape impact assessment

Criteria	Assessment
Anticipated change to landscape character	The Proposal will occur outside of LCU2. The Proposal will be visible from LCU2 and will therefore have the capacity to impact the setting of LCU2. The anticipated change would include views of: – Up to 20 wind turbines with a maximum tip height of 250 m – Two meteorological masts with a maximum height of 164 m
Landscape value	LCU2 is an area of significant environmental and biodiversity value with a landscape value of **high**. Scenic qualities include long stretches of coastline free of disturbance and designated areas incorporating Scott National Park and Gingilup Swamps Nature Reserve which includes highly diverse flora and fauna species. These values are recognised in the Augusta Margaret River LPS1.

Criteria	Assessment
Susceptibility to change	Susceptibility to accommodate the proposed change is **high** as the landscape is of high quality with consistent, intact, well-defined attributes. The proposed development would be incompatible with some of the existing characteristics of the area and mitigation measures are unlikely to reduce the impacts of the change.
Sensitivity to change	The sensitivity to change is **high** as the susceptibility to accommodate the proposed change is considered high and the landscape value is high.
Magnitude of change	Magnitude of change is **moderate** as the Proposal will result in discernible changes in the landscape character due to partial loss of, or change to elements, features, or characteristics of the landscape. The change would appear to have an adverse effect on the landscape character since it would be out of scale with the local pattern and the landforms.
Duration of impact	Permanent
Significance of impact	**High-moderate**

6.2.3 LCU3 – Darling Uplands

Distinguishing features

– A deeply dissected landscape featuring rolling hills, V shaped river valleys and extensive areas of Jarrah, Marri and Karri forest.

– LCU3 consists of the Margaret River (Wooditjup Bilya) and tributaries of the Blackwood River (Goorbilyup Buerle). The Margare River (Wooditjup Bilya) and tributaries of the Blackwood River, (Goorbilyup Buerle) and their foreshores are registered Aboriginal heritage sites.

– Farming and agriculture (including viticulture) and the timber industry are prevalent throughout LCU3 with family farms being quintessential to the way of life within LCU3.

Photo 14 ***Gently rolling hills with uniform rows of grape vines backed by undisturbed forest.***

Photo 15 ***Remnant vegetation alongside a semi-enclosed canopied rural road.***

Photo 16 ***Cleared pasture land across gently rolling hills with ageing farm buildings, isolated trees backed by undisturbed forest.***

Photo 17 ***Flat agricultural land with uniform windbreak planting and stand of remnant vegetation.***

Photo 18 Fenced Group Settlement farm residence

Photo 19 Karridale newly developed residential area

6.2.3.1 Key characteristics

The key characteristics of LCU3 are listed in Table 12.

Table 12 Key characteristics of LCU3

Criteria	Description
Landform	Located within the Darling Uplands this LCU includes rolling low hills, areas of granite outcrops and boulders and deep sided valleys influenced by the tributaries of the Blackwood River (Goorbilyup Buerle) and other watercourses.
Vegetation	Native vegetation includes dense areas of Jarrah forest (*Eucalyptus margrinata)* with an understorey including Sheok (*Allocasuarina fraseriana),* Bull Banksia (*B. grandis),* Snottygobble (Persoonia longifolia) and Woody Pear (*Xylomelum occidentale).* Other plant species include Grass Tree (*Xathorroea preissii*), Zamia Palm (*Macrozamia reidlii*), Prickly Bitter-Pea (*Daviesia decurrens*), Parrot Bush (*Dryandra sessilis*), Couch Honeypot (*D.nivea*), Snail Hakea (*H. cristata*) and the Two-leaf Hakea (*H. trifurcata*). This vegetation is interspersed with areas of cleared pastoral and farming lands, including areas of tree plantation.
Waterways/reserves	Reserves within LCU3 are plentiful and include, in no particular order, Milyeannup State Forest, Milyeannup National Park, Barlee Brook State Forest, Blackwood State Forest, Blackwood River National Park, South Blackwood State Forest, Hilliger National Park, Forest Grove National Park, Pagett Nature Reserve, Chester Nature Reserve and Wiltshire Butler National Park. Prominent drainage features of LCU 3 include the Margaret River (Wooditjup Bilya) located in the northern extent of LCU3 and the tributaries of the Blackwood River (Goorbilyup Buerle). Both the Margaret River (Wooditjup Bilya) and tributaries of the Blackwood River (Goorbilyup Buerle) are registered Aboriginal heritage sites.
Land use	Land use within LCU3 primarily includes farming / agriculture and state forest / national parks and nature reserves. Within this LCU also sits residential areas of Augusta, Kudardup, Karridale, Witchcliffe, and south-east Margaret River in addition to rural residential areas.
Infrastructure	LCU3 is bordered by Bussell Highway (the main arterial road north to south) and Brockman Highway (the main arterial road east to west). Infrastructure associated with rural localities and residential areas is also included in LCU3 as is Alexandra Bridge.
Cultural and characteristics	LCU3 includes the rural localities of Karridale, Kudardup, Alexandra Bridge and Witchcliffe. Farming and agriculture (including viticulture) and the timber industry are prevalent throughout LCU3 with family farms being quintessential to the way of life within LCU3.
Spatial qualities	Subdued topography with a gently undulating plateau featuring rolling hills and V shaped river valleys, tall forests and cleared agricultural land.

6.2.3.2 Landscape impact assessment

Refer to Table 13 for assessment.

Table 13 LCU3 Darling Uplands landscape impact assessment

Criteria	Assessment
Anticipated change to landscape character	The Proposal will occur within LCU2. The anticipated change may include: – Up to 20 wind turbines with a maximum tip height of 250m – Two meteorological masts with a maximum height of 164 m – Transmission poles – Access tracks – Substation – Operation and maintenance facility – Temporary batching plant – Temporary construction and laydown area
Landscape value	LCU3 has a landscape value of **high**. The two main drainage features within LCU3 are registered Aboriginal heritage sites. LCU3 also includes a number of designated national parks, including but not limited to Blackwood River National Park and Milyeannup National Park in addition to residential areas such as new subdivisions located east of Bussell Highway in Karridale and Witchcliffe.
Susceptibility to change	Susceptibility to accommodate the proposed change is **moderate** as LCU3 is a dissected landscape consisting of native vegetation interspersed with areas of cleared pastoral and farming lands, as such classified as being of moderate quality and condition. In addition, changes caused by the Proposal would be unlikely to have a significant adverse effect on the landscape character, as a whole, that cannot be effectively mitigated.
Sensitivity to change	The sensitivity to change is **high** as the landscape value is high and the susceptibility to accommodate the proposed change is considered moderate.
Magnitude of change	The magnitude of change is **moderate** as the Proposal will likely result in discernible changes to the landscape character due to partial loss of, or change to, elements, features or characteristics of the landscape that would be out of scale with the local pattern and landforms.
Duration of impact	Permanent
Significance of impact	**High-moderate**

6.2.4 LCU4 – Blackwood River and Hardy Inlet Riparian Corridor

Distinguishing features

– LCU4 consists of the Blackwood River and Hardy Inlet (Goorbilyup Buerle). Hardy Inlet and the Blackwood River, (Goorbilyup Buerle) and their foreshores are registered Aboriginal heritage sites.
– Hardy Inlet is open to the Southern Ocean, via Flinders Bay. The Blackwood River (Goorbilyup Buerle) discharges into the north eastern end of the inlet.
– 70% of lower Blackwood land use consists of State Forest or conservation estate.
– Fringing vegetation is largely in excellent condition.
– Recreational pursuits such as kayaking, boating, and camping alongside the Blackwood River (Goorbilyup Buerle) are popular pastimes for local residents, tourists, and visitors.
– Ellis Street Jetty primarily serves as the boat access from East Augusta (a regular form of transport)

Photo 20 *Open basin of Hardy Inlet*

Photo 21 *A unique gated private jetty at East Augusta*

Photo 22 *An enclosed view of the dark waters of the river fringed by riparian vegetation*

Photo 23 *Gently rippling water fringed by riparian vegetation gives a sense of enclosure*

Photo 24 *A framed view of the river at Alexandra Bridge*

Photo 25 *Reflected undisturbed natural vegetation on the banks of the river*

6.2.4.1 Key characteristics

The key characteristics of LCU4 are listed in Table 14.

Table 14 Key characteristics of LCU4

Criteria	Description
Waterform	Edged by irregular slopes, LCU4 consists of Hardy Inlet and the lower / coastal catchment of the Blackwood River (Goorbilyup Buerle). The river mouth is at its narrowest at the entrance channel, which expands out at Senge Bay and further still just north of East Augusta settlement before opening out into the Hardy Inlet basin that has an area of 9 km. Molloy Island is located within the northeast component of the inlet with Blackwood River (Goorbilyup Buerle) to the northwest of the Island. The long sinuous lower Blackwood gently ripples and snakes through the landscape in an irregular pattern, becoming wider or narrower throughout the extent of the catchment. The depth of the inlet and river vary from shallow areas with sandy beaches and sand bars closer to the entrance channel and deeper water towards the centre. The depth variances are reflected in surface colour from light blue – deep dark brown and blue.
Vegetation	Fringing vegetation throughout the extent of LCU4 is largely intact and in excellent condition. There are various zones of riparian with rushes present towards the coast giving way to salt and then freshwater melaleucas with medium height jarrah-marri forest. A small area of medium height woodland comprising flooded gum ((*Eucalyptus rudis*) and blackbutt with some bullich, jarrah and marri fringes the river whilst another small area is covered by low paperbark woodlands (*Melaleuca sp*.) (Department of Water, 2015).
Reserves	National parks adjacent to LCU4 include Scott National Park and Blackwood River National Park. There are also numerous unnamed reserves located alongside the river banks.
Land use	Land use within LCU4 mostly consists of vegetation and conservation estates with almost 70% of the lower catchment being State Forest or conservation estate with other land use consisting of timber milling, intensive horticulture, viticulture, dairy and beef farming (DWER, 2024).
Infrastructure	Infrastructure within LCU4 includes boat ramps, jetties of various size, styles and types, Molloy Island vehicle and pedestrian chain ferry and two vehicle bridges being Warner Glen and Alexandra Bridge.
Cultural and characteristics	Blackwood River (Goorbilyup Buerle) is a registered Aboriginal heritage site. It is believed that the Blackwood River (Goorbilyup Buerle) was created by and is home to the Waugal, rendering the entire river and its tributaries as a sacred site. It is also important to Aboriginal people as it forms the cultural boundary between the Bibulmun/Piblemen and Wardandi language groups (Brad Goode & Associates, 2018). Kayaking, boating, fishing, camping, and bushwalking alongside the Blackwood River (Goorbilyup Buerle) are popular recreational pursuits.
Spatial qualities	A narrow entrance channel at the river mouth that opening out into a wide basin at Hardy Inlet that transitions into a narrower winding river, edged by irregular slopes framed by varying zones of riparian vegetation.

6.2.4.2 Landscape impact assessment

Refer to Table 15 for assessment.

Table 15 LCU4 Blackwood River and Hardy Inlet Riparian Corridor landscape impact assessment

Criteria	Assessment
Anticipated change to landscape character	The Proposal will occur outside of LCU4. Elements of the Proposal will be visible from LCU4 and will therefore have the capacity to impact the setting of LCU4. The anticipated change may include views of: – Up to 20 wind turbines with a maximum tip height of 250 m.
Landscape value	Landscape values associated with LCU4 include designated landscapes such as Scott National Park and Blackwood River National Park and the nationally important features of the river corridor in addition to Aboriginal Cultural Heritage sensitivities. LCU4 therefore has a **high** landscape value.

Criteria	Assessment
Susceptibility to change	The landscape susceptibility to change is **moderate** as any change caused by the Proposal would be unlikely to have a significant adverse effect on the landscape character, condition or value that could not be mitigated.
Sensitivity to change	Sensitivity to change is **high** as the community place high value upon the landscape of LCU4 and enjoyment of views of their setting.
Magnitude of change	The magnitude of change is **low**, as the proposal will alter one or more key view elements, features, or characteristics by introducing components likely to be visible from specific confined locations within LCU4. Although limited, the change would appear to have an adverse effect on the view at these specific locations, as it would be out of scale with the existing view.
Duration of impact	Permanent
Significance of impact	**Moderate**

6.3 Summary of landscape character impacts

Landscape character units within the Study Area include LCU1 – Leeuwin Naturaliste Coast, LCU2 Scott Coastal Plains, LCU3 Darling Uplands and LCU 4 Blackwood River and Hardy Inlet Riparian Corridor. The detailed review undertaken provided a thorough understanding of the key characteristics of each LCU which, in turn, provided the baseline data required to carry out the landscape impact assessment (Table 16).

The landscape impact assessment found that LCU 1 – Leeuwin Naturaliste Coast, LCU2 – Scott Coastal Plain and LCU3 - Darling Uplands would be most significantly impacted by the Proposal, with a rating of high-moderate, for the following reasons:

– LCU1 Leeuwin Naturaliste Ridge has a high sensitivity relating to Leeuwin Naturaliste Ridge, a landscape of high quality and a magnitude of change of moderate as the Proposal will result in discernible changes in the landscape.
– LCU2 Scott Coastal Plain has a high sensitivity relating to the Southern Ocean coastline, an area of high scenic values, and numerous designated areas which include highly diverse flora and fauna species. The magnitude of change is moderate as the Proposal will result in discernible changes in the landscape that would be out of scale with the landscape character and at odds with the local pattern of the landform.
– LCU3 Darling Uplands received a high-moderate significance of impact rating due to the importance of the drainage features and inclusion of designated areas within a dissected landscape whereby the Proposal would result in discernible changes to the landscape that would leave an adverse impact on the landscape character.
– LCU4 Blackwood River and Hardy Inlet Riparian Corridor received a significance of impact rating of moderate as it likely that this LCU will experience landscape character impacts confined to specific locations.

Table 16 Summary of landscape character impacts

LCU	Name	Sensitivity to change	Magnitude of change	Significance of impact
LCU1	Leeuwin Naturaliste Coast	High	Moderate	High-moderate
LCU2	Scott Coastal Plains	High	Moderate	High-moderate
LCU3	Darling Uplands	High	Moderate	High-moderate
LCU4	Blackwood River and Hardy Inlet Riparian Corridor	High	Low	Moderate

7. Visual impact assessment

7.1 Zone of theoretical visibility analysis

A ZTV analyses were undertaken for the Proposal, focusing on the theoretical visibility of the Proposal. Refer to Section 3.1 for the methodology and heights used and below for an analysis of the ZTV.

Figure 14 and Figure 15 show the Proposal ZTV. The areas showing colour gradient from purple to white indicate land where the Proposal is theoretically visible.

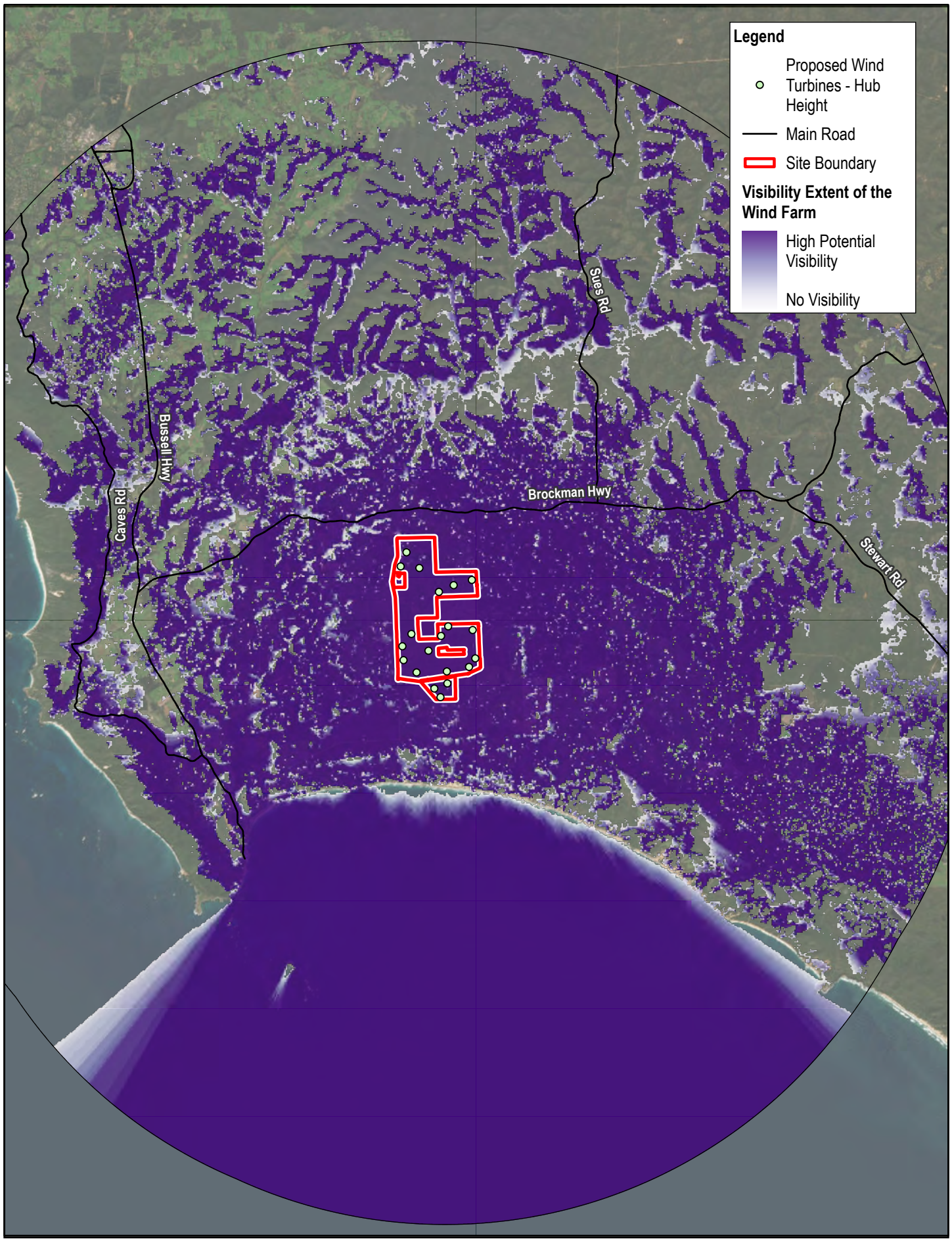
7.2 Site inspection and sensitive visual receptors

The ZTVs show that the siting of the Proposal has resulted in a high visibility of the Proposal throughout the Study Area. During the site inspection the existing Telstra radio tower was used as a reference guide to locate the Proposal site. It was observed that some areas shown as being theoretically visible on the ZTV mapping did not have views of the Proposal site due to intervening vegetation and / or distance. As a result, potential sensitive visual receptors were ruled out of the assessment including:

– East Augusta residential area
– Nillup General Store
– Cape Leeuwin lighthouse complex

The ZTVs showed that the wind turbines would be theoretically visible from Southern Ocean sensitive visual receptors (such as cruise passengers, commercial and recreational fisherpersons) to the south of the Proposal site. However, these areas were discounted from the assessment due to inaccessibility and limited public use.

Remaining sensitive visual receptor locations were chosen for viewpoint assessment in Section 7.3.



Paper Size ISO A4

0 3 6 9 12

Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Synergy Renewable Energy Developments Pty Ltd
Proposed Wind Farm - Scott River

Zone of Theoretical Visibility Mapping - Hub Height

Project No. **12632296**
Revision No. **1**
Date **07/01/2025**

FIGURE 14

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Print date: 07 Jan 2025 - 15:44

Data source: World Imagery: Earthstar Geographics. Created by: rbrown3

Paper Size ISO A4

0 3 6 9 12

Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Synergy Renewable Energy Developments Pty Ltd
Proposed Wind Farm - Scott River

Zone of Theoretical Visibility Mapping - Tip Height

Project No. **12632296**
Revision No. **1**
Date **07/01/2025**

FIGURE 15

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Print date: 07 Jan 2025 - 15:44

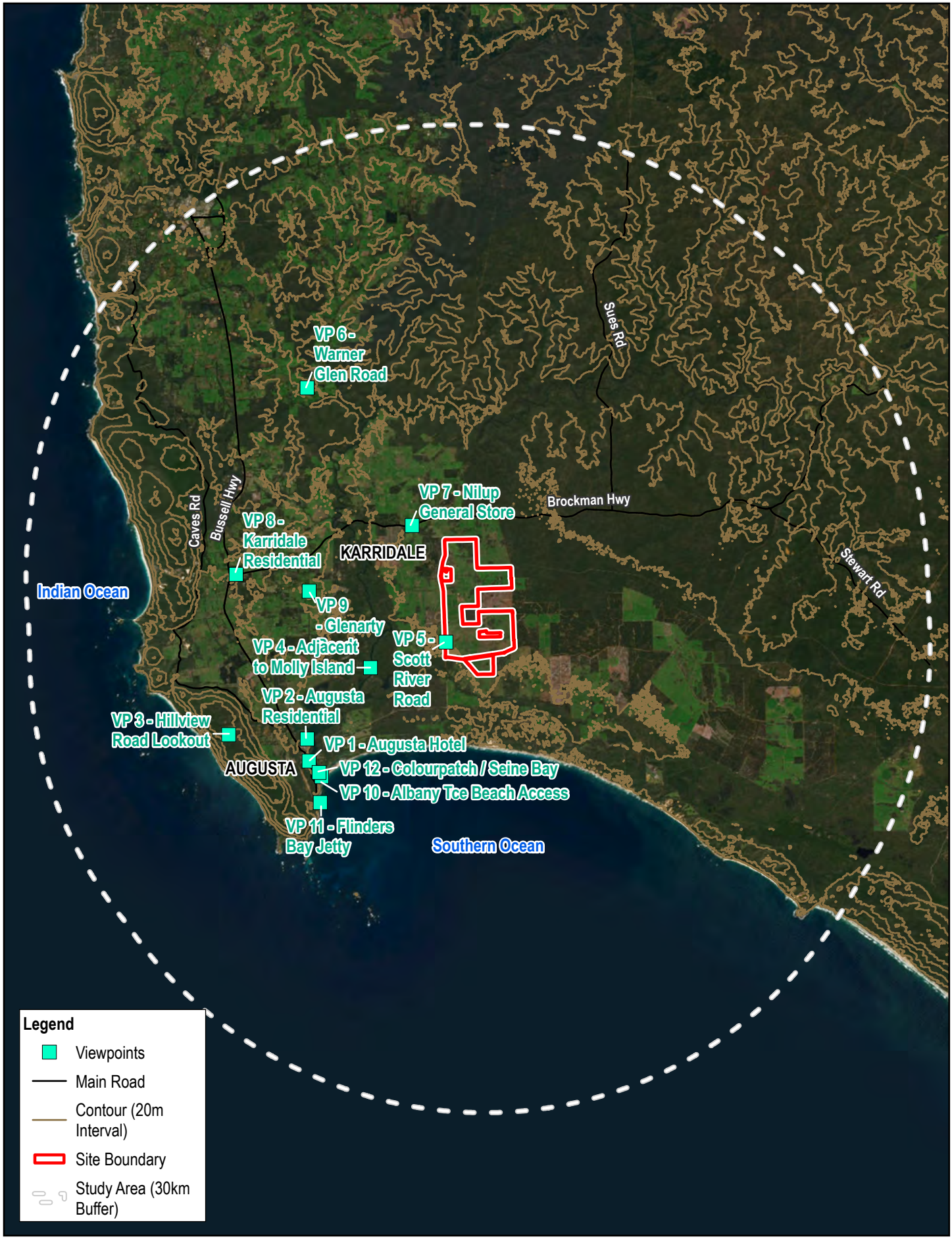
Data source: World Imagery: Earthstar Geographics. Created by: rbrown3

7.3 Viewpoint locations

Based on the visual analysis and understanding of the Proposal, viewpoint locations were selected for assessment of sensitive visual receptors. Refer to Table 17 and Figure 16 for viewpoint locations. For each viewpoint, a panorama of the existing view is provided, together with a description of the existing view, anticipated changes, and impact assessment rating.

Table 17 Viewpoint locations

VP	Title	Location
VP01	Augusta Hotel	Blackwood Avenue, Augusta
VP02	Augusta Residential	Hurford Place, Augusta
VP03	Hillview Road Lookout	Lawrence Road, Augusta
VP04	Adjacent to Molloy Island	Howe Road, Kudardup
VP05	Scott River Road	Scott River Road, Scott River
VP06	Warner Glen Road	Warner Glen Road, Forest Grove
VP07	Brockman Highway	Brockman Highway, Schroeder
VP08	Karridale Residential	Sawmill Loop, Karridale
VP09	Glenarty Road	Glenarty Road, Karridale
VP10	Albany Tce Beach Access	Albany Terrace, Augusta
VP11	Flinders Bay Jetty	Davies Road, Augusta
VP12	Colourpatch / Seine Bay	Albany Terrace, Augusta



Paper Size ISO A4

0 3 6 9 12

Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Synergy Renewable Energy Developments Pty Ltd
Proposed Wind Farm - Scott River

Project No. **12632296**
Revision No. **3**
Date **07/01/2025**

Viewpoints

FIGURE 16

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Print date: 07 Jan 2025 - 15:11

Data source: World Imagery: Earthstar Geographics. Created by: rbrown3

7.4 Assessment of visual impacts

7.4.1 Viewpoint 1 Augusta Hotel

Viewpoint 1 Augusta Hotel is located on Blackwood Avenue, Augusta facing north-east, as shown in Photo 26. Refer to Table 18 for assessment. Refer to Appendix A for photomontages of this viewpoint.

Photo 26 ***Existing view from VP01 Augusta Hotel - Blackwood Avenue, Augusta***

Photo 27 ***Photomontage from VP01 Augusta Hotel - Blackwood Avenue, Augusta***

Photo 28 ***Proposed design rotated 90 degrees with rotated blades from VP01 Augusta Hotel - Blackwood Avenue, Augusta***

Table 18 VP01 assessment

Criteria	Comments
Location	50 34°19.19" S 115° 9' 38" E Elevation: 45.4 m VP01 is situated approximately 12 km south-west of the Proposal and is facing in a north-east direction. This viewpoint is representative of views experienced by Augusta residents and Augusta town centre visitors including patrons of Augusta Hotel. VP01 provides expansive views across Hardy Inlet and East Augusta.
Description of existing view	The foreground includes the grassed slope of the hotel alfresco area with frosted sphere lighting and a variety of fencing types including colorbond compound, rendered brick, hit and miss timber panel and post and rail fencing all of cream tones. A series of cream fibre cement buildings with forest green trim and red corrugated iron roofs are also located within the left to right of centre of the foreground view. The midground includes a proportion of the grassed embankment and the sweeping form of Hardy Inlet. The densely vegetated area of East Augusta is visible across the extent of the background view with a glimpse of the Southern Ocean to the far right of the view.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. Views may be partially screened by intervening vegetation. **Operation** During operation, a proportion of the wind turbines (hub tip and blades) are highly likely to be visible in the centre of the background. This will be a permanent change in the view that will not be screened.
Sensitivity to change	The sensitivity of change is **high** as residents and visitors to Augusta town centre place value on the scenic, elevated long and wide views across Hardy Inlet and East Augusta from VP01 located on Blackwood Avenue, the main street of Augusta.
Magnitude of change	The magnitude of change is **high** as the top of the towers and blades of the Proposal will be visible above the vegetation cover resulting in a substantial and obvious change to the existing view, which permanently alters the characteristics and diminishes the perceived quality of the view.
Significance of impact	The significance of impact is **high**, as the sensitivity to change is **high** and the magnitude of change is high.

7.4.2 Viewpoint 2 Augusta Residential

Viewpoint 2 Augusta Residential is located on Hurford Place, Augusta facing north-east, as shown in Photo 29. Refer to Table 19 for assessment.

Photo 29 Existing view from VP02 Augusta Residential - Hurford Place, Augusta

Photo 30 *Photomontage from VP02 Augusta Residential - Hurford Place, Augusta*

Photo 31 *Red overlay showing maximum blade tip height from VP02 Augusta Residential - Hurford Place, Augusta*

Table 19 *VP02 assessment*

Criteria	Comments
Location	50 34°18'10"S 115°9'35"E Elevation: 19.4m VP02 is situated approximately 12 km south-west of the Proposal and is facing in a north-east direction. This viewpoint is representative of views experienced by Augusta residents. VP02 provides expansive views across Hardy Inlet and East Augusta.
Description of existing view	The foreground highlights landscaping, red asphalt driveways and cul-de-sac typical of the hillside residential areas of Augusta. Within the midground elevated two storey dwellings, orientated to capture the view of Hardy Inlet across to East Augusta, step down the hillside with street trees consisting of the weeping Peppermint tree (*Agonis flexuosa*). The calm waters of Hardy Inlet and undisturbed natural vegetation of East Augusta are visible in the background.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. Views may be partially screened by intervening vegetation. **Operation** During operation, a proportion of the wind turbines (hub tip and blades) are highly likely to be visible in the centre - right of the background. This will be a permanent change in the view that will not be screened.
Sensitivity to change	Sensitivity to change is **high** as the community of Augusta, as a whole, place value on the scenic, elevated, and wide views that include the water body of Hardy Inlet with occupiers of residential properties such as those included in VP02 placing their living and outdoors areas on the second floor to take advantage of these views.

Criteria	Comments
Magnitude of change	The magnitude of change is **moderate** as the top of the towers and blades of the Proposal above the vegetation cover is a discernible change to the characteristics of the central - right view. The change would appear to have an adverse effect on the view since it would be out of scale with the existing view.
Significance of impact	The significance of impact is **high-moderate**, as the sensitivity to change is high and the magnitude of change is moderate.

7.4.3 Viewpoint 3 Hillview Road Lookout

Viewpoint 3 Hillview Road Lookout is located just off Lawrence Road, Augusta facing north-east, as shown in Photo 32. Refer to Table 20 for assessment.

Photo 32 ***Existing view from VP03 Hillview Road Lookout, Lawrence Road, Augusta***

Photo 33 ***Photomontage from VP03 Hillview Road Lookout, Lawrence Road, Augusta***

Photo 34 ***Red overlay showing maximum blade tip height from VP02 Hillview Road Lookout, Lawrence Road, Augusta***

Table 20 VP03 assessment

Criteria	Comments
Location	50 34°17'39"S 115°6'13"E Elevation: 196 m VP03 is situated approximately 17 km south-west of the Proposal and is facing in a north-east direction. This viewpoint is representative of views experienced by visitors to Hillview Road Lookout and Augusta Golf Club members as Augusta Golf Club is of a similar vantage point, located adjacent to Hillview Road Lookout. VP02 provides expansive views from Leeuwin-Naturaliste Ridge across the flat to undulating plain of Leeuwin Naturaliste Coast and the Darling Uplands towards Hardy Inlet, East Augusta and the Southern Ocean.
Description of existing view	Situated within the Leeuwin-Naturaliste Ridge the foreground indicates wind pruned heath and stunted low forest located on top of a rounded undulating hillside. The midground view includes cleared agricultural lands with remnant vegetation and forested areas with the winding form of Hardy Inlet and the relatively undisturbed landscape surrounding East Augusta and a glimpse of the Southern Ocean in the background.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. Views may be partially screened by intervening vegetation. **Operation** During operation, a proportion of the wind turbines (hub tip and blades) may be visible in the background but the prominence if this will be diminished due to the distance of VP03 from the Proposal.
Sensitivity to change	VP03 is situated with LCU1 Leeuwin-Naturaliste Coast which is protected by State Planning Policy 6.1. This policy nominates the Leeuwin-Naturaliste Ridge as an area of extraordinary landscape value and one of the key landscape features within this area. The sensitivity to change is **high** as VP03 is a designated lookout that provides long and wide-ranging, elevated views within a scenic landscape that includes the Hardy Inlet.
Magnitude of change	The view is approximately 17 km away from the Proposal, as a result, the wind turbines may be visible but would occupy a very small portion of a much wider view. Although the visual impacts would be permanent in nature the magnitude of change is considered **low** due to the introduction of components that may be new but may not be uncharacteristic within the existing landscape character.
Significance of impact	The significance of impact is **moderate**, as the sensitivity to change is high and the magnitude of change is low.

7.4.4 Viewpoint 4 Adjacent to Molloy Island

Viewpoint 4 Adjacent to Molloy Island is located just off Howe Road, Kudardup facing north-east, as shown in Photo 35. Refer to Table 21 for assessment.

Photo 35 Existing view from VP04 Adjacent to Molloy Island, Howe Road, Kudardup

Photo 36 *Photomontage from VP04 Adjacent to Molloy Island, Howe Road, Kudardup*

Photo 37 *Red overlay showing maximum blade tip height from VP04 Adjacent to Molloy Island, Howe Road, Kudardup*

Table 21 *VP04 assessment*

Criteria	Comments
Location	50 34°15'21"S 115°12'39"E Elevation: 8.7 m VP04 is situated approximately 6 km south-west of the Proposal and is facing in a north-east direction. This viewpoint is representative of views experienced by visitors of Molloy Hideaway Holiday Park, recreational river users and Molloy Island residents from the chain ferry vehicle barge. VP04 provides expansive views across Blackwood River, Molloy Island and Scott National Park.
Description of existing view	The varied and textured riparian vegetation of the Blackwood River (Goorbilyup Buerle) is indicated within the foreground of VP04. This provides a sense of intimacy and enclosure in juxtaposition to the large expanse of the Blackwood River (Goorbilyup Buerle), the rippled and calm nature of which dominated the midground. The muted dark green – charcoal tones of Molly Island and Scott River National Park in the background provide a high degree of tranquillity.
Anticipated change to view	As indicated in Photo 36 it is likely that a number of turbines will be visible from this public viewpoint, with intervening vegetation shielding the majority of the Proposal.
Sensitivity to change	Sensitivity to change is **high** as VP04 is a conservation and scenic area used for recreation with views that include bodies of water. In addition, occupiers of residential properties frequently engage with this view via use of the chain ferry vehicle barge.
Magnitude of change	The magnitude of change at VP04 is assessed as **moderate** as a proportion of the wind turbines would be visible in the left side of the view which causes discernible change to the characteristics of the view. The change would appear to have an adverse effect on the view since it would be out of scale with the existing view.
Significance of impact	The significance of impact is **high-moderate**, as the sensitivity to change is high and the magnitude of change is moderate.

Note: This VP was the nearest to Molloy Island and offers representational views from the island. According to the assessment of VP04 and considering the dense vegetation on Molloy Island and in Scott River National Park it is unlikely that the Proposal will be visible from most areas of Molloy Island.

7.4.5 Viewpoint 5 Scott River Road

Viewpoint 5 Scott River Road is located on the Scott River Road, Scott River facing north, as shown in Photo 38. Refer to Table 22 for assessment.

Photo 38 ***Existing view from VP05 Scott River Road, Scott River Road, Scott River***

Photo 39 ***Photomontage from VP05 Scott River Road, Scott River Road, Scott River***

Photo 40 ***Red overlay showing maximum blade tip height from VP05 Scott River Road, Scott River Road, Scott River***

Table 22 VP05 assessment

Criteria	Comments
Location	50 34°14'26"S 115°16'11"E Elevation: 40.4 m VP05 is situated directly adjacent to the Proposal site and is facing in an eastern direction. This viewpoint is representative of views experienced by residents and agricultural workers of East Augusta and Scott River. VP05 provides expansive views across the pastureland and remnant vegetation located within the Proposal site.
Description of existing view	The sandy flats of the foreground include an open area of homogenous browning grassland with the midground including clumps of trees and fence line to the left. The background exemplifies the gradual and naturally appearing transition between agricultural land and naturally vegetated areas.
Anticipated change to view	**Construction** During the construction phase, potential short term visual impacts may be associated with construction of gravel access tracks and associated earthworks and vegetation clearing (between turbines and existing public access roads and within the site), trenching, concrete batching plant (100 m x 100 m), construction and laydown area (100 m x 400 m), wind turbine, meteorological mast and transmission post and lattice tower transportation and construction in addition to additional construction activities such as increased vehicle movements. **Operation** Windfarm components visible from VP05 are subject to finalisation of detailed design. Components that may be present in the view include wind turbines and foundations in the midground and background. Access tracks, hard stand areas and the meteorological mast.
Sensitivity to change	Sensitivity to change is **high** as VP05 will be experienced by occupiers of residential properties going to and from work with long viewing periods within close proximity to the Proposal. Outside workers will also have prolonged views of the Proposal from this vantage point.
Magnitude of change	The magnitude of change is considered **high** as the Proposal will have a substantial and obvious change to the existing view due to a change of elements within the view which cause a view to be permanently changed and its perceived quality diminished.
Significance of impact	The significance of impact is **high**, as the sensitivity to change is high and the magnitude of change is high.

7.4.6 Viewpoint 6 Warner Glen Road

Viewpoint 6 Warner Glen Road is located on Warner Glen Road, Forest Grove facing south-east, as shown in Photo 41. Refer to Table 23 for assessment. Refer to Appendix A for photomontages of this viewpoint.

Photo 41 Existing view from VP06 Warner Glen Road, Warner Glen Road, Forest Grove

Photo 42 *Photomontage from VP06 Warner Glen Road, Warner Glen Road, Forest Grove*

Photo 43 *Red overlay showing maximum blade tip height from VP06 Warner Glen Road, Warner Glen Road, Forest Grove*

Table 23 *VP06 assessment*

Criteria	Comments
Location	50 34°4'25"S 115°9'48"E Elevation: 148.6 m VP06 is situated approximately 15 km north-west of the Proposal and is facing in a south-east direction. This viewpoint is representative of views experienced by occupiers of residences and farm workers within Warner Glen in addition to recreational users and tourists (accessing scenic locations such as Chapman Pool). VP06 provides elevated views across reticulated undulating pastureland towards forested areas.
Description of existing view	The foreground is characterised by the gently undulating irrigated pastureland featuring textured, bright green pasture. A cleared, sloping valley is in the centre of the midground. Components of the mid-ground view include isolated trees, tree clumps, farm related infrastructure (access tracks, fencing, power pole) with the farm dwelling visible in the righthand side. Further irrigated fields and a farm building can be seen in the background, along with the boundary of the surrounding forested area with the cleared agricultural landscape.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. Views may be partially screened by intervening vegetation. **Operation** During operation, a proportion of the wind turbines (hub tip and blades) may be visible in the background but the prominence if this will be diminished due to the distance of VP06 from the Proposal.
Sensitivity to change	Sensitivity to change is **high** as Warner Glen Road is a scenic road that is utilised by local residents, recreational users, and tourists. It provides long and wide scenic views across the rural landscape from an elevated vantage point and occupiers of rural properties will experience prolonged views of the Proposal from VP06.

Criteria	Comments
Magnitude of change	Due to the distance from the Proposal the magnitude of change is **low** as the introduced wind turbines are not out of character with the existing view. The wind turbines are likely to be seen in the righthand side of the background view, just above the tree canopy. As the view already includes a range of industrial elements such as fencing, farm building and tracks, irrigated pastureland, the addition of the diminished turbines, located approximately 15 km away will be mostly consistent with the existing characteristics of the view.
Significance of impact	The significance of impact is **moderate**, as the sensitivity to change is high and the magnitude of change is low.

7.4.7 Viewpoint 7 Brockman Highway Residential

Viewpoint 7 Brockman Highway Residential is located on Brockman Highway, Schroeder facing south, as shown in Photo 44. Refer to Table 24 for assessment.

Photo 44 ***Existing view from VP07 Brockman Highway Residential, Brockman Road, Schroeder***

Photo 45 ***Photomontages from VP07 Brockman Highway Residential, Brockman Road, Schroeder***

Photo 46 ***Red overlay showing maximum blade tip height from VP07 Brockman Highway Residential, Brockman Road, Schroeder***

Table 24 VP07 assessment

Criteria	Comments
Location	50 34°9'32"S 115°17'37"E Elevation: 44.9 m VP07 is situated approximately 1.6 km north of the Proposal and is facing in a southern direction. This viewpoint is representative of views experienced by Brockman Highway road users. VP07 provides views across agricultural pastureland towards the Proposal site.
Description of existing view	The diagonal line of the access track spans the foreground, midground and background of VP07, the colour of which is quintessential of the rubbly pale orange lateritic soil and pea gravel of the Darling Uplands LCU. Shaded by remnant roadside vegetation (out of view) the foreground encompasses fenceposts and gates either side of the access track, with patches of low untended grass. To the left of the track stands a clump of trees. The midground includes a large flat expanse of dry uniform unirrigated pastureland with rolls of hay adjacent to the access track and a herd of cows grazing in the paddock. Large trees delineate the extent of the background view.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. Views may be partially screened by intervening vegetation. **Operation** During operation, a proportion of wind turbines will likely be visible in the background. Depending on where it is situated a component of the meteorological mast may also be visible from VP07.
Sensitivity to change	Brockman Highway is an arterial road between Karridale in the west and Nannup in the east. As stated in AMR Shire LPS Brockman Highway has associated visual management controls whereby large visually obtrusive developments on sites that are prominently located along travel route corridors and contribute to the natural and rural landscape amenity of the shire are discouraged. Categories of road users include, but are not limited to, local residents, agricultural workers, heavy haul vehicles and tourists. Based on the local government road designations and type of sensitive visual receptors and their likely interest in the view the sensitivity to change is defined as **high.**
Magnitude of change	The magnitude of change is **moderate** as the top of the towers and blades of the Proposal above the vegetation cover is a discernible change to the characteristics of the view. The change would appear to have an adverse effect on the view since it would be out of scale with the existing view.
Significance of impact	The significance of impact is **high-moderate**, as the sensitivity to change is high and the magnitude of change is moderate.

7.4.8 Viewpoint 8 Karridale Residential

Viewpoint 8 Karridale Residential is located on Sawmill Loop, Karridale facing east, as shown in Photo 47. Refer to Table 25 for assessment.

Photo 47 Existing view from VP08 Karridale Residential, Sawmill Loop, Karridale

Photo 48 *Red overlay showing maximum blade tip height from VP08 Karridale Residential, Sawmill Loop, Karridale*

Table 25 *VP08 assessment*

Criteria	Comments
Location	50 34°4'25"S 115°9'48"E Elevation: 135.7 m VP08 is situated approximately 15 km west of the Proposal and is facing in an eastern direction. This viewpoint is representative of views experienced by residents of Karridale semi-rural residential area. VP08 provides representative views of the residential area.
Description of existing view	The view is centred along the residential street of Sawmill Loop. The centre of the foreground and midground view is composed of Sawmill Loop, adjacent grey concrete pathway and post and wire rural fencing. The residential street is sparse and includes (from left to right) the roadway, sparsely vegetated verge segregated by the concrete path and the sloped yard of the adjacent residential property. Residential dwellings and associated infrastructure such as sheds, a water tank and fencing material are evident in the midground with open swales with driveways over concrete culverts and newly planted street trees, between the road and pathway in the midground to background of the view. The remainder of the background view consists of construction machinery, power poles and an agricultural field lined with trees on the skyline.
Anticipated change to view	Due to the distance from the Proposal and intervening vegetation there is no anticipated changed to the view from construction or operation.
Sensitivity to change	The sensitivity to change is **moderate** as VP08 will be experienced by occupiers of residential properties with long viewing periods at a distance from and screened from the Proposal.
Magnitude of change	The magnitude of change is **negligible** as there is almost imperceptible or no change in the view as there is little or no loss of/or change to the elements, features, or characteristics of the view.
Significance of impact	The significance of impact is **negligible**, as the sensitivity to change is moderate and the magnitude of change is negligible.

7.4.9 Viewpoint 9 Glenarty Road

Viewpoint 9 Glenarty Road is located on Glenarty Road, Karridale facing east, as shown in Photo 49. Refer to Table 26 for assessment.

Photo 49 *Existing view from VP09 Glenarty Road, Glenarty Road, Karridale*

Photo 50 *Photomontages from VP09 Glenarty Road, Glenarty Road, Karridale*

Photo 51 *Red overlay showing maximum blade tip height from VP09 Glenarty Road, Glenarty Road, Karridale*

Table 26 *VP09 assessment*

Criteria	Comments
Location	50 34°12'20" S 115°9'49"E Elevation: 85.4 m VP09 is situated approximately 9.5 km west of the Proposal and is facing in an eastern direction. This viewpoint is representative of views experienced by occupiers of residences within the locality of Glenarty in addition to tourists and visitors to such places as local wineries. VP08 provides representative views across gently undulating pastureland towards forested area.
Description of existing view	Evident in the foreground is an open view of gently undulating low, dry pasture. The centre of the midground view includes sparsely scattered trees and cattle grazing. Within the gradual undulating form of the midground, scattered trees and vegetation are located to the left and right of the view, framing the open pastural landscape. Within the background the landscape transitions from agriculture to relatively undisturbed, low-lying forested areas.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. Views may be partially screened by intervening vegetation. **Operation** During operation, a proportion of the wind turbines (hub and blades) are likely to be visible in the background. Views may be partially screened by intervening vegetation.
Sensitivity to change	The sensitivity to change is **high** as Glenarty Road is a local road that provides scenic and rural views from an elevated position which is utilised by local residents, agricultural workers, recreational users and tourists.
Magnitude of change	The magnitude of change is **moderate** as the likely view of a proportion of the wind turbines above the vegetation cover is discernible change to the characteristics of the view. The change would appear to have an adverse effect on the view since it would be out of scale with the existing view.
Significance of impact	The significance of impact is **high-moderate**, as the sensitivity to change is high and the magnitude of change is moderate.

7.4.10 Viewpoint 10 Albany Terrace Beach Access

Viewpoint 10 Albany Terrace Beach Access is located on Albany Terrace, Augusta facing north-east, as shown in Photo 52. Refer to Table 27 for assessment. Refer to Appendix A for photomontages of this viewpoint.

Photo 52 Existing view from VP10 Albany Terrace, Albany Terrace, Augusta

Photo 53 Photomontage from VP10 Albany Terrace, Albany Terrace, Augusta

Photo 54 Proposed design rotated 90 degrees with rotated blades from VP10 Albany Tce, Albany Terrace, Augusta

Table 27 VP10 assessment

Criteria	Comments
Location	50 34°19'36" S 115°10'12"E Elevation: 7.9 m VP10 is situated approximately 12.5 km southwest of the Proposal and is facing in a north-east direction. This viewpoint is representative of views experienced by local residents, recreational beach users and tourists. VP10 provides representative views of the Hardy Inlet / Southern Ocean river mouth and the coastal zone of the Scott Coastal Plain from Albany Terrace beach access point.
Description of existing view	A sand dune with low-growing coastal vegetation is located in the left of the foreground view. The beach expands across the centre and right of the foreground view. The beach extends across the midground view where it merges with the Blackwood river mouth and into the Southern Ocean. In the background the gentle curve of the coastline allows for long unobstructed views of the Southern Ocean and coastal zone of the Scott Coastal Plain which provides and expansive and rugged coastal view.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. **Operation** During operation, a proportion of the wind turbines are highly likely to be visible in the background.
Sensitivity to change	Sensitivity to change is **high** as VP10 is a coastal vantage point that includes long scenic views of the Southern Ocean, Blackwood river mouth and the coastal zone of Scott Coastal Plain that will be experienced by recreation users in additional to local residents and tourists.
Magnitude of change	Although the Proposal is located approximately 12.5 km away Photo 53 highlights the permanent change the Proposal will have to an otherwise undeveloped and rugged coastal view. As such the magnitude of change is **high** as the Proposal will cause the view to be permanently altered and its perceived quality diminished through the inclusion of a substantial and obvious change to the existing view.
Significance of impact	The significance of impact is **high**, as the sensitivity to change is high and the magnitude of change is high.

7.4.11 Viewpoint 11 Flinders Bay Jetty

Viewpoint 11 Flinders Bay Jetty is located on Davies Road, Augusta facing north-east, as shown in Photo 55. Refer to Table 28 for assessment. Refer to Appendix A for photomontages of this viewpoint.

Photo 55 VP11 Flinders Bay Jetty, Davies Road, Augusta

Photo 56 *Photomontage from VP11 Flinders Bay Jetty, Davies Road, Augusta*

Photo 57 *Proposed design rotated 90 degrees with rotated blades from VP11 Flinders Bay Jetty, Davies Road, Augusta*

Table 28 *VP11 assessment*

Criteria	Comments
Location	50 34°20'36"S 115°10'6"E Elevation: 52.6 m VP11 is situated approximately 14 km south-west of the Proposal and is facing in a north-east direction. This viewpoint is representative of views experienced by local residents, recreational beach users and tourists. VP11 provides representative views across Flinders Bay to the Southern Ocean and the coastal zone of the Scott Coastal Plain, in addition to residential areas of Augusta from Flinders Bay Jetty.
Description of existing view	Framed by a platform on the left and a jetty on the right the foreground view consists of the gently rippling form of the ocean. Crystal clear and shallow, with scatterings of boulders adjacent to the shore, the shallow water also contains dark patches of reef and seaweed. To the left of the midground view is the moderately inclined hillslope adjacent to Augusta town centre. This is densely vegetated with numerous houses dispersed throughout. Across the large expanse of ocean, within the background view, is the coastal zone of Scott Coastal Plain. A slither of land with a high degree of naturalness.
Anticipated change to view	**Construction** During the construction phase potential short term visual impacts associated with assembly of the wind turbines (including use of cranes) may be achieved in the background view. **Operation** During operation, a proportion of the wind turbines are highly likely to be visible in the background.
Sensitivity to change	Sensitivity to change is **high** as VP11 is a coastal vantage point that includes long scenic views of the Southern Ocean, and the coastal zone of Scott Coastal Plain that will be experienced by recreation users in addition to local residents and tourists.

Criteria	Comments
Magnitude of change	Although the Proposal is located approximately 14 km away Photo 56 highlights the permanent change the Proposal will have to an otherwise undeveloped view across the Southern Ocean towards the Scott Coastal Plain coastal zone. As such the magnitude of change is **high** as the Proposal will cause the view to be permanently altered and its perceived quality diminished through the inclusion of a substantial and obvious change to the existing view.
Significance of impact	The significance of impact is **high**, as the sensitivity to change is high and the magnitude of change is high.

7.4.12 Viewpoint 12 Colourpatch / Seine Bay

Viewpoint 12 is located at Colourpatch / Seine Bay, within close proximity to Albany Terrace, Augusta. VP12 faces in a north-east direction, as shown in Photo 58. Refer to Table 29 for assessment. Refer to Appendix A for photomontages of this viewpoint.

Photo 58 ***Existing view from VP12 Colourpatch, Seine Bay, Augusta***

Photo 59 ***Photomontages from VP12 Colourpatch, Seine Bay, Augusta***

Photo 60 ***Red overlay showing maximum blade tip height from VP12 Colourpatch, Seine Bay, Augusta***

Table 29 VP12 assessment

Criteria	Comments
Location	50 34°19'27"S 115°10'6"E Elevation: 17 m VP12 is situated approximately 12 km south-west of the Proposal and faces a north-east direction. This viewpoint is representative of views experienced by local residents, recreational users of the inlet and tourists. VP12 provides representative views of the Hardy Inlet / Southern Ocean river mouth from Colourpatch / Seine Bay.
Description of existing view	The foreground showcases a well-maintained green lawn, a tall pine tree and shrubs fronted by a sandy beach. The midground is dominated by the deep grey/blue choppy form of the Hardy Inlet which, to the right of view, connects to the Southern Ocean. East Augusta is the landform shown in the distance. The gently sloping portion of East Augusta visible within this view, is covered with low, dense vegetation. Trees and shrubs make up the majority of the vegetation, which creates a dense natural buffer along the water's edge.
Anticipated change to view	**Construction** It is unlikely that the construction activities will impact VP12. **Operation** It is unlikely the wind turbines be visible from VP12. The wind turbine would be screened by the existing landform and topography.
Sensitivity to change	Sensitivity to change is **high**, as views of the landscape from this area are highly valued by the community, recreational users and tourists. Long scenic views of Seine Bay and Hardy Inlet, the Southern Ocean river mouth and East Augusta are afforded from VP12.
Magnitude of change	Although the Proposal is located approximately 12.5 km away it will impose a permanent change to an otherwise undeveloped view. The magnitude of change is **moderate** as a proportion of the wind turbines would be visible in the right side of the view which causes discernible change to the characteristics of the view. The change would appear to have an adverse effect on the view since it would be out of scale with the existing view.
Significance of impact	The significance of impact is **high-moderate**, as the sensitivity to change is high and the magnitude of change is moderate.

7.5 Visual impact assessment summary

Table 30 provides a summary of the assessment of sensitive visual receptors. This assessment includes a panorama of the existing view, view description, anticipated visual changes in addition to an impact assessment rating. As highlighted in this table the overall visual impact rating ranges from high – negligible.

Table 30 Visual impacts assessment summary

VP	Title	Sensitivity to change	Magnitude of change	Significance of impact
VP01	Augusta Hotel	High	High	High
VP02	Augusta Residential	High	Moderate	High-moderate
VP03	Hillview Road Lookout	High	Low	Moderate
VP04	Adjacent to Molloy Island	High	Moderate	High-moderate
VP05	Scott River Road	High	High	High
VP06	Warner Glen Road	High	Low	Moderate
VP07	Brockman Highway	High	Moderate	High-moderate
VP08	Karridale Residential	Moderate	Negligible	Negligible
VP09	Glenarty Road	High	Moderate	High-moderate
VP10	Albany Tce Beach Access	High	High	High
VP11	Flinders Bay Jetty	High	High	High
VP12	Colourpatch / Seine Bay	High	Moderate	High-moderate

Mitigation and management measures

8. Mitigation and management measures

This section includes a discussion on how the Proposal responds to the visual management objectives identified in Section 5. Landscape and visual mitigation measures are proposed in Section 8.2

8.1 Response to landscape and visual management objectives

8.1.1 Best practice siting and design

Impacts on views from key landscape features identified in Section 4, including Leeuwin Naturaliste Ridge, Scott Coastal Plain, coastal environments, waterbodies, and Brockman Highway travel route corridor, in addition to sensitive visual receptors identified in Section 7, should be considered during initial wind farm layout design, having regard to other pertinent factors including wind quality and acoustic impacts that typically drive the wind turbine layout. Landscape character values identified in Section 6 should also be protected through appropriate siting and design.

The layout (e.g. grid pattern or clustered) of the wind farm should consider the existing landscape character (vegetation, waterform, landform and land use) and any topography variation. Best practice suggests that a regular shape, such as a double line, triangle or grid can appear appropriate within a wide open and level space where there is a regular landscape pattern, such as with in agricultural fields. As identified in Figure 4 the turbine layout seems to be dictated by the existing environmental constraints with turbines located within cleared agricultural areas. This has resulted in an irregular turbine layout which stands out from the natural surroundings and the turbines will interact in varying ways with each other as well as with the landscape.

8.1.2 Protection and maintenance of landscape character

The valued elements that define the existing landscape character are recommended to be protected. This includes but is not limited to, Leeuwin Naturaliste Ridge, wind pruned coastal heath, extensive areas of distinct Jarrah, Marri and Karri forest, agricultural lands, wetland corridors and V shaped river valleys, the coastal landscape of Leeuwin Naturaliste Coast (adjacent to the Indian Ocean), Scott Coastal Plain (adjacent to the Southern Ocean) and the rural amenity of Brockman Highway travel route corridor.

Elements of the Proposal, namely the wind turbines, are uncharacteristic with the existing landscape context. Turbine height and layout should be considered in future design iterations to manage impacts to landscape character.

8.1.3 Engagement

The significance of the landscape within the Study Area, specifically the Blackwood River (Goorbilyup Buerle) and Margaret River (Wooditjup Bilya) and their tributaries, to the Wardandi and Bibulmun/Piblemen people should be considered in the design of the Proposal. Where possible, engagement with Traditional Custodians to discuss the visual elements of the design should be considered. See Section 4.3 for a summary of the community engagement.

8.2 Mitigation

The following section identifies potential mitigation measures that respond to issues arising within the assessment that have the potential to impact on:

– The character of the landscape
– Views to the Proposal from sensitive visual receptors within the Study Area

Mitigation measures address the most visual elements of the Proposal, as well as referencing any relevant considerations drawn from the legislation and planning context review in Section 4.

8.2.1 Site layout and design

- To assist with blending the Proposal into the existing visual context, as far as practically possible, consider realigning turbine layout into a regular shape, such as double line or grid.
- Consider a reduction in the height of all turbines to ease visibility from sensitive visual receptors, including but not limited to VP01 – Augusta Hotel.
- To assist with blending the Proposal into the existing visual context, ensure that the colour, materiality and finishes of proposed supporting infrastructure are of a complementary muted colour palette, compatible with the surrounding visual landscape. Bright or highly contrasting colours, and reflective surfaces, should be avoided.
- Consider maintaining turbine access roads in an unsealed condition within the site boundary where appropriate, rather than sealed roads with dark coloured asphalt, to reduce visual impacts and blend with the surrounding rural setting.

8.2.2 Vegetation

- Retain as much existing remnant vegetation as possible within the Proposal site.
- Where clearing of remnant vegetation occurs in relation to construction of Proposal consider revegetation given due regard of regulatory requirements.
- Where possible, revegetate disturbed areas of native vegetation, using select endemic species from the existing palette within the surrounding area, using species of an appropriate maximum height.
- Consider potential screen planting in strategic locations. Ensure any screen planting is proposed in appropriate locations, does not increase bushfire risk and is undertaken in collaboration and with consent of landowners.
- Ensure native roadside vegetation is retained, where practicable, to screen views to the ancillary infrastructure and overhead transmission line.

8.2.3 Overhead transmission lines

- Where possible, minimise the number and height of transmission poles / towers required to reduce the associated visual impact.
- Where possible, in line with relevant standards, minimise the width of the transmission line easement required to be maintained, to reduce the area of vegetation clearance required (if any).

8.2.4 Ancillary infrastructure

Substation, operational and maintenance facility

- Ensure any permanent visible infrastructure uses a non-reflective material finishes and a recessive colour palette that responds to the landscape character (e.g., rural setting) and visual context within which it sits.
- Where practicable, locate permanent storage, operation and maintenance areas on relatively flat land already clear of canopy vegetation to minimise earthworks and vegetation removal.
- In consultation with landowners and ensuring it does not increase bushfire risk, where practicable, use native plant species to provide screening planting around permanent built form infrastructure to assist in filtering views to the infrastructure and reinstate the existing landscape character.

Meteorological masts

- If applicable and where practicable, micro-site meteorological masts to avoid tree removal.

Access tracks

- Where practicable, align access tracks to avoid the removal of existing vegetation.

8.2.5 Construction and decommissioning

– Minimise the area of disturbance during the construction period to areas within the Proposal site, where possible.
– After construction is complete, seek to ensure any disturbed areas (including temporary construction compounds, areas disturbed by the construction, erection, and transportation of Proposal infrastructure) are reinstated to their previous condition (or better), including the reinstatement of topography, soils, vegetation cover, and natural drainage patterns. Replace any trees, shrubs and ground covers that have been removed with the same (or similar) species of local provenance, in accordance with the rural landscape character.
– Where possible, ensure construction equipment, stockpiles, and other visible elements are located away from views to or from sensitive visual receptors. Should equipment or stockpiles be located in visually prominent locations for any reasonable period of time, incorporate screening measures and practices to ensure sites are kept tidy.
– During construction, protect any sensitive landscape features (e.g., remnant vegetation, waterways) via a construction management plan.

8.2.6 Cultural heritage values

To ensure that cultural heritage landscape values have been appropriately incorporated into this assessment, cultural knowledge holders, the Wardandi and Bibulmun/Piblemen people, should be consulted, and where appropriate relevant heritage approvals should be obtained.

8.3 Recommendations for further work

– The impacts of where one blade of each turbine is painted black have not been assessed. The effect of the black blade on views, particularly from Augusta town centre and the Southern Ocean coastline, Augusta, should be considered and assessed.

9. Conclusion

This LVIA report has been prepared to assess the possible effect of the Proposal on the surrounding landscape and views. The purpose of this report is to support the following:

– Environmental Protection Authority (EPA) referral under Part IV, Section 38 in accordance with *Environmental Factor Guideline –Social Surroundings* (EPA, 2023e) under the Environmental Protection Act 1986.
– Development approval application (Shire of Augusta Margaret River) to commence development of the Proposal.

The Proposal has been thoroughly assessed in relation to the relevant planning and environmental regulations concerning landscape and visual impact. The scope of the assessment is limited to the expected distance from which the Proposal would likely be visible in its surrounding environment. This determination has led to a Study Area covering roughly 30 km in each direction of the Proposal site. Accordingly, the Study Area encompasses regions within AMR Shire LGA and the Shire of Nannup.

The Proposal is located in Warren Bioregion (Figure 7) within the locality of Scott River in the AMR LGA which is situated approximately 294 km south-east of Perth. AMR Shire LGA has a population of approximately 16,791 (Australian Bureau of Statistics, 2021) which is expected to grow to approximately 25 000 people by 2036 (DPLH, 2022). The landscape within the Study Area contains the townsites of Augusta and a proportion of Margaret River, in addition to the settlements of Karridale, Kudardup and Witchcliffe. It also contains national parks, nature reserves, state forests, agricultural land, and tourism land uses.

The topography of the Study Area is a landscape dominated by gently undulating and rolling hills, rocky shorelines, towering sea cliffs, gently curving beaches, wetland corridors and areas of granite outcrops. Features of the landscape include Leeuwin Naturaliste ridge and the long stretch of coastline adjacent to the Indian and Southern Ocean free of disturbance. It encompasses various watercourses, including the Blackwood River

(Goorbilyup Buerle) and Hardy Inlet and the Margaret River (Wooditjup Bilya). The Study Area has a diverse array of vegetation, featuring native woodlands and forests, sedges, and low heath with cleared irrigated and non-irrigated areas linked to agricultural use.

This assessment was undertaken based on a comprehensive desktop study, and site inspections of the existing landscape and views.

Four LCU's were identified in the Study Area. The significance of impact on LCU1 is high-moderate, as the Proposal will likely affect the characteristics of LCU1, where the Leeuwin-Naturaliste Ridge is recognised as a key landscape feature. The significance of impact on LCU2 is also high-moderate, with contributing factors including scenic qualities and the inclusions of Scott National Park and Gingilup Swamps Nature Reserve, which host highly diverse flora and fauna species. The findings indicate a high-moderate significance of impact on LCU3 due to the high sensitivity and importance of notable drainage features that are registered Aboriginal heritage sites, as well as several national parks and nature reserves. The Proposal will likely result in notable changes to this landscape character. LCU4 would experience a moderate significance of impact, as the changes will be confined to specific locations within LCU4.

Visual impacts associated with construction were considered short term (approximately 2 years) with operation considered permanent. Based on the desktop study and ZTV analysis as well as a fieldwork conducted in March and August 2024, 12 representative viewpoints were selected for this LVIA. The assessment identified the significance of impact for the viewpoints, ranging from negligible to high.

After conducting a contextual analysis, the visual management objectives for the Study Area were outlined. The focus of the visual management objectives included optimising the siting and design of the Proposal to protect and maintain the distinct landscape characters with a key recommendation being to consider realignment of wind turbines into a regular layout such as a double line or grid and a reduction in turbine height. In addition, the impact of wind turbines on the visual landscape, from Brockman Highway needs to be taken into account and future design iterations should consider how the Proposal appears from the roadway.

Other recommended visual management measures include maintaining the rural landscape character through mitigation by adopting measures such as retaining as much existing remnant vegetation as possible within the Proposal site and re-establishing any pastural land disturbed during construction. In addition, consideration of Aboriginal heritage values and engagement with the Wardandi and Bibulmun/Piblemen people was recommended as a consideration for protection and maintenance of cultural heritage values.

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Appendices

Appendix A

Photomontages

EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	336° - 66°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	11:50, 27th March 2024

Location:	53 Blackwood Avenue, Augusta
Coordinates:	330764, 6201222 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	39 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 01 : Augusta Hotel

GHD Pty Ltd
999 Hay Street Perth, Western Australia
Western Australia, 6000
T 61 8 6222 8222 **E** permail@ghd.com.au **W** www.ghd.com

PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
ROTATED 90
DEGREES WITH
ROTATED BLADES

KEY PLAN

View Direction:	336° - 66°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	11:50, 27th March 2024

Location:	53 Blackwood Avenue, Augusta
Coordinates:	330764, 6201222 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	39 m
Date of Photomontage:	11th November 2024
Issue:	v 01

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Viewpoint 01 : Augusta Hotel

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	27° - 117°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	11:21, 8th March 2024

Location:	Hurford Place, Augusta
Coordinates:	330617, 6202805 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	32 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
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Viewpoint 02 : Augusta Residential

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	27° - 117°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	11:21, 8th March 2024

Location:	Hurford Place, Augusta
Coordinates:	330617, 6202805 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	32 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
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Viewpoint 02 : Augusta Residential

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	27° - 117°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	11:21, 8th March 2024

Location:	Hillview Road, Augusta
Coordinates:	330617, 6202805 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	32 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
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Viewpoint 03 : Hillview Road Lookout

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	27° - 117°	**Location:**	Hillview Road, Augusta
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	330617, 6202805 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	32 m
Photograph Time & Date:	11:21, 8th March 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
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Viewpoint 03 : Hillview Road Lookout

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	22º - 112º
Horizontal Field Of View:	90º
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	12:04, 8th March 2024

Location:	Howe Road, Kudardup
Coordinates:	335173, 6208016 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	10 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 04 : Adjacent to Molley Island

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	22° - 112°	**Location:**	Howe Road, Kudardup
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	335173, 6208016 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	10 m
Photograph Time & Date:	12:04, 8th March 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
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Viewpoint 04 : Adjacent to Molley Island

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	X° - X°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	12:40, 7th March 2024

Location:	Scott River Road, Courtenay
Coordinates:	340650, 6209816 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	26 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
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Viewpoint 05 : Scott River Road

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	X° - X°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	12:40, 7th March 2024

Location:	Scott River Road, Courtenay
Coordinates:	340650, 6209816 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	26 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
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Viewpoint 05 : Scott River Road

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	115° - 205°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	8:54, 7th March 2024

Location:	Warner Glen Road, Forest Grove
Coordinates:	330530, 6228149 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	66 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 06 : Warner Glen Road

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	115° - 205°	**Location:**	Warner Glen Road, Forest Grove
Horizontal Field Of View:	90°	**Coordinates:**	330530, 6228149 (GDA 2020 MGA Zone 50)
Camera Height:	1.7 m	**Viewpoint Elevation:**	66 m
Camera Type:	Canon EOS 6D	**Date of Photomontage:**	11th November 2024
Lens Type:	50 mm	**Issue:**	v 01
Photograph Time & Date:	8:54, 7th March 2024		

Proposed Wind Farm - Scott River Region
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Viewpoint 06 : Warner Glen Road

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	125° - 215°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	14:18, 7th March 2024

Location:	Brockman Highway, Courtenay
Coordinates:	338204, 6218225 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	37 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 07 : Brockman Highway

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	125° - 215°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	14:18, 7th March 2024

Location:	Brockman Highway, Courtenay
Coordinates:	338204, 6218225 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	37 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 07 : Brockman Highway

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	21° - 111°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	14:46, 8th March 2024

Location:	Felling Road, Karridale
Coordinates:	352464, 6214724 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	64 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 08 : Karridale Residential

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	21° - 111°	**Location:**	Felling Road, Karridale
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	352464, 6214724 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	64 m
Photograph Time & Date:	14:46, 8th March 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 08 : Karridale Residential

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	33° - 123°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	14:42, 8th March 2024

Location:	Glenarty Road, Karridale
Coordinates:	330766, 6213489 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	67 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 09 : Glenarty Road

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	33° - 123°	**Location:**	Glenarty Road, Karridale
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	330766, 6213489 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	67 m
Photograph Time & Date:	14:42, 8th March 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 09 : Glenarty Road

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	349° - 79°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	7:02, 8th March 2024

Location:	829 Albany Terrace, Augusta
Coordinates:	331663, 6200081 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	5.2 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 10 : Albany Tce Beach Access

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
ROTATED 90
DEGREES WITH
ROTATED BLADES

KEY PLAN

View Direction:	349° - 79°	**Location:**	829 Albany Terrace, Augusta
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	331663, 6200081 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	5.2 m
Photograph Time & Date:	7:02, 8th March 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 10 : Albany Tce Beach Access

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	325° - 55°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	11:24, 27th March 2024

Location:	Davies Road, Augusta
Coordinates:	331568, 6198202 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	6.7 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 11 : Flinders Bay

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
ROTATED 90
DEGREES WITH
ROTATED BLADES

KEY PLAN

View Direction:	325° - 55°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	11:24, 27th March 2024

Location:	Davies Road, Augusta
Coordinates:	331568, 6198202 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	6.7 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 11 : Flinders Bay

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	339° - 69°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	15:41, 28th August 2024

Location:	94 Albany Terrace, Augusta
Coordinates:	331500, 6200371 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	15.1 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 12 : Colourpatch / Seine Bay

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	339° - 69°	**Location:**	94 Albany Terrace, Augusta
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	331500, 6200371 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	15.1 m
Photograph Time & Date:	15:41, 28th August 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Viewpoint 12 : Colourpatch / Seine Bay

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	325° - 55°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	8:14, 8th March 2024

Location:	Leeuwin Road, Augusta
Coordinates:	328651, 6194689 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	65.6 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Photomontage : Cape Leeuwin Lighthouse - Top

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	325° - 55°	**Location:**	Leeuwin Road, Augusta
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	328651, 6194689 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	65.6 m
Photograph Time & Date:	8:14, 8th March 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Photomontage : Cape Leeuwin Lighthouse - Top

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EXISTING VIEW

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT

KEY PLAN

View Direction:	344° - 74°
Horizontal Field Of View:	90°
Camera Height:	1.7 m
Camera Type:	Canon EOS 6D
Lens Type:	50 mm
Photograph Time & Date:	15:12, 28th August 2024

Location:	Leeuwin Road, Augusta
Coordinates:	328660, 6194692 (GDA 2020 MGA Zone 50)
Viewpoint Elevation:	33 m
Date of Photomontage:	11th November 2024
Issue:	v 01

Proposed Wind Farm - Scott River Region
SynergyRED

Photomontage : Cape Leeuwin Lighthouse - Base

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PROPOSED DESIGN
ROTATED BLADES

PROPOSED DESIGN
BLADE TIPS AT
MAXIMUM HEIGHT
OVERLAY

KEY PLAN

View Direction:	344° - 74°	**Location:**	Leeuwin Road, Augusta
Horizontal Field Of View:	90°		
Camera Height:	1.7 m	**Coordinates:**	328660, 6194692 (GDA 2020 MGA Zone 50)
Camera Type:	Canon EOS 6D		
Lens Type:	50 mm	**Viewpoint Elevation:**	33 m
Photograph Time & Date:	15:12, 28th August 2024	**Date of Photomontage:**	11th November 2024
		Issue:	v 01

Proposed Wind Farm - Scott River Region
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Photomontage : Cape Leeuwin Lighthouse - Base

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The Power of Commitment