

North Yarragon BESS – Environmental Assessments

Landscape and Visual Impact Assessment

ZEN Energy Future Pty Ltd

Reference: 528157

Revision: D

2026-02-03

ADVERTISED PLAN

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Document control record

Document prepared by:

Aurecon Australasia Pty Ltd

ABN 54 005 139 873
 Aurecon Centre
 Level 8, 850 Collins Street
 Docklands, Melbourne VIC 3008
 PO Box 23061
 Docklands VIC 8012
 Australia


**ADVERTISED
 PLAN**

T +61 3 9975 3000
F +61 3 9975 3444
E melbourne@aurecongroup.com
W aurecongroup.com

A person using Aurecon documents or data accepts the risk of:

- a) Using the documents or data in electronic form without requesting and checking them for accuracy against the original hard copy version.
- b) Using the documents or data for any purpose not agreed to in writing by Aurecon.

Document control		aurecon				
Report title		Landscape and Visual Impact Assessment				
Document code		528157-W00001-REP-EN-007	Project number		528157	
File path		528157-W00001-REP-EN-0007.docx				
Client		ZEN Energy Future Pty Ltd				
Client contact		Client reference				
Rev	Date	Revision details/status	Author	Reviewer	Verifier (if required)	Approver
A	2025-04-07	First draft for client review	N.Lamb-Egar/ A. Hille	N.Lamb-Egar		
B	2025-04-07	Final report	E.Goldberg		N.Lamb-Egar	Courtney Hollerich
C	2025-04-07	Final Report (lodgement)	N.Lamb-Egar		N. Lamb-Egar	Courtney Hollerich
D	2026-02-03	Lodgement	N.Lamb-Egar			Courtney Hollerich
Current revision		D				

Approval			
Author signature		Approver signature	
			
Name	Natarsha Lamb-Egar	Name	Courtney Hollerich
Title	Integrated Design Lead	Title	Associate, Environment and Planning

ADVERTISED PLAN

Contents

Glossary	6
Executive Summary	7
Project overview	7
1 Introduction.....	1
1.1 Purpose	1
1.1.1 Assumptions and Limitations.....	1
1.2 The Project	4
1.2.1 Project Description	4
1.2.2 Project Area	5
1.2.3 Construction and Operation Phase	7
2 Methodology	10
2.1 Approach to the assessment.....	10
2.2 Defining the Study Area	10
2.3 Impact Assessment Criteria	10
2.3.1 Sensitivity	11
2.3.2 Magnitude of change	13
2.4 Assigning a level of impact.....	14
2.5 Cumulative impacts	14
2.6 Photomontages	14
3 Existing environment.....	16
3.1 Legislation and Policy.....	16
3.1.1 State Planning Policy Framework	16
3.1.2 Local Planning Policy Framework (LPPF).....	17
3.1.3 Zones and overlays	17
3.2 Site context.....	22
3.2.1 Land use.....	22
3.2.2 Topography, landform and waterways	22
3.2.3 Vegetation	23
3.2.4 Cultural heritage	24
3.3 Landscape Character Types	27
3.3.1 Landscape character.....	27
4 Assessment of Landscape and Visual Impacts	28
4.1 Assessment of Landscape character impacts.....	28
4.2 Assessment of Visual impacts.....	28
4.3 Cumulative impacts analysis	36
4.4 Management of impacts	36
4.4.1 Construction phase recommendations.....	36
4.4.2 Operational phase recommendations	36
4.5 Summary of findings.....	37
5 Conclusion	38

Appendices

Appendix A: Indicative photomontages

**ADVERTISED
PLAN**

Figures

- Figure 1-1 North Yarragon BESS site context plan
- Figure 1-2 Example of battery storage units
- Figure 1-3 Project layout
- Figure 1-4 Birdseye view of Project layout (modelled for use in photomontages, Appendix A)
- Figure 2-1 LVIA assessment method
- Figure 2-2 Plan showing photomontage viewpoint locations on private property
- Figure 3-1 Land Use Zone Types
- Figure 3-2 Planning overlays and area of Aboriginal Cultural Heritage Sensitivity
- Figure 3-3 Cattle farming within Study Area
- Figure 3-4 HV power line view from Parkins Road (looking east)
- Figure 3-5 Elevated view from Araluen Road (looking south-west)
- Figure 3-6 Shady Creek view from Araluen Road (looking south)
- Figure 3-7 Swamp Scrub near the creek within Site
- Figure 3-8 Swampy Riparian Woodland near creek within Site
- Figure 3-9 Windrow of pines along fence line on Yarragon-Shady Creek Road (looking south)
- Figure 3-10 Roadside vegetation on Yarragon-Shady Creek Road (looking south-east)
- Figure 3-11 Topography and Hydrology
- Figure 3-12 Vegetation cover
- Figure 3-13 Windrows of pine, Yarragon-Shady Creek Road
- Figure 3-14 Pastoral plains, Araluen Road
- Figure 3-15 Farm buildings, Yarragon-Shady Creek Road
- Figure 3-16 Treelined roads, Yarragon-Shady Creek Road
- Figure 4-1 Viewpoint locations
- Figure 4-2 Viewpoint 1: View northwest from Yarragon-Shady Creek Road
- Figure 4-3 Viewpoint 2: View northwest from Yarragon-Shady Creek Road
- Figure 4-4 Viewpoint 3: View west from Yarragon-Shady Creek Road
- Figure 4-5 Viewpoint 4: View southwest from Yarragon-Shady Creek Road
- Figure 4-6 Viewpoint 5: View west from side of Yarragon-Shady Creek Road
- Figure 4-7 Viewpoint 6: View east from Brookers Road
- Figure 5-1 Viewpoint locations
- Figure 5-2 Viewpoint 1: Existing view
- Figure 5-3 Viewpoint 1: Indicative view of Project at Day 1 of Operation
- Figure 5-4 Viewpoint 1: Red highlight of indicative view of Project at Day 1 of Operation
- Figure 5-5 Viewpoint 4: Existing view
- Figure 5-6 Viewpoint 4: Indicative view of Project at Day 1 of Operation
- Figure 5-7 Viewpoint 4: Red highlighted indicative view of Project at Day 1 of Operation
- Figure 5-8 Viewpoint a: Existing view
- Figure 5-9 Viewpoint a: Indicative view of Project at Day 1 of Operation
- Figure 5-10 Viewpoint a: Red highlighted indicative view of Project at Day 1 of Operation
- Figure 5-11 Viewpoint a: Indicative view of Project at Year 10 of Operation
- Figure 5-12 Viewpoint a: Red highlighted indicative view of Project at Year 10 of Operation
- Figure 5-13 Viewpoint b: Existing view
- Figure 5-14 Viewpoint b: Indicative view of Project at Day 1 of Operation
- Figure 5-15 Viewpoint b: Red highlighted indicative view of Project at Day 1 of Operation
- Figure 5-16 Viewpoint b: Indicative view of Project at Year 10 of Operation
- Figure 5-17 Viewpoint b: Red highlighted indicative view of Project at Year 10 of Operation

Figure 5-18 Viewpoint c: Existing view from private farmland,
Figure 5-19 Viewpoint c: Indicative view of Project at Day 1 of Operation
Figure 5-20 Viewpoint c: Red highlighted indicative view of Project at Day 1 of Operation
Figure 5-21 Viewpoint c: Indicative view of Project at Year 10 of Operation
Figure 5-22 Viewpoint c: Red highlighted indicative view of Project at Year 10 of Operation

Tables

Table 0-1 Summary of visual impacts
Table 1-1 Project components
Table 3-1 Landscape sensitivity criteria
Table 3-2 Evaluating level of visual sensitivity
Table 3-3 Visibility distance zones
Table 3-4 Criteria for determining the visual modification level
Table 3-5 Impact determination matrix
Table 4-1 State Planning Policy Framework documents
Table 3-2 Land use classes
Table 3-3 Overlays
Table 4-1 Impacts to landscape character
Table 4-2 Viewpoints representative of private receivers and public viewpoints
Table 5-3 Summary of landscape character impacts
Table 5-4 Summary of visual impacts

**ADVERTISED
PLAN**

ADVERTISED PLAN

Glossary

Term	Definition
Aurecon	Aurecon Australasia Pty Ltd
BESS	Battery Energy Storage System
CHMP	Cultural Heritage Management Plan
DEECA	Department of Energy, Environment and Climate Action (formerly DELWP: Department of Land, Water and Planning)
ESO	Environmental Significance Overlay
EVC	Ecological Vegetation Class
Foreground	The area that immediately surrounds the project up to a distance of 0.5 kilometres.
HO	Heritage Overlay
HV	High Voltage
Km	kilometres
FZ	Farming Zone
LVIA	Landscape and visual impact assessment: The assessment of the impacts of the proposal on landscape and visual values.
Landscape	Its constituent elements, its character and the way this varies spatially, its geographic extent, its condition, the way the landscape is experienced, and the value attached to it.
LCT	Landscape Character Types
LPPF	Local planning policy framework: Local planning policies are tools used to implement the objectives and strategies of the Municipal Strategic Statement.
M	metre
P&E Act	Planning and Environment Act 1987
Project Area	The subdivided area for the proposed development, located at 713 Yarragon-Shady Creek Road, Yarragon VIC 3823.
Project Envelope	The land within the Project Area that will accommodate the Project. Includes any land to be disturbed for the purpose of the Project, including during construction and for access. This is proposed to be 12.22 ha.
Property Boundary	This refers to the boundary of the Site.
(the) Proponent	ZEN Energy Future Pty Ltd (ZEN Energy)
(the) Project	North Yarragon BESS
(the) Site	Proposed Project location at 713 Yarragon-Shady Creek Road, Yarragon, VIC 3823
Study Area	The area designated relevant for assessment of the Project, determined by viewshed analysis
Viewpoint	Moderate or high sensitivity location from which views to the construction process or components of the project may be possible.
Viewshed	The area visible from a particular viewing location.
Visual amenity	The qualities of a landscape setting that are appreciated and valued by a viewer.
Visual catchment	The area over which an object can be seen within the landscape based on the line of sight.
Visual impact	The result of assessing the sensitivity level of a viewer and the modification level of a development.
Visual sensitivity	The degree to which various user groups would respond to change based on their expectation of a particular experience in a given setting for example the expectation of a high level of visual amenity in a national park.

Project overview

This Landscape and Visual Impact Assessment (LVIA) for the North Yarragon BESS (the Project) has been prepared to support the planning approval process, identifying potential adverse impacts with recommended mitigation measures to limit long-term adverse impacts. The Project will be a grid-scale battery energy storage system (BESS) and associated infrastructure. The Project is located on farmland, at 713 Yarragon-Shady Creek Road, Yarragon VIC. 3823 (the Site).

The Project is part of a joint venture called ZEBRE, a joint venture between Taiwan Stock Exchange listed HD Renewable Energy (HDRE) and Australia's ZEN Energy, formed to build new renewable energy assets in Australia. ZEN Energy is currently progressing the development of the Project on behalf of the joint venture.

The LVIA considered the 'North Yarragon BESS Layout' (ZEN-AU-NYG-LAY-E-DRG-001) and 'North Yarragon BESS Layout and Access Points' (ZEN-AU-NYG-LAY-E-DRG-002) to determine the scale and type of modification proposed (refer Figure 1-3).

The landscape and visual baseline

The Study Area for the LVIA has been defined within a radius of two kilometres from the location of the proposed site. The Study Area captures where the Project will be observable based upon the topographical characteristics and intervening elements in the surrounding area.

Relevant planning policies and legislation have been reviewed to understand any specific landscape or visual designations relating to the Study Area. A desktop study and site visit has been undertaken to understand the various physical elements that combine to create landscape and visual character.

The Project is subject to the planning scheme of Baw Baw Shire Council, in land zoned farming (FZ). There are no specific planning designations attributing any specific landscape or visual value within the Study Area.

Landscape and visual assessment findings

The level of visual modification due to the Project is a combination of the degree of change and the ability of the landscape setting to absorb the change. The prominence and level of intrusion of the development within a landscape setting is a key determinant of the level of visual modification.

The baseline assessment identified one Landscape Character Type (LCT) 'Agricultural Hills' (LCT 1) within the Study Area. The BESS and ancillary structures introduce built form which is larger than farm infrastructure but of a scale that does not influence outside of the Site. It presents a very low magnitude of change to the LCT, which is widely dispersed, resulting in a **very low impact to the landscape character**.

There were six representative public viewpoints identified within the Study Area that were assessed. These viewpoints were representative of rural residential dwellings and included views from adjacent roads. The assessment determines the modification proposed by the Project during construction, at day one of operation and residual impacts if recommended mitigation measures are applied. A summary of the visual impacts are outlined in Table 0-1 below.

Table 0-1 Summary of visual impacts

Viewpoint no. and location	Description	Potential Construction impacts	Potential Operational impacts	Potential Residual impacts
VP1 678 Yarragon-Shady Creek Road	There are partial views of the Project from Yarragon-Shady Creek Road.	Very Low	Low	Very Low

VP2 699 Yarragon-Shady Creek Road	There is potential for partial views of the Project from the slightly elevated view, though partially screened by intervening vegetation and the shed to the rear of the dwelling.	Very Low	Very Low	Very Low
VP3 755 Yarragon-Shady Creek Road	Projects components are screened by foreground vegetation and not expected to be seen from the dwelling.	Negligible	Negligible	Negligible
VP4 771 Yarragon-Shady Creek Road	The Site has potential partial visibility from the dwelling. Construction works would be barely noticeable, though there is potential for partial views of BESS components once built.	Negligible	Negligible	Negligible
VP5 815 Yarragon-Shady Creek Road	Views towards the Site are screened by intervening sheds and vegetation, resulting in negligible visual impact from the dwelling.	Negligible	Negligible	Negligible
VP6 Brookers Road	The Project would occupy a narrow field of view at the distance of 1,040m and be partially screened by vegetation. Construction works would be barely noticeable, though there is potential for partial views of BESS components once built.	Negligible	Very Low	Very Low

Cumulative visual impacts were considered involving the Project and Shady Creek Solar Farm (approved through not built). There are no cumulative impacts experienced by sensitive receivers between the two Projects, based on visual prominence of Project elements and with a distance of 4km between the Projects.

Mitigation

Whilst mitigation is not required given the very low visual impacts, design recommendations have been provided. The key beneficial recommendation is to provide screen planting along the west and south site boundaries.

**ADVERTISED
PLAN**

1

Landscape and Visual Assessment

Report



**ADVERTISED
PLAN**

ADVERTISED PLAN

1 Introduction

Aurecon Pty Ltd (Aurecon) was commissioned by ZEN Energy Future Pty Ltd (ZEN Energy, the Proponent) to undertake a Landscape and Visual Impact Assessment (LVIA) to support the development of a Battery Energy Storage System (BESS) in Yarragon Victoria called North Yarragon BESS (herein referred to as 'the Project').

The Project is part of a joint venture called ZEBRE, a joint venture between Taiwan Stock Exchange listed HD Renewable Energy (HDRE) and Australia's ZEN Energy, formed to build new renewable energy assets in Australia. ZEN Energy is currently progressing the development of the Project on behalf of the joint venture.

1.1 Purpose

The purpose of this LVIA is to provide an assessment of landscape character and visual amenity at the Site, including an assessment of any potential impacts to public and private viewpoints.

The scope of the assessment was to:

- Undertake a review of existing planning information for the Site.
- Understand the natural and built landscape and visual attributes and characteristics in the vicinity of the project, including their relationship to use patterns and history.
- Identify areas of sensitivity to landscape and visual change associated with the Project.
- Identify opportunities to improve and enhance the visual environment from a precinct perspective and for the project's components.
- Assess the landscape and visual impacts associated with the Project.
- Satisfy regulatory requirements under the *Planning and Environment Act 1987* (VIC).

1.1.1 Assumptions and Limitations

The following limitations apply to this report:

- The LVIA aims to be objective and, as such, seeks to describe any changes factually. Potential changes resulting from the Proposal have been defined. However, the significance of these changes requires qualitative (subjective) judgements to be made. Therefore, the conclusions to this LVIA combine both objective measurement and subjective professional interpretation.
- This LVIA has attempted to be objective, however it is recognised that visual impact assessment can be highly subjective, and individuals are likely to associate different visual experiences to the Study Area.
- The LVIA is based on the 'North Yarragon BESS Layout' (ZEN-AU-NYG-LAY-E-DRG-001) and 'North Yarragon BESS Layout and Access Points' (ZEN-AU-NYG-LAY-E-DRG-002). These plans are provided in Appendix B of the associated Planning Report.
- Access to sensitive viewpoints on private land, such as residences or accommodation, were not undertaken for this LVIA. However, impacts from these locations were considered in the assessment.
- Methodology, program and timing of the construction works are currently indicative and dependent upon planning approvals.

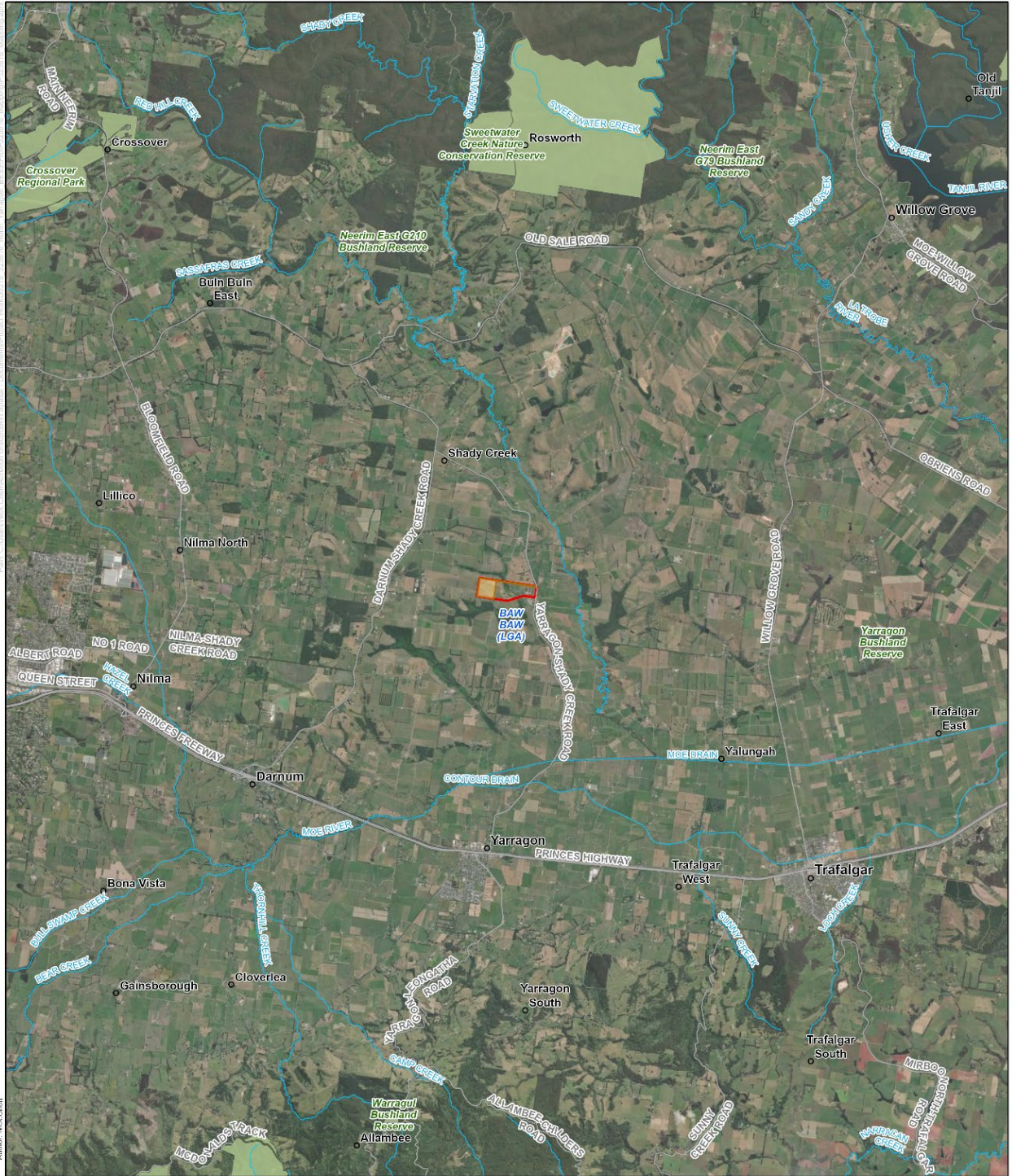
This LVIA has been developed based on the following assumptions:

- Desktop and field investigations were undertaken to inform the findings of this report.
- No stakeholder consultation or engagement on environmental matters has occurred.

- The preliminary environmental assessments were undertaken based on the Project investigation area mapped in each specialist assessment. Any additional Project area has not been considered by these reports and therefore has not been considered to date.
- The environmental assessments are based on the Project Description as outlined in Section 1.2. As the design of the Project is not yet finalised, our advice provides a point in time reference that is subject to change.
- Modelling of the proposed transmission towers assumed these are of equal size, or smaller than the existing HV towers which the Project ties into.

**ADVERTISED
PLAN**

ADVERTISED PLAN



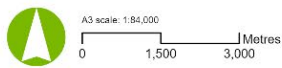
Legend

- Town
- Road
- Watercourse
- Park and Reserve
- Project area
- ▭ Property boundary
- ▭ Local government area

Basemap: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©

Other data: DEECA, Aurecon

Date: 23/06/2022 Version: 2



Job No: P526157
Coordinate System: GDA2020 MGA Zone 55

North Yarragon BESS Site Context Plan

Figure 1-1 North Yarragon BESS site context plan

1.2 The Project

1.2.1 Project Description

The Project proposes a Battery Energy Storage System (BESS) with an installed capacity of up to 210 MW / 1680 MWh with a nominal duration of 8 hours.

The Project works include:

- BESS modules, inverters and transformers.
- Construction of internal access roads and access (and egress) points including a culvert bridge over the creek.
- Underground cabling to provide a connection between the battery modules and inverters and on-site substation.
- On-site substation including transformer to step up from 33 kV to the connection voltage of 220 kV.
- Underground or overhead cabling (33kV) to connect the onsite substation to the Hazelwood Terminal Station to Rowville Terminal 220kV transmission line via a new tower.
- An Operations and Maintenance Facility.
- Water storage (including firefighting water supply and fire water runoff containment).
- Fencing around the perimeter of the BESS facility.
- Car parking.
- Business identification signage at site entry.

Table 1-1 outlines the key project components of the Project as relevant to potential for landscape and visual changes.

Table 1-1 Project components

Component	Description	Quantity	Indicative scale (l x w x h)
BESS	Battery Pack Containers	496	6.06m x 2.44m x 2.9m
	Power Conversion Systems	62	6.50m x 2.00m x 2.20m
Storage shed	Storage shed for operation and maintenance.	1	12m x 12m x 3-4m
Storage units	Metal shipping containers	2	12m x 2.5m x 2.6m
Site office	Simple building with site office, meeting room, toilets and kitchenette.	1	12m x 8m x 3-4m
Generator	Up to 200 kVA Diesel Generator	1	4.0m height approximately
Switch room	33 kV	2	2.7m height approximately
Power transformer	250MVA	1	6.5m x 3.0m x 4.2m approximately
Fuel tank	2000 L	1	4.0m height approximately
Fire water tank	310kL round tanks	2	4.0m height approximately
Stormwater detention basin	In line with industry standard	1	In line with industry standard
Car parking	Gravel surface for 9 cars	9	4.9m x 3.2m

The figure below provides indicative illustrations of battery storage units. This application is supported by a concept plan, which identifies the maximum footprint of the proposal. This will provide flexibility in accommodating minor design and layout changes.

**ADVERTISED
PLAN**

ADVERTISED PLAN



Figure 1-2 Example of battery storage units

1.2.2 Project Area

For clarity, the following terms have been adopted:

Term	Definition
the Site	The property at 713 Yarragon-Shady Creek Rd, Yarragon VIC 3823
the Property Boundary	This refers to the boundary of the Site.
the Project Area	The proposed subdivided land proposed to be used for the Project. This is proposed to be 18.31ha.
the Project Envelope	The land within the Project Area that will accommodate the Project. Includes any land to be disturbed for the purpose of the Project, including during construction and for access. This is proposed to be 12.22 ha.

The Project is located at 713 Yarragon-Shady Creek Road, Yarragon VIC 3823, approximately 125 kilometres (km) from Melbourne. The nearest town is Yarragon, approximately 7.5 km south of the Project Area.

The Property Boundary is defined by Yarragon-Shady Creek Road to the east, extending 1.3 km to the west and is approximately 51 hectares.

The Project Area is approximately 18.31 hectares and is located in the north-west corner of the broader Property Boundary. A dwelling is located within the Property Boundary on the eastern side, with access from the dwelling to Yarragon-Shady Creek Road.

Shady Creek, running north to south, is located approximately 1km east of the Property Boundary. A tributary of Shady Creek runs through the north-east section of the Site. The Hazelwood Terminal Station to Rowville Terminal 220kV transmission lines runs east to west through a section of the Project Boundary.

The terrain of the Project Area is comprised of undulating cleared open paddocks, currently used for livestock grazing. Vehicle access to the Project Area is proposed from Yarragon-Shady Creek Road with an access road running along the north side of the Property Area.

The exact location of the BESS infrastructure will be determined through detailed design, once a BESS supplier has been selected and will be in accordance with commitments made in this planning application.

The Project Area and indicative layout is shown in Figure 1-3 and Figure 1-4.

**ADVERTISED
PLAN**

1.2.3 Construction and Operation Phase

Construction

Methodology, program and timing of the construction works are currently indicative and dependent upon planning approvals and the selected contractor. It is anticipated that the construction activities will take place over a 24-month timeframe and will involve the following key works:

- Site mobilisation, installation of a perimeter fence
- Construction of main site access road, watercourse crossing
- Earthworks to level the site and create bench surfaces for the BESS equipment, storage and removal of spoil (including the treatment of contaminated soil, where required), drainage, establishment of laydown area
- Civil works to prepare internal access roads, equipment foundations and trenches for electrical and communications cabling
- Delivery, installation and connection of batteries, inverters and associated infrastructure
- Construction of substation and connection to the transmission network
- Installation of operation & maintenance building including storage area and site office
- Testing and commissioning

Construction work is expected to be undertaken six days per week and will generally occur during the following construction hours:

- Monday to Friday: 6:00 am – 6:00 pm
- Saturday: 7:00 am – 1:00 pm (assumed standard construction hours on Saturdays)

At its peak, construction of the BESS would have a maximum of 60 staff on-site. The expected worker origins are approximately 20% from Yarragon and 80% from Melbourne. Workers are expected to travel to site in light vehicles.

Operation

The battery facility will be available for operation 24 hours a day, 7 days a week. Typical operation will be one charge cycle (approximately 9 hours) and one discharge cycle (8 hours) per day.

The operation and monitoring of the battery facility is largely automated. There are expected to be two full-time workers on the site from 8am to 5pm on Monday to Friday. Additionally, a small team will access the site approximately five days a month to undertake inspections and perform maintenance activities.

It is expected that the battery facility will be operating for approximately 30 years. Following this period, there will be a decision to either refurbish/deploy an alternative Proposal on the site or decommissioning of site will occur. If the latter option is elected, all equipment will be safely removed from site and recycled where possible. The site will then be rehabilitated to its original condition and agricultural use can resume on the site.

**ADVERTISED
PLAN**

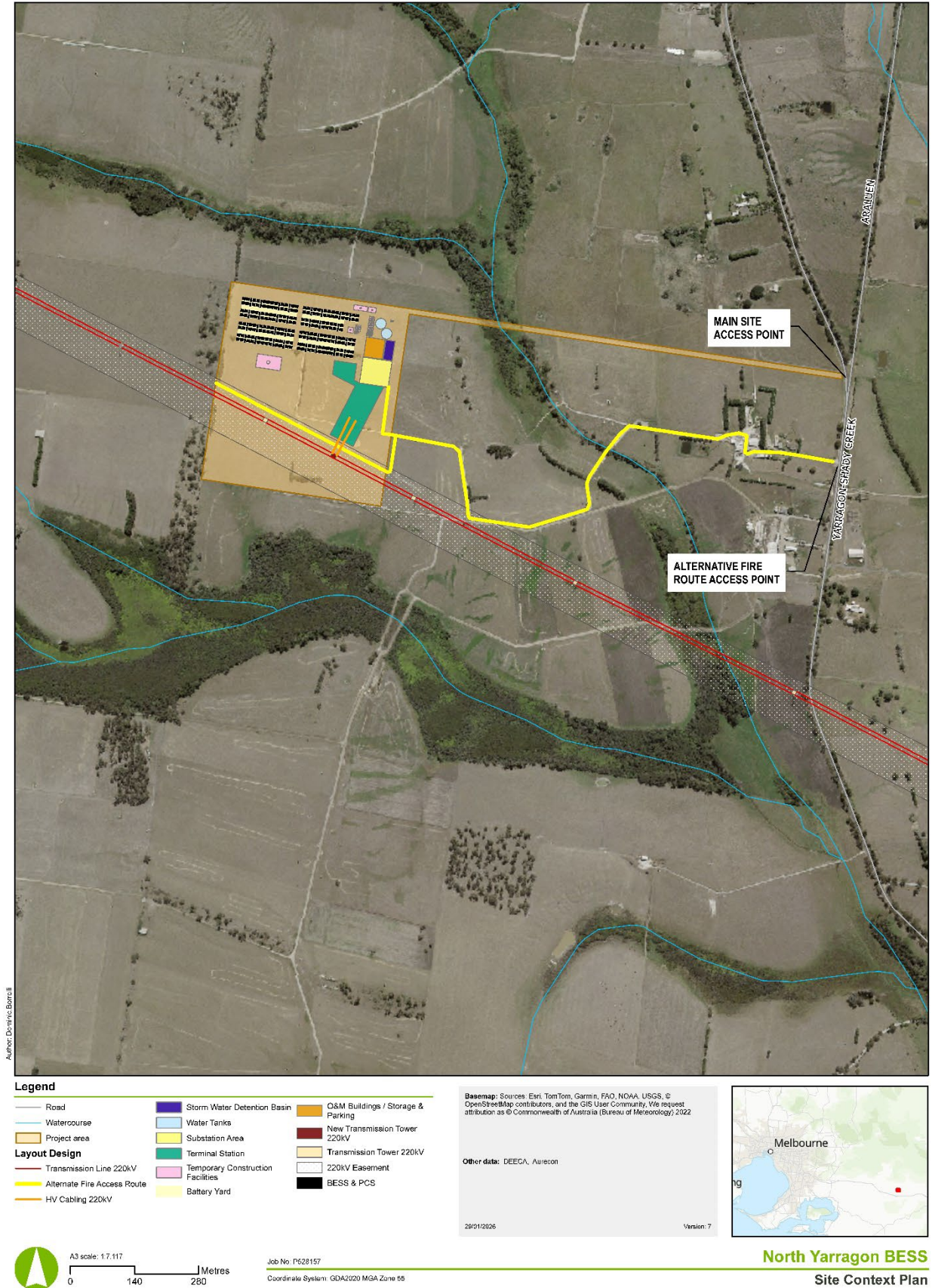


Figure 1-3 Project layout

**ADVERTISED
PLAN**



Figure 1-4 Birdseye view of Project layout (modelled for use in photomontages, Appendix A)

ADVERTISED PLAN

2 Methodology

2.1 Approach to the assessment

The following industry accepted guidelines are used as a basis for the methodology of this LVIA:

- The Guidance for Landscape and Visual Impact Assessment (GLVIA), Third Edition (2013), prepared by Landscape Institute and Institute of Environmental Management & Assessment (IEMA, UK);
- Guidance Note for Landscape and Visual Assessment (June 2018), Australian Institute of Landscape Architects.

The LVIA comprises a desktop evaluation of the Project and its various components, identifying sensitive viewpoints with potential for high adverse impacts. A field visit was conducted on 26 February 2025 by a consultant designer, guided by a Registered Landscape Architect (the assessor), to photographically document and ground truth the desktop analysis.

A determination of the prominence of the proposed development within a landscape setting is treated as being of a lower relevance to assess the visual impact than the sensitivity or perception of a viewer. The LVIA's key focus therefore is on the visual sensitivity being the tolerance of the viewer and the landscape setting to change as a result of the proposed development. The visual impact of the Project is determined by evaluating the degree of its visual fit in the context of the visual sensitivity of the surrounding land uses (based on the land use zones of the applicable planning scheme).

The LVIA makes consideration of the potential impact of the proposed North Yarragon BESS on private and key public viewpoints.

2.2 Defining the Study Area

The Study Area is initially defined through the production of a Zone of Theoretical Visibility (ZTV), which illustrates the theoretical area from which the Project could be visible, based on the height of proposed elements and lidar geometry. This is a helpful tool for providing an overview as the extent to which the proposal elements, would be visible. It is important to note that the ZTV is, by its nature, approximate only and generated to represent a worst-case scenario.

The ZTV (labelled 'viewshed'), is illustrated in Figure 4-1. The ZTV is concentrated within a two-kilometre radius of the Project area, though is illustrated that views from a further distance are possible. Based on observations on the site visit, it was found that intervening vegetation limited views towards the Site. Additionally, in accordance with the visual prominence rationale¹, objects would not be highly visible in the view where it is less than 5 degrees of the vertical field of view. For objects up to 4m in height, this equates to a distance of approximately 460 m.

For this LVIA, the Study Area has been concentrated within a two-kilometre radius of the Project Area. Within this area the potential effects of the proposal are likely to be more acute for both landscape and visual effects.

2.3 Impact Assessment Criteria

The potential level of impacts associated with the proposed development on landscape character and visual amenity have been assessed based on themes of magnitude and sensitivity. The assessment method is demonstrated in Figure 2-1.

**ADVERTISED
PLAN**

¹ *Panero and Zelnik – Vertical field of view*

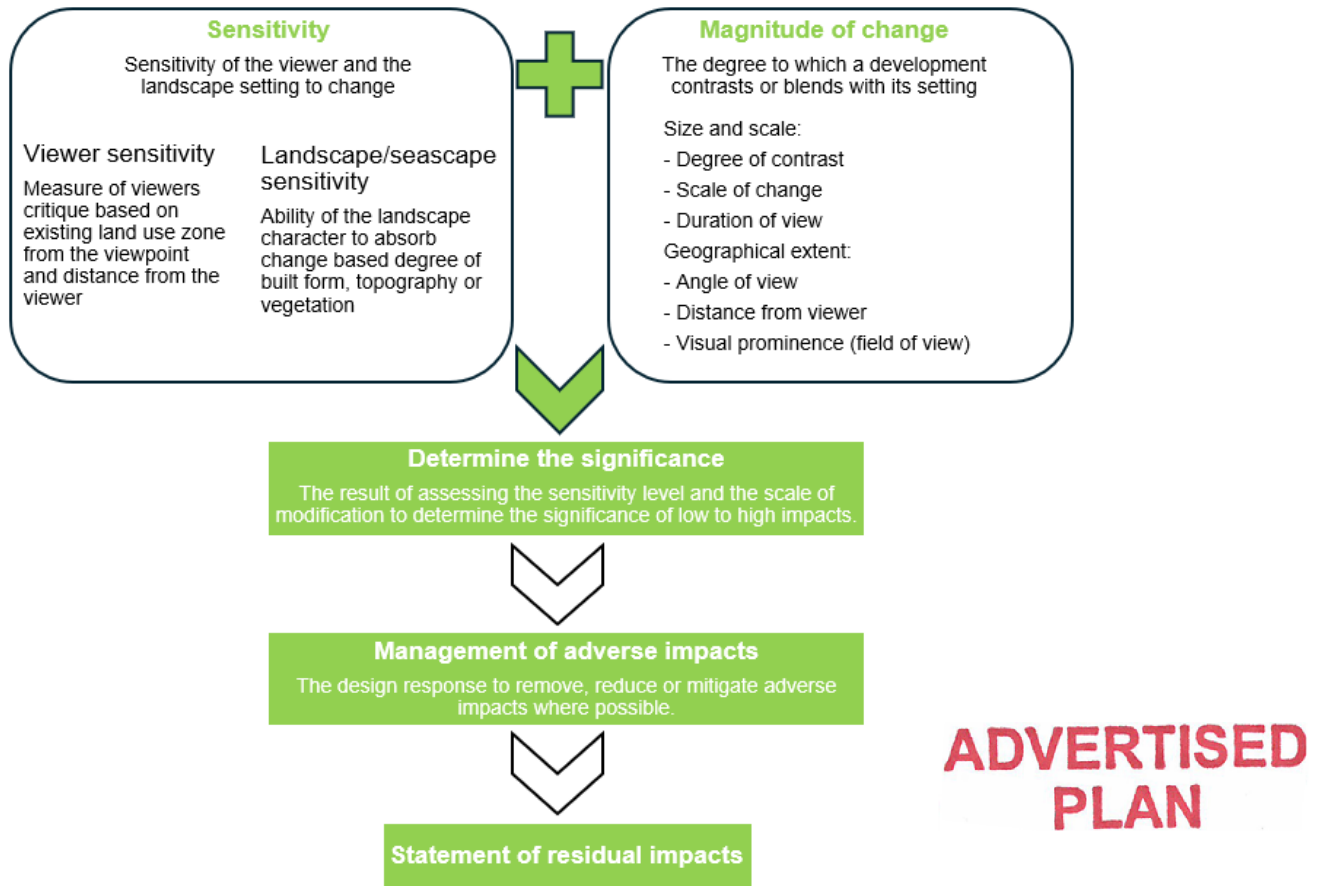


Figure 2-1 LVIA assessment method

2.3.1 Sensitivity

Landscape sensitivity

The sensitivity of a landscape is judged based on the extent to which it is considered able to accept change of a particular type and scale without adverse effects on its character. Sensitivity varies according to the type of development and the nature of the landscape, including:

- Its inherent landscape value (its condition, perceptual qualities, cultural importance, and any specific values that may apply, such as landscape planning designations); and
- The likely congruency of the proposed change (i.e. the extent to which the proposal may fit or be 'visually absorbed' into the scale, landform, land use, pattern, texture of the existing landscape).

The attributes which influence the sensitivity of landscape character are outlined in Table 3-1.

Table 3-1 Landscape sensitivity criteria

Landscape sensitivity rating	Description
High	<p>Landscapes which by nature of their character would be unable to accommodate change of the proposed type. Typically, these would be:</p> <ul style="list-style-type: none"> • Of high value with distinct elements and features making a positive contribution to character and sense of place • Likely to be designated, but the aspects which underpin such value may also be present outside designated areas, especially at the local scale • Areas of special recognised value, through use, perception or historic and cultural associations. • The extent of alteration would result in the landscape losing significant natural landscape features, its character and/or sense of place. • The viewer is highly sensitive to changes in their immediate surroundings such as residents or 'natural' areas such as National Parks.

Moderate	<p>Landscapes which by nature of their character would be able to partly accommodate change of the type proposed. Typically, these would be;</p> <ul style="list-style-type: none"> • Comprised of commonplace elements and features creating generally unremarkable character but with some sense of place • Locally designated, or their value may be expressed through non-statutory local publications • Containing some features of value through use, perception of historic and cultural associations. • Likely to contain some features and elements that could not be replaced <p>The extent of alteration would result in the landscape partially losing some natural or designed landscape features, its character and/or sense of place.</p> <ul style="list-style-type: none"> • Open, expansive and moderately vegetated landscapes including canopy trees. • Elevated and vegetation landscape including canopy trees. • The viewer is moderately sensitive to changes in their immediate surroundings such as users of regional and local reserves.
Low	<p>Landscapes which by nature of their characteristics would be able to accommodate change of the type proposed. Typically, these would be;</p> <ul style="list-style-type: none"> • Containing few, if any, features of value through use, perception or historic and cultural associations • Likely to contain few, if any, features and elements that could not be replaced. • Built-up landscapes typically interspersed with canopy trees. • The viewer is aware of the change but not overly sensitive to changes in their immediate surroundings such as users of commercial areas and farming land.
Very Low	<p>Landscapes which by nature of their characteristics would be able to accommodate change of the type proposed. Typically, these would be;</p> <ul style="list-style-type: none"> • Comprised of some features and elements that are discordant, derelict or in decline, resulting in indistinct character with little or no sense of place • Modified landscapes with an abundance of built form and limited natural characteristics. • The viewer is aware of the change but not overly sensitive to changes in their immediate surroundings such as users of industrial areas.

Visual sensitivity

The sensitivity of the viewers at the viewpoints is considered to be dependent upon factors including:

- The importance (scenic quality) of the view;
- Viewer exposure, typically assessed by measuring the number of viewers exposed to the resource change and the type and duration of viewer activity; and
- The nature of the visual receptor (type and volume of sensitive receptors or viewers) experiencing the view.
- Distance of the proposal from the identified land use area

**ADVERTISED
PLAN**

Table 3-2 Evaluating level of visual sensitivity

Visual sensitivity rating	Description
High	<p>Large numbers of viewers or those with proprietary interest and prolonged viewing opportunities such as residents and users of attractive and/or well-used recreational facilities.</p> <p>Views from a regionally important location such as a scenic lookout whose interest is specifically focussed on the landscape.</p> <ul style="list-style-type: none"> • Residential areas and rural villages • Recreation, cultural or scenic sites and viewpoints of National or State significance. • Any buildings, historic rural homesteads/residences on the State or local Government Heritage List
Moderate	<p>Medium numbers of residents and moderate numbers of visitors with an interest in their environment. Larger numbers of travellers with an interest in their surroundings.</p> <ul style="list-style-type: none"> • Schools and other institutional buildings, and their outdoor areas • Rural dwellings • Tourist and visitor accommodation • Recreation, cultural or scenic sites and viewpoints of regional significance

Low	<p>Small numbers of visitors with a passing interest in their surroundings. Viewers whose interest is not specifically focussed on the landscape.</p> <ul style="list-style-type: none"> • Indoor workers • Users of main roads or arterial roads • Rural dwelling • Tourist and visitor accommodation • Recreation, cultural or scenic sites and viewpoints of regional significance • Users of recreational facilities where the purpose of that recreation is not related to the views
Very Low	<p>Small numbers of viewers with little interest in their surrounds</p> <ul style="list-style-type: none"> • Industrial workers • Road users, farm workers with proposal in middleground or background views

The next critical component to rating the viewer sensitivity is the distance of the Project element from the identified viewpoint as provided in Table 3-3

Table 3-3 Visibility distance zones

Distance zone	Distance of view
Near foreground	0 – 500 m
Mid foreground	500 m – 1 km
Far foreground	1 – 2 km
Near middleground	2 – 4 km

2.3.2 Magnitude of change

The magnitude of change affecting a landscape or visual receptor depends on the nature, scale and duration of the particular change that is expected to occur. It describes the extent of change and identifies elements which are removed or added, changed in colour or texture, and the compatibility of new elements with the existing landscape. Visual modification can result in an improvement or reduction in visual amenity.

Table 3-4 outlines the four categories of modification used for determining the degree of visual modification potentially resulting from the Project which include:

- Scale - with respect to the loss of, or addition of, features in the view and changes in its composition.
- Degree of contrast or integration - form, scale and mass, line, height, colour, texture.
- Nature of view in relation to the proposal - angle, distance and extent.
- Mitigation - the degree to which mitigation would reduce the effect.

**ADVERTISED
PLAN**

Table 3-4 Criteria for determining the visual modification level

Modification level	Description
High	The proposal is highly visible and intrusive in regard to the size, scale and geographical extent, and would disrupt views currently experienced from sensitive land use areas and/or strongly contrasts with the existing landscape setting which has limited capacity for change and/or the extent of area over which the changes would be visible from sensitive land use areas is significant.
Moderate	The proposal partially intrudes in regard to the size, scale and geographical extent or somewhat obstructs current views from sensitive land use areas and/or a noticeable compositional change to the existing landscape setting in which there is moderate capacity for change and/or the extent of area over which the changes would be visible from sensitive land use areas is moderate.
Low	The proposal is barely perceptible resulting in minor deterioration to the view currently experienced from sensitive land use areas; and/or results in a small change to the existing landscape setting in which change is possible without harm and/or the extent of area over which the changes would be visible from sensitive land use areas is limited.
Very low	There is minimal compositional contrast and a high level of integration of form, line, shape, pattern, colour or texture values between the proposal and the environment in which it sits. In this situation, the proposal may be noticeable but does not markedly contrast with the existing landscape setting and/or the extent of area over which the changes would be visible from sensitive land use areas is negligible.
Negligible	There are no views of the proposal components and as such, there is no impact.

2.4 Assigning a level of impact

The impact significance ratings have been determined through a combination of the sensitivity and magnitude of change assessments, in accordance with the scale defined within Table 3-5.

The consequence of the application of the matrix is that (except where there are no visible works) the Project would have low, moderate or high impacts, depending on the level of visual modification and viewer sensitivity from the location at which the project can be viewed. If the Project is not visible, the impact is negligible.

Table 3-5 Impact determination matrix

		LEVEL OF SENSITIVITY			
		HIGH	MODERATE	LOW	VERY LOW
MAGNITUDE OF CHANGE	HIGH	HIGH	HIGH	MODERATE	LOW
	MODERATE	HIGH	MODERATE	LOW	VERY LOW
	LOW	MODERATE	LOW	LOW	VERY LOW
	VERY LOW	LOW	VERY LOW	VERY LOW	VERY LOW
	NEGLIGIBLE	NEGLIBIBLE	NEGLIBIBLE	NEGLIBIBLE	NEGLIBIBLE

2.5 Cumulative impacts

Cumulative landscape and visual effects result from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it) or actions that occurred in the past, present or are likely to occur in the foreseeable future (Landscape Institute et al, 2002).

The potential cumulative visual impact is considered in relation to the potential visual impact when viewed sequentially. If a number of electrical infrastructure sites are viewed in succession as a traveller moves through the landscape (i.e. roads or walking tracks) this may result in a change in the overall perception of the landscape character.

Scottish Natural Heritage (2005) describes a range of potential cumulative landscape impacts, including:

- Combined visibility (whether two or more projects will be visible from one location).
- Sequential visibility (e.g. the effect of seeing two or more projects along a single journey, e.g. road or walking trail).
- The visual compatibility of different projects in the same vicinity.
- Perceived or actual change in land use across a character type or region.
- Loss of a characteristic element (e.g. viewing type or feature) across a character type caused by developments across that character type.

**ADVERTISED
PLAN**

2.6 Photomontages

A photomontage is a technique whereby an image of the Project is produced using an existing photograph, overlaid with a render of proposed Project elements, to provide an indicative visual representation.

The process involves inserting a computer-generated model of the Project into a photograph taken from a geographically referenced viewpoint, using existing landscape elements of a known size, location, and scale to suitably locate the digital elements within the photograph. Existing elements, such as buildings, have been modelled to create a reference point to match in the photos.

The methodology used to produce the photomontages included:

- Undertake site photography including overlapping photo to create a 180-degree panoramic image to depict the existing scene, with the proposed facility to the centre of that image.

- The location of each viewpoint was recorded on site to accurately depict the location of the photo and match to the 3D digital model of the key design components.
- Existing site elements were measured to match with the scale of elements within the model.
- Model the facility in 3D max applying known dimensions and material finishes. Render of the model, matching with the photograph.

The photomontages are indicative of the Preliminary Project layout (Figure 1-3) and are subject to detailed design. As such, there may be minor changes which are not captured within the photomontages. It is assumed that minor changes will not have any bearing on the level of visual modification presented by the Project. A 'birds eye' view of the Project as modelled, has been provided in Figure 1-4.

Project photomontages

Photomontages were produced for two of the six assessed viewpoints (see Section 4.2), based on the likely clearest views of Project:

- VP1 – 678 Yarragon-Shady Creek Road (southeast of Project)
- VP4 – 771 Yarragon-Shady Creek Road (northeast of Project)

An additional three photomontages have been produced for community consultation that are indicative of how the Project will appear from within the Project area (on private land). These include (see Figure 2-2):

- a. 450m southeast of transmission connection
- b. 220m east of transmission connection
- c. 330 m south of BESS

**ADVERTISED
PLAN**

The photomontages at day 1 of operation depict the current design of key elements available at the time of preparing this report, as represented in Appendix A: Visualisations.

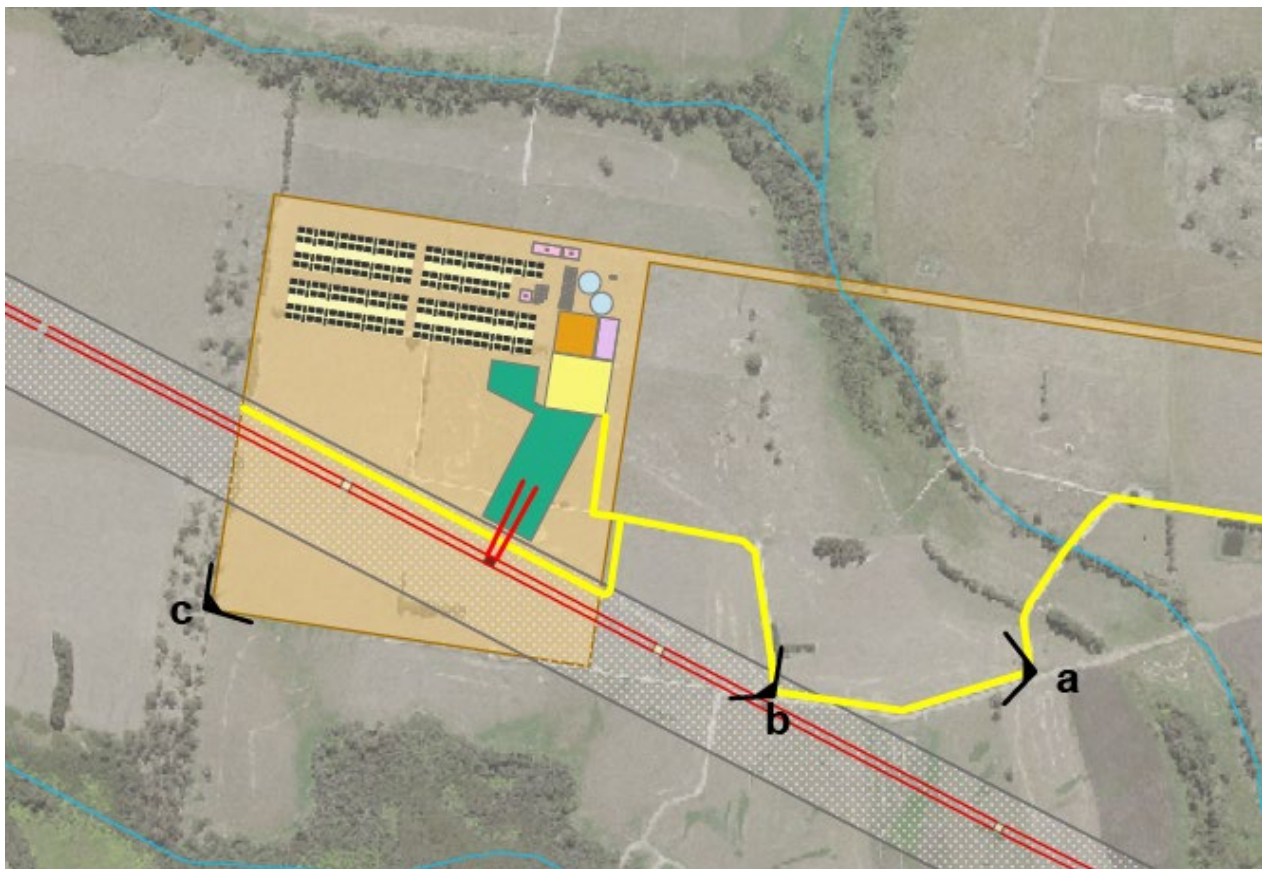


Figure 2-2 Plan showing photomontage viewpoint locations on private property

3 Existing environment

3.1 Legislation and Policy

The following sections provide a brief overview of the statutory context within the Study Area, which will likely influence planning requirements in the existing environment.

Commonwealth legislation

Commonwealth legislation applicable to the Project includes:

- *Environment Protection and Biodiversity Conservation Act 1999*
- *Native Title Act 1993*

State legislation

Victorian legislation contains several Acts that are relevant to the North Yarragon BESS project, including:

- *Planning and Environment Act 1987*
- *Environment Effects Act 1978* and the *Environment Protection Act 1970*
- *Flora and Fauna Guarantee Act 1988* and *Flora and Fauna Guarantee Amendment Bill 2019*
- *Aboriginal Heritage Act 2006* and *Aboriginal Heritage Regulation 2018*
- *Heritage Act 2017*
- *Environment Protection Act 1970 / Environment Protection Act 2018*

Municipal planning schemes

The *Planning and Environment Act 1987* (P&E Act) provides the framework for land-use and development in Victoria. Planning schemes prepared under the provisions of the Act apply to each municipal area in Victoria.

The project is located in an area subject to the planning schemes of BawBaw Council. The relevant planning schemes control the use and development of land and are structured to include:

- State Planning Policy Framework
- Local Planning Policy Framework
- Zones and overlays
- Particular and general provisions
- Definitions and incorporated documents

3.1.1 State Planning Policy Framework

The State Planning Policy Framework (SPPF) provides a context for spatial planning and decision making in Victoria. Table 4-1 below is a summary of the key documents assessed.

**ADVERTISED
PLAN**

Table 4-1 State Planning Policy Framework documents

Legislation/Policy reference	Brief description legislation, salient parts and intent	How legislation/policy is relevant to the study
Baw Baw Shire PS Ordinance	<p>53.13 Renewable energy facility (other than Wind energy facility)</p> <ul style="list-style-type: none"> To facilitate the establishment and expansion of renewable energy facilities, in appropriate locations, with minimal impact on the amenity of the area. 	<p>The LVIA meets the application requirements including this written report and assessment comprising:</p> <ul style="list-style-type: none"> Site and context analysis – Section 3.2 Detailed plans of the proposal – Section 1.2.3 Accurate visual simulations – Appendix A
Victoria Planning Provisions (VPP) Clause 12 Environmental and landscape values	<p>Conserve areas with identified environmental and landscape values.</p> <p>12.05-2S Landscapes objectives:</p> <ul style="list-style-type: none"> To protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments. 	<p>The LVIA identifies significant landscapes in Section 3.3</p> <p>Project is not located in restricted locations (National Park or Ramsar wetlands)</p>
Solar Energy Facilities Design and Development Guideline (DELWP October 2022)	<p>Minimising impacts on landscape values.</p> <p>The visual impact of a solar energy facility relates to:</p> <ol style="list-style-type: none"> the sensitivity of the landscape and its ability to absorb change the size, height, scale, spacing, colour and surface reflectivity of the facility's components the number of solar energy facilities located close to each other another within the same landscape the excessive removal, or planting of inappropriate species of vegetation the location and scale of other ancillary uses, buildings and works including transmission lines, battery storage units and associated access roads the proximity to environmentally sensitive areas such as public land, water courses and low-lying areas. 	<p>The LVIA identifies the potential visual impacts as outlined in the guideline.</p>

3.1.2 Local Planning Policy Framework (LPPF)

Baw Baw Shire Council prioritises its diverse agricultural industry, aiming to maximise the use of productive land. This focus is evident in the region's strategic plans and local planning provisions for land within the Farming Zone. Therefore, justifying the Site's suitability for a renewable energy project requires considering its current agricultural use and potential productivity in accordance with regional statutory and strategic provisions.

3.1.3 Zones and overlays

**ADVERTISED
PLAN**

Land Use

The Study Area is in entirely within the Farming Zone (see Figure 3-1). Under the Australian Land Use and Management Classification (Version 8) the Study Area is mainly Primary Production as described in Table 3-2 below. There are pockets of Residential land use at dwellings along Yarragon-Shady Creek Road, Araluen Road and Darnum-Shady Creek Road. There is a single Industrial site at 60 Brookers Road, which is approximately 1 km west of the Property Boundary. Shady Creek is defined as Conservation Reserves, and this land use follows the creek for the entirety of the Study Area.

The proposed BESS and related transmission infrastructure is defined as a Utility Installation pursuant to Clause 73.03 (Land Use Terms) of the Baw Baw Shire Planning Scheme. Utility Installation includes “transmission, distribution and storage of power”.

ADVERTISED PLAN

Table 3-2 Land use classes

LAND USE CLASS	Land Use Features / Requirements	Relevance to LVIA
PRIMARY PRODUCTION	<p>The Primary Production class includes land that is based on dryland farming systems.</p> <p>Visual features normally include:</p> <ul style="list-style-type: none"> Native vegetation largely replaced by introduced species for clearing Activities such as pasture production for stock, cropping and fodder production Wide range of horticulture production 	<ul style="list-style-type: none"> The impact of the proposal on visual corridors and sightlines – refer section 4.2 Assessment of Visual impacts The impact of the proposal on the natural environment and natural systems – refer section 4.1 Assessment of Landscape character impacts
CONSERVATION RESERVES	<p>The Conservation Reserves class includes land that is important for natural resources and as a point of reference in the landscape.</p> <p>This class applies to Shady Creek which is a main water body within the Study Area.</p>	<ul style="list-style-type: none"> The impact of the proposal on Shady Creek as a point of reference in elevated viewpoints – refer section 4.2 Assessment of Visual impacts
RESIDENTIAL	<p>The Residential class includes land with houses or other residential infrastructure, with or without, associated agricultural activity.</p> <p>This class applies to seven properties within the Study Area and main roads including Yarragon-Shady Creek Road, Araluen Road and Darnum-Shady Creek Road.</p>	<ul style="list-style-type: none"> The impact of the proposal on views from residences and roads - refer section 4.2 Assessment of Visual impacts
INDUSTRIAL	<p>The Industrial class includes operations associated with factories, workshops, foundries and construction sites.</p> <p>This class applies to 60 Brooker Road which is approximately 1km west of the Project Area.</p>	<ul style="list-style-type: none"> The impact of the proposal on views from industrial property - refer section 4.2 Assessment of Visual impacts

Overlays

As shown in Figure 3-2 and described in Table 3-3, the Study Area intersects with the following Overlays.

Table 3-3 Overlays

PLANNING OVERLAY	Land Use Features / Requirements	Relevance to LVIA
BMO: BUSHFIRE MANAGEMENT OVERLAY	<p>The Bushfire Management Overlay (BMO) intersects with the Project Area in the south-west corner of the site.</p> <p>The purpose of the BMO is:</p> <ul style="list-style-type: none"> To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire. To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented. To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level. <p>Pursuant to Clause 44.06-2 (permit requirement), planning approval is required to subdivide land in the BMO.</p>	<ul style="list-style-type: none"> The BMO does not have any direct requirements for landscape and visual assessment. Landscape mitigation recommendations must adhere to bushfire buffer zones from built or electrical structures.
DCPO1: DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY – SCHEDULE 1	<p>The Baw Baw Shire Development Contributions Plan applies to the Project and ensures that developers contribute towards infrastructure and community facilities associated with their developments.</p>	<ul style="list-style-type: none"> There are no direct impacts by Project on this Overlay.
ESO3: ENVIRONMENTAL SIGNIFICANCE OVERLAY – SCHEDULE 3	<p>The Environmental Significance Overlay – Schedule 3 (ESO3) is within 2 km of the Project and pertains to the Trafalgar area. This area contains a sand resource of State significance and has the potential for development as a sand supply region for the Melbourne area in the medium to long term.</p> <p>The purpose of ESO3 is:</p> <ul style="list-style-type: none"> To protect sand resources from sterilisation by inappropriate development Enable sand extraction while protecting environmental values of Sweetwater Creek Flora and Fauna Reserve 	<ul style="list-style-type: none"> The Project does not encroach on this overlay and there are no direct impacts by Project.

	Environmental values of waterways and vegetation in the area require appropriate planning protection.	
Aboriginal Cultural Heritage Sensitivity	Overlay applies to Shady Creek.	<ul style="list-style-type: none"> The Project does not encroach on this overlay and there are no direct impacts by Project
LSIO: LAND SUBJECT TO INUNDATION OVERLAY	Overlay applies to Shady Creek.	<ul style="list-style-type: none"> The Project does not encroach on this overlay and there are no direct impacts by Project
FO: FLOODING OVERLAY	Overlay applies to Shady Creek.	<ul style="list-style-type: none"> The Project does not encroach on this overlay and there are no direct impacts by Project

Further information on planning is within the *Planning Report*.

**ADVERTISED
PLAN**

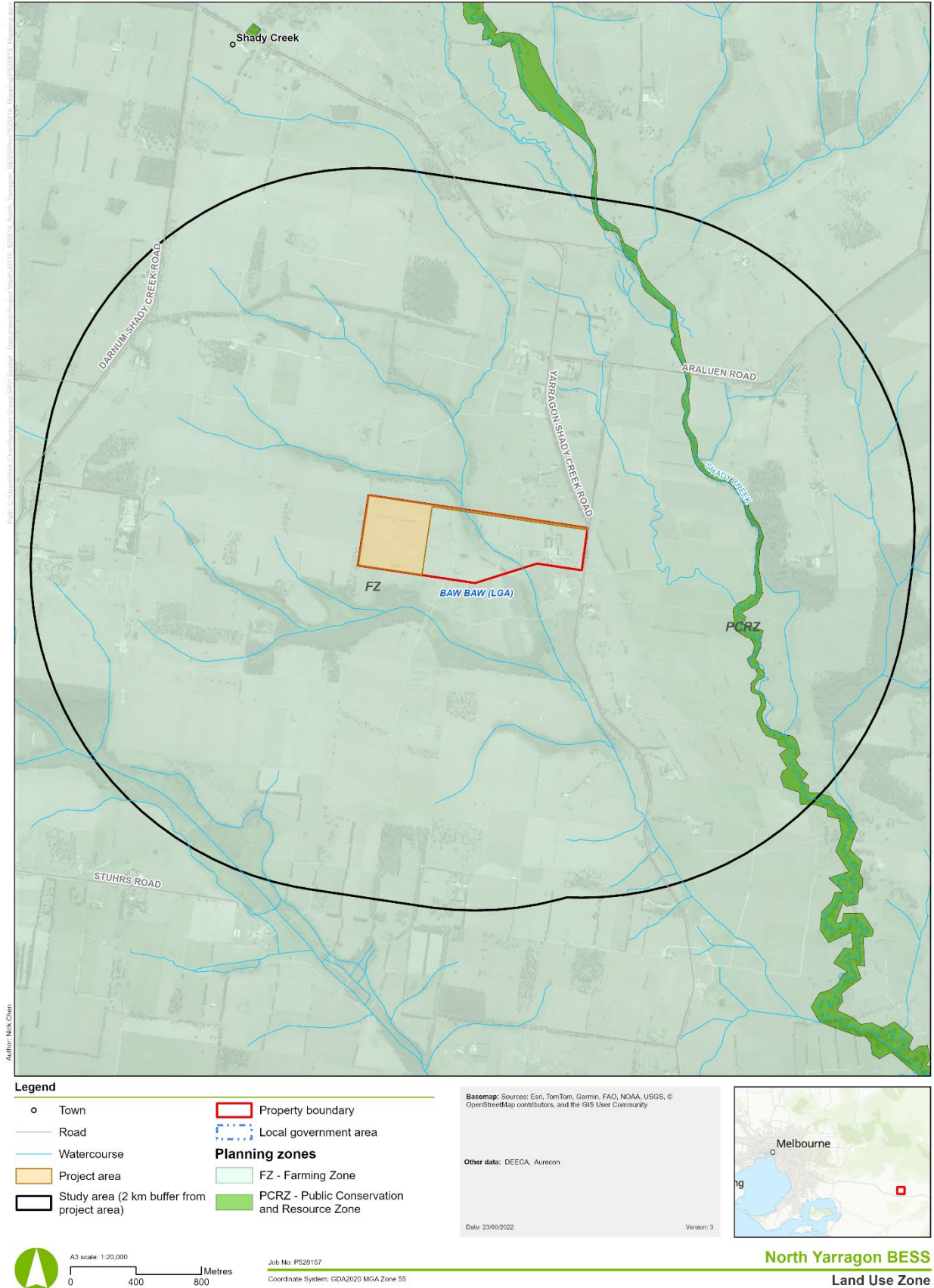


Figure 3-1 Land Use Zone Types

ADVERTISED PLAN

ADVERTISED PLAN

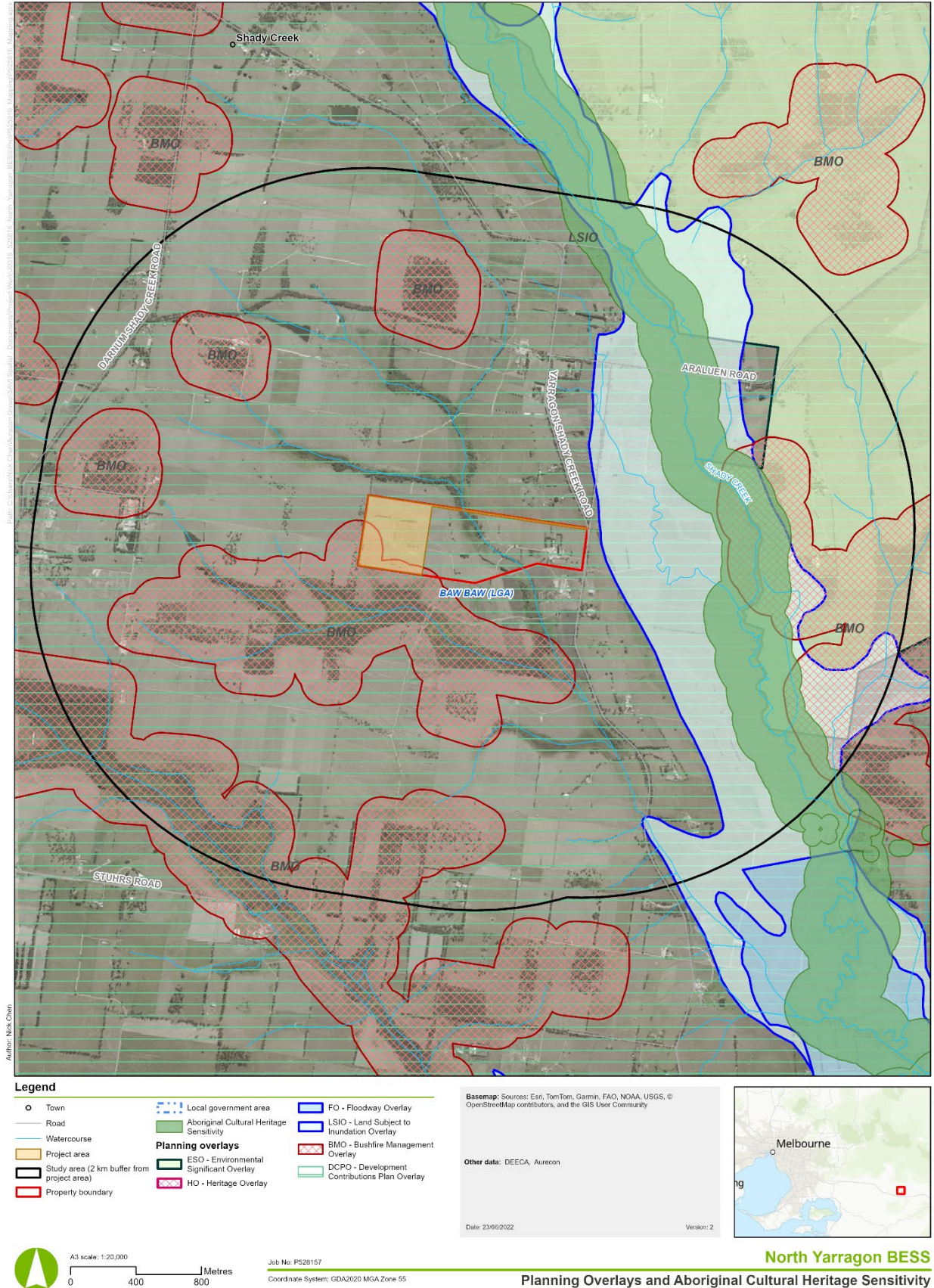


Figure 3-2 Planning overlays and area of Aboriginal Cultural Heritage Sensitivity

3.2 Site context

The Project is located approximately 6 kilometres north of Yarragon in eastern Victoria. Key markers and studies relevant to this study, are:

- The Project is located approximately 6 km from the Princes Highway
- The Project is located approximately 1 km from Shady Creek

The following sections outline the existing biophysical and cultural aspects of the Study Area.

3.2.1 Land use

As identified in 3.1.3 Zones and overlays, the Study Area is land zoned for farming. The type of farming that occurs includes grazing cattle and sheep, with some paddocks used for crops. The land cover of the Site and surrounding area is largely exotic pasture or grassland, with some small areas of horticulture or irrigated pasture.

There are approximately 5 rural residential dwellings within one kilometre of the Site. Some of these are associated with adjacent farms. Residents are likely to commute a short distance (7 km) to Yarragon for services (schools, businesses, shopping etc).

Yarragon-Shady Creek Road to the east of the Site is a sealed two-way rural road, traversing between Yarragon (7 km south) and continuing on Old Sale Road which connects to Moe-Newborough (16 km to east) and Drouin (20km to west).

There is large electrical infrastructure within the Study Area including four HV transmission lines 1.5 km north of the Site (Figure 3-4) and one HV line to the southwest corner of the Site. The transmission lines to the north are main connectors from Latrobe Valley power stations to Melbourne.



Figure 3-3 Cattle farming within Study Area



Figure 3-4 HV power line view from Parkins Road (looking east)

3.2.2 Topography, landform and waterways

The Site gently slopes from west to east, with surface elevations ranging from approximately 113 m Australian Height Datum (AHD) to 89 m AHD. Surface water is expected to flow eastward towards the tributary of Shady Creek.

Shady Creek, running north to south, is located 1km east of the Project. It flows south into the Moe River Drain, which runs through the Moe Flats to join Latrobe River. Shady Creek is a meandering creek with sloping vegetated embankments.

Further information on topography is within the *Contaminated Land Impact Assessment Report*.

**ADVERTISED
PLAN**



Figure 3-5 Elevated view from Araluen Road (looking south-west)



Figure 3-6 Shady Creek view from Araluen Road (looking south)

3.2.3 Vegetation

The Site is located within the Gippsland Plain (GipP) bioregion. The Site and surrounding area is highly modified due to a history of pastoral use.

A tributary of Shady Creek runs through the centre of the Project boundary, with a high density of native vegetation concentrated around the creek. There are a total of nine patches of native vegetation inside the Project area, including eight patches of Swamp Scrub (see Figure 3-7) and one patch of Swampy Riparian Woodland (see Figure 3-8).

There are regular occurrences of planted native and exotic windrows to the fence line of paddocks and property boundaries (see Figure 3-9). Planted trees including Eucalypts and Acacia species form a vegetation screen along Yarragon-Shady Creek Road (see Figure 3-10).

Further information on vegetation is within the *Ecological Impact Assessment Report*.



Figure 3-7 Swamp Scrub near the creek within Site



Figure 3-8 Swampy Riparian Woodland near creek within Site

**ADVERTISED
PLAN**



Figure 3-9 Windrow of pines along fence line on Yarragon-Shady Creek Road (looking south)



Figure 3-10 Roadside vegetation on Yarragon-Shady Creek Road (looking south-east)

3.2.4 Cultural heritage

Aboriginal heritage

The Study Area is located within the Registered Aboriginal Party (RAP) area of the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC).

The Project Area does not intersect with any areas of Cultural Heritage Sensitivity (CHS) however voluntary Cultural Heritage Management Plan (CHMP) (No. 20508) is being prepared for the Project.

Consultation with GLaWAC was undertaken during the preparation of the CHMP, and GLaWAC participated in the preparation of the CHMP. The CHMP will be reviewed and approved by First Peoples State Relations.

Non-Aboriginal heritage

There are no places of historical significance within the Study Area, including listings within the Victorian Heritage Register (VHR) and Victoria Heritage Inventory (VHI).

**ADVERTISED
PLAN**

ADVERTISED PLAN

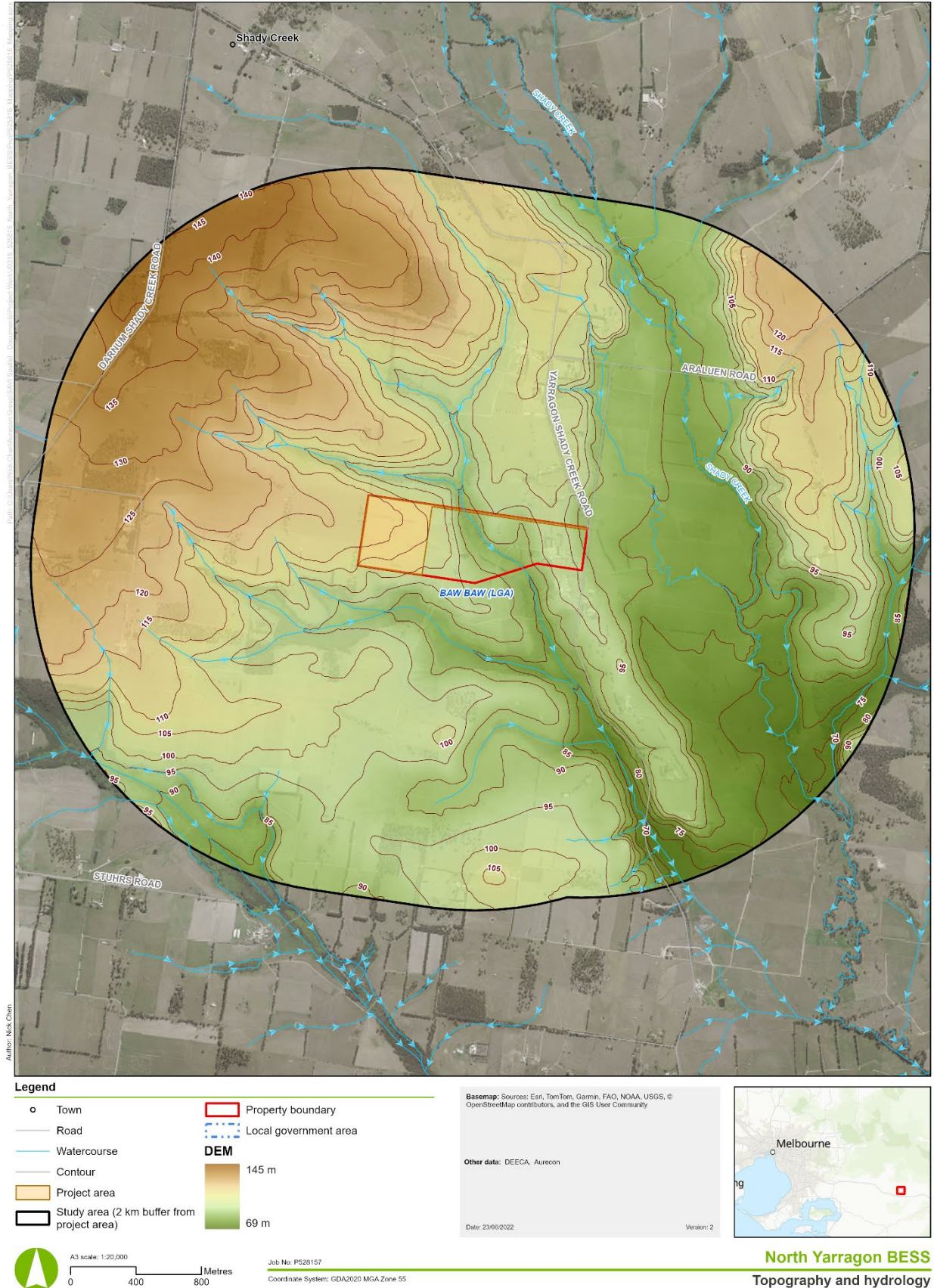
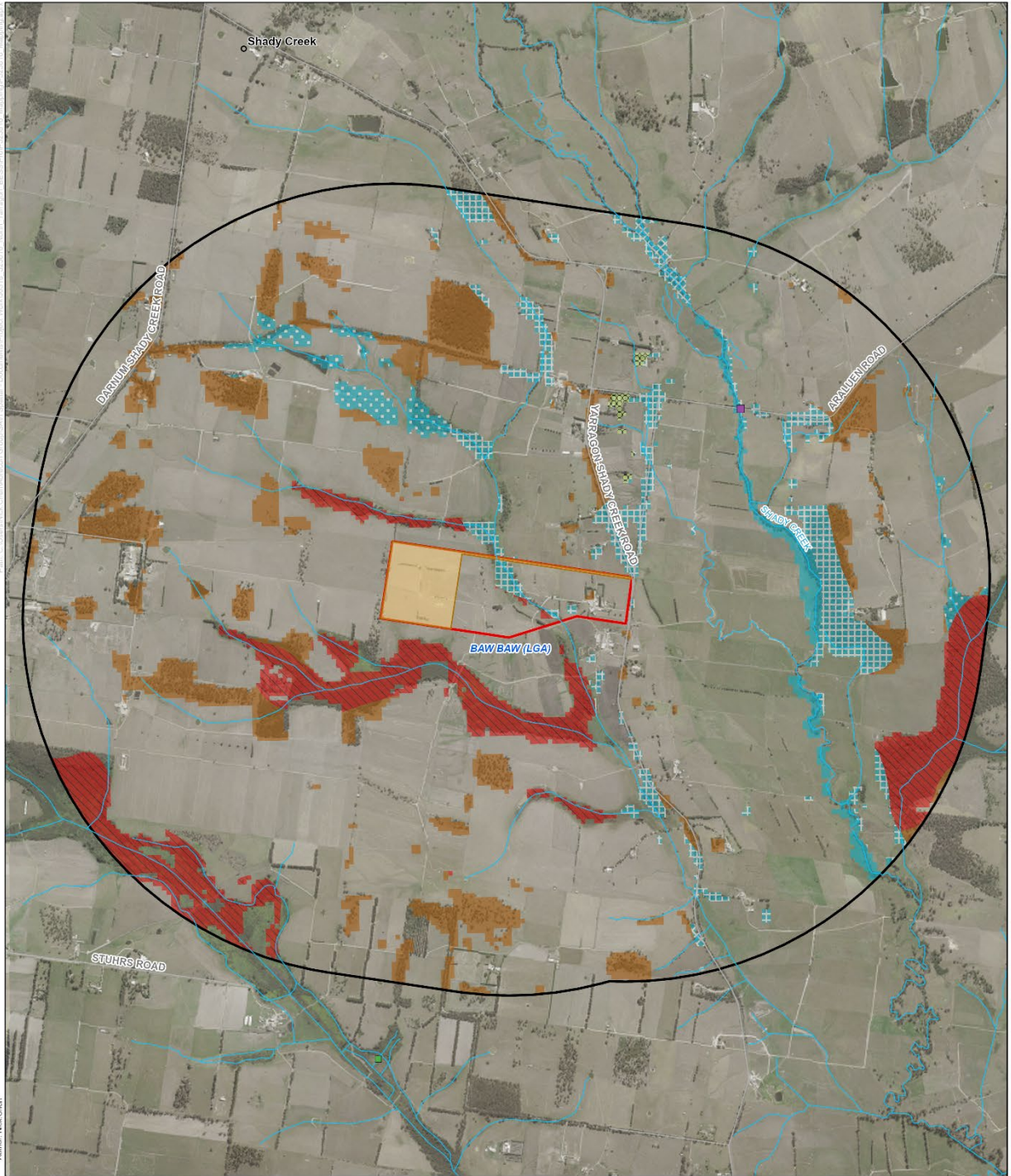


Figure 3-11 Topography and Hydrology



Legend

- | | |
|--|--|
| <p>Threatened fauna</p> <ul style="list-style-type: none"> ■ Growing Grass Frog ■ Platypus ○ Town — Road — Watercourse Project area | <ul style="list-style-type: none"> Study area (2 km buffer from project area) Property boundary <p>Modelled EVC 2005</p> <ul style="list-style-type: none"> 16, Lowland Forest 17, Riparian Scrub/Swampy Riparian Woodland Complex 18, Riparian Forest 45, Shrubby Foothill Forest 53, Swamp Scrub 126, Swampy Riparian Complex 150, Clay Heathland/Wet Heathland/Riparian Scrub Mosaic Local government area |
|--|--|

Basemap: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Other data: DEECA, Aurecon

Date: 23/06/2022

Version: 2



A3 scale: 1:20,000



Job No: P528157

Coordinate System: GDA2020 MGA Zone 55

North Yarragon BESS
Vegetation cover

Figure 3-12 Vegetation cover

**ADVERTISED
PLAN**

3.3 Landscape Character Types

Landscape Character Types (LCT) help to identify unifying aspects of the landscape and distinguish why one landscape is visually distinct from another. The character zones have been determined through a desktop assessment and confirmed through a site visit.

3.3.1 Landscape character

The Study Area comprises one Landscape Character Type - **LCT 1: Agricultural hills**

It is a rural landscape with undulating topography, within and surrounding the Study Area. There are large paddocks used for sheep and cattle grazing. Supporting farm infrastructure includes fencing, sheds and machinery. There are residential dwellings spotted around the area, typically set back from roads and having a greater presence of planted exotic and native landscaping near to the dwellings. See Figure 3-10 to Figure 3-13 for photographs from within the Study Area.

Shady Creek is a natural feature to the east of the Site, which weaves its way down the landscape to the Moe River Drain in Yarragon. A tributary of the creek runs through the north-east of the Site. There are farm dams spotted within paddocks, to provide for stock.

The rural landscape within the Study Area is influenced by powerlines which traverse fields and connect to large power station infrastructure in the Latrobe Valley.

Key characteristics:

- Includes scattered residential dwellings and ancillary farm buildings at low densities.
- Vegetation occurs throughout the area sporadically in agricultural paddocks, along riparian corridors and as windrows. Species are both native and exotic, with windrows mostly made up of dense planting of pine and macrocarpa.
- Small streams, creeks and occasional man-made dams.



Figure 3-13 Windrows of pine, Yarragon-Shady Creek Road



Figure 3-14 Pastoral plains, Araluen Road



Figure 3-15 Farm buildings, Yarragon-Shady Creek Road

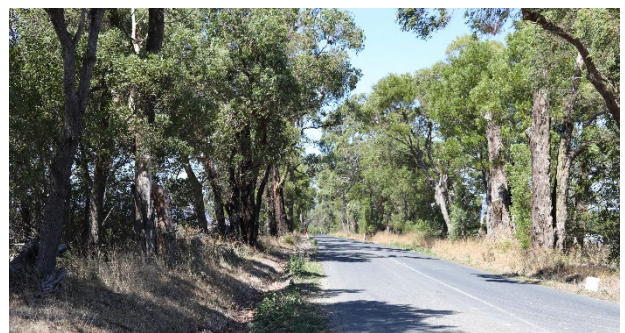


Figure 3-16 Treelined roads, Yarragon-Shady Creek Road

**ADVERTISED
PLAN**

4 Assessment of Landscape and Visual Impacts

4.1 Assessment of Landscape character impacts

The level of modification to the existing landscape character has been assessed based on the broad effects of the Project as outlined below in Table 4-1.

Due to the visual influence dictated by the height of key Project components, the landscape character impacts are likely to influence the area immediately surrounding the site. The potential for landscape character impacts have been considered during construction and Day 1 of operation.

Table 4-1 Impacts to landscape character

Landscape Character Area	Sensitivity	Construction impacts	Operational impacts
		Magnitude of change	
LCT 1 Agricultural hills	Moderate <ul style="list-style-type: none"> The rural landscape is modified, containing and surrounded by bulky elements that lessen the sensitivity and provide capacity to absorb further changes 	Very Low <ul style="list-style-type: none"> Construction activity including earthworks and installation of electrical elements, present a very low magnitude of change to the LCT, which is widely dispersed. 	Very Low <ul style="list-style-type: none"> The BESS and ancillary structures introduce built form which is larger than farm infrastructure but of a scale that does not influence outside of the site. It presents a very low magnitude of change to the LCT, which is widely dispersed.

**ADVERTISED
PLAN**

4.2 Assessment of Visual Impacts

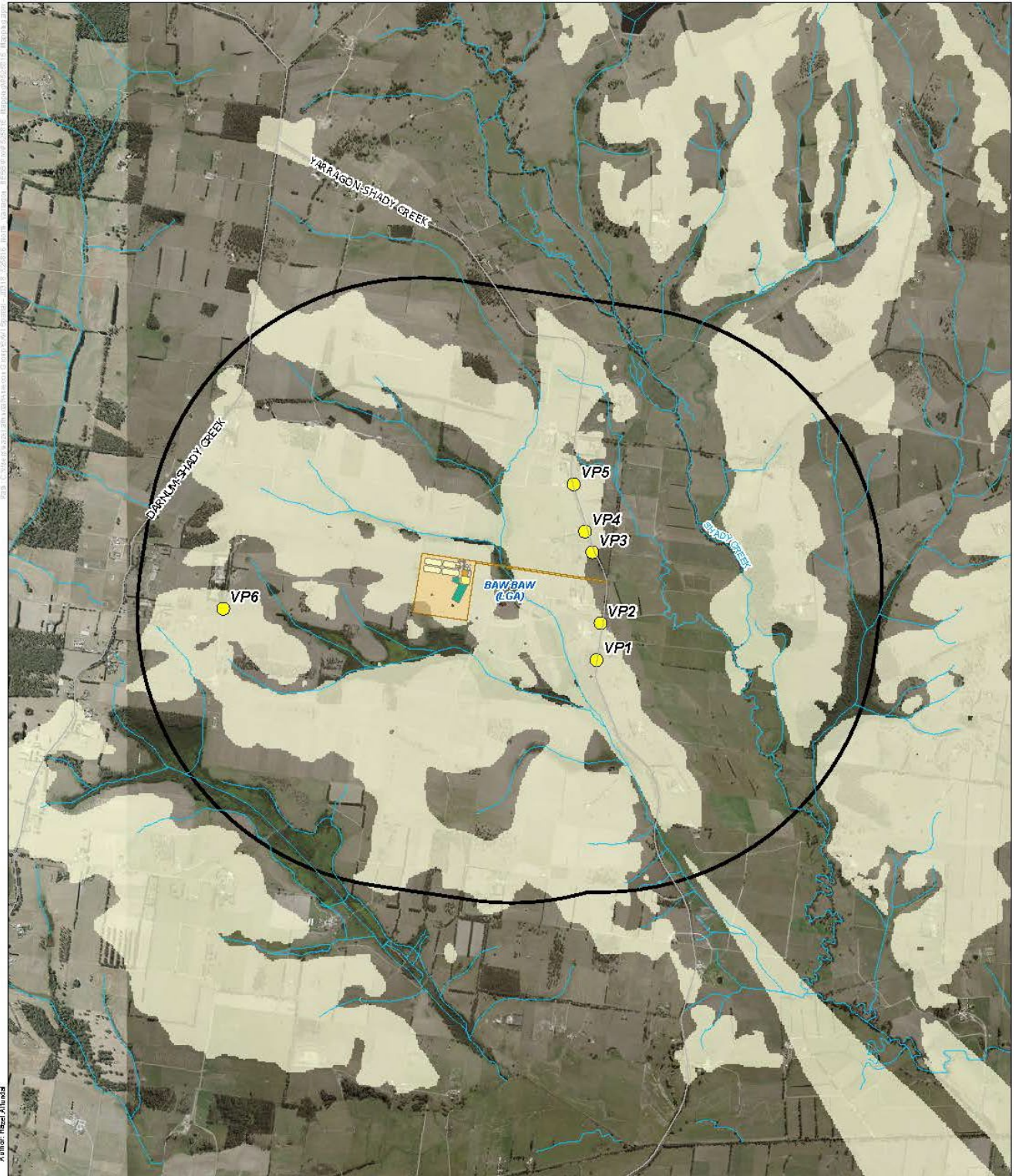
Six viewpoints were identified for visual assessment of the Project based on the design, viewing distance, aspect and sensitivity of receptors. The viewpoints are located within a 2 km radius of the Project Area, which include the nearest neighbouring rural residences. Beyond this distance, views of the Project are likely to diminish, with intervening topography, vegetation and built form obscuring the site. Therefore, these viewpoints are considered *worst-case* scenarios for potential visual impacts of the Project. The location of the assessed viewpoints are shown in Figure 4-1.

Photos (26th February 2025) in the direction of the Project are included from each of the viewpoints, demonstrating the existing visual conditions. The photos have been taken from publicly accessible positions and are representative of views from adjacent private dwellings.

Table 4-2 identifies the viewpoints within the Study Area which have been assessed.

Table 4-2 Viewpoints representative of private receivers and public viewpoints

ID	Location	Receiver type	Distance/ direction from Site
VP1	678 Yarragon-Shady Creek Road	Local motorists	650m southeast
VP2	699 Yarragon-Shady Creek Road	Rural residential	640m southeast
VP3	755 Yarragon-Shady Creek Road	Rural residential	750m – east
VP4	771 Yarragon-Shady Creek Road	Rural residential	740m – northeast
VP5	815 Yarragon-Shady Creek Road	Rural residential	850m - northeast
VP6	Brookers Road	Rural residential	1,040m - west



Legend

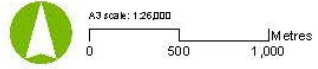
Road	Local government area	Battery Yard
Watercourse	Storm Water Detention Basin	O&M Buildings / Storage & Parking
Project area	Water Tanks	New Transmission Tower 220kV
Viewshed	Substation Area	Transmission Tower 220kV
Study area (2 km buffer from project area)	Terminal Station	220kV Easement
	Temporary Facilities	

Base map: Vicmap, Esri, TomTom, Garmin, FAO, NOAA, USGS

Other data: DEECA, Atracore

Date: 23/09/2022

Version: 3



Job No: P528157
 Coordinate System: GDA2020 MGA Zone 55

North Yarragon BESS
 Viewpoint and Viewshed

Figure 4-1 Viewpoint locations

ADVERTISED PLAN

Viewpoint 1: Yarragon-Shady Creek Road – southeast 1



Figure 4-2 Viewpoint 1: View northwest from Yarragon-Shady Creek Road

Viewing location	678 Yarragon-Shady Creek Road		
Visual receivers	Representative of views experienced by motorists on Yarragon-Shady Creek Road. Additionally, there is a rural dwelling located 100m to the northeast (left) of the viewpoint, with surrounding shrubs and trees which are likely to obscure outward views.		
Existing setting	The foreground of VP1 (Figure 4-2) comprises an open field, recently cropped, and a few scattered native trees. The landform falls to the middleground where there is further farm paddocks and clusters of native vegetation. The HV transmission line and towers are visible from the far left and diminishing to the center of the viewpoint. Farm sheds and silos are visible in the middleground to the far right. The viewpoint is at a vantage point, allowing views towards the background with a line of trees. The scene is a typical rural undulating landscape with wide open views, scattered farm buildings, paddocks and vegetation.		
Viewing context	Static – views from dwelling typically experienced for long periods	Viewing angle	Perpendicular
Land use	Farm zone	Distance to nearest component	650m
Visual sensitivity	Low - Experienced motorists on local road.		
	Sensitivity	Magnitude of change	Visual Impact
Construction	Moderate	Construction works within the Site would be partially visible from this viewpoint. There is potential to see part of the works from the road, which is due to the intervening distance, but will not be prominent and is commensurate with farm work such as cropping for an extended period during construction. The magnitude of change is very low.	Very Low
Day 1 of operation		Refer to Appendix A: Figure 0-2 Viewpoint 1: Indicative view of Project at Day 1 of Operation. There is potential for partial views including the BESS containers and ancillary structures from the road. At the distance viewed, the Project elements will appear small and are commensurate with foreground farm sheds, presenting a low contrast to the existing setting. The magnitude of change at operation is low.	Low

**ADVERTISED
PLAN**

Viewpoint 2: Yarragon-Shady Creek Road – southeast 2



Figure 4-3 Viewpoint 2: View northwest from Yarragon-Shady Creek Road

Viewing location	699 Yarragon-Shady Creek Road		
Visual receivers	Representative of views adjacent nearest rural residential dwelling, to the southeast of the Project. The rural dwelling is 100m west (left) of the viewpoint, and at a slightly higher elevation, with a shed and a low degree of vegetation near the dwelling, in the direction of the Project.		
Existing setting	<p>The view (Figure 4-3) is directed southeast towards the Project along Yarragon-Shady Creek Road. This is a two-way local road, mostly used by locals, workers and occasional visitors.</p> <p>The foreground comprises a field, recently cropped, with scattered trees and windrow vegetation around the residential driveway. The landform rises to the middleground where there are further windrows along a residential house. Farm sheds and silos are visible in the middleground to the far left, with a residential house and silos visible to the far right. The viewpoint is at a low point, with rising topography limiting views to the Project in the background.</p>		
Viewing context	Static – views from dwelling typically experienced for long periods	Viewing angle	Perpendicular
Land use	Farm zone	Distance to nearest component	640m
Visual sensitivity	Moderate - Experienced predominantly by adjacent residents and rural workers, with some visitors travelling on local road.		
	Sensitivity	Magnitude of change	Visual Impact
Construction	Moderate	Construction works within the Site would be partially visible from the dwelling due to the elevated position, however, would be obscured by the intervening shed. The works would present a very low magnitude of change.	Very Low
Day 1 of operation		There is potential for partial views including the BESS containers and ancillary structures, from the dwelling. At the distance viewed, the Project elements will appear small and are commensurate with farm sheds, presenting a low contrast to the existing setting. The magnitude of change at operation is very low.	Very Low

**ADVERTISED
PLAN**

Viewpoint 3: Yarragon-Shady Creek Road – east



Figure 4-4 Viewpoint 3: View west from Yarragon-Shady Creek Road

Viewing location	755 Yarragon-Shady Creek Road		
Visual receivers	Representative of views adjacent neighboring rural residential dwelling (to center of viewpoint), to the east of the Project. Trees and sheds are located to the southwest of the dwelling which would obscure views in that direction.		
Existing setting	<p>The view (Figure 4-4) is directed east towards the Project along Yarragon-Shady Creek Road. This is a two-way local road, mostly used by locals, workers and occasional visitors.</p> <p>The foreground comprises a recently cropped field and a dwelling. The dwelling has open views of the surrounding farmland, except to the west which is screened by a large tree. The dwelling is at a slightly higher elevation than the viewpoint location, which may allow slightly broader views of the surrounds.</p> <p>The middleground comprises scattered trees, with a windrow on the far right along a residential property line. The HV transmission line and towers and distribution lines are visible from the far right and diminishing to the left of the viewpoint. To the right there are densely planted windrows around farming infrastructure.</p> <p>The background comprises scattered trees and undulating landscape.</p>		
Viewing context	Static – views from dwelling typically experienced for long periods	Viewing angle	Perpendicular
Land use	Farm zone	Distance to nearest component	750m
Visual sensitivity	Moderate - Experienced predominantly by adjacent residents and rural workers, with some visitors travelling on local road.		
	Sensitivity	Magnitude of change	Visual Impact
Construction	Moderate	Construction works within the Site would be screened by intervening vegetation, both next to the dwelling and along the creek to the east of the Project. The magnitude of change is negligible during construction.	Negligible
Day 1 of operation		Project components would appear very small at this distance, are screened by intervening foreground and middleground vegetation. The magnitude of change at operation is negligible.	Negligible

**ADVERTISED
PLAN**

Viewpoint 4: Yarragon-Shady Creek Road – northeast 1



Figure 4-5 Viewpoint 4: View southwest from Yarragon-Shady Creek Road

Viewing location	771 Yarragon-Shady Creek Road		
Visual receivers	Representative of views adjacent rural residential dwelling, to the east of the Project. The dwelling is 40m west (right) of the viewpoint, up a tree-lined driveway and with other surrounding trees which partially screen views of the surrounds.		
Existing setting	<p>The view (Figure 4-5) is directed northeast towards the Project along Yarragon-Shady Creek Road. This is a two-way local road, mostly used by locals, workers and occasional visitors. The view is adjacent to a residential driveway.</p> <p>The foreground comprises a recently cropped field that is surrounded by dense vegetation to the left (along Yarragon-Shady Creek Road) and right (along residential driveway). The middleground comprises of multiple dwellings and farm buildings, including silos, sheds and animal shelters. There is scattered vegetation of varying height near the infrastructure. The HV transmission line and towers and distribution lines are visible from the far right and diminishing to the left of the viewpoint.</p> <p>The background comprises scattered trees and undulating landscape.</p>		
Viewing context	Static – views from dwelling typically experienced for long periods	Viewing angle	Perpendicular
Land use	Farm zone	Distance to nearest component	740m
Visual sensitivity	Moderate - Experienced predominantly by adjacent residents and rural workers, with some visitors travelling on local road.		
	Sensitivity	Magnitude of change	Visual Impact
Construction	Moderate	Construction works within the Site may be partially visible from this elevated viewpoint, partially screened by intervening vegetation near to the dwelling as scattered vegetation in the middleground. There is potential to see part of the works from the residence, though at this distance would be of a small scale and commensurate with farm works and therefore a negligible magnitude of change.	Negligible
Day 1 of operation		Refer to Appendix A: Figure 0-5 Viewpoint 4: Indicative view of Project at Day 1 of Operation. There is potential for partial views including the BESS containers and ancillary structures. At the distance viewed, the Project elements will appear small, commensurate with farm sheds and would be mostly screened by intervening vegetation. The magnitude of change at operation is negligible.	Negligible

Viewpoint 5: Yarragon-Shady Creek Road – northeast 2



Figure 4-6 Viewpoint 5: View west from side of Yarragon-Shady Creek Road

Viewing location	South of 815 Yarragon-Shady Creek Road		
Visual receivers	Representative of views adjacent rural residential dwelling, to the northeast of the Project. The dwelling is 140m northwest (right) of the viewpoint and has some large trees and sheds which are likely to partially screen views of the surrounds.		
Existing setting	<p>The view (Figure 4-6) is directed northeast towards the Project along Yarragon-Shady Creek Road. This is a two-way local road, mostly used by locals, workers and occasional visitors.</p> <p>The foreground comprises a bare patch of land that has mounds of dirt on it and has been recently disturbed. Adjacent to the immediate plot is a recently cropped paddock with scattered trees.</p> <p>The middleground comprises of farm buildings, with scattered vegetation of varying height. Distribution lines are visible from the far left, with powerlines diminishing into the middle of the viewpoint.</p> <p>The background comprises scattered trees and undulating landscape.</p>		
Viewing context	Static – views from dwelling typically experienced for long periods	Viewing angle	Perpendicular
Land use	Farm zone	Distance to nearest component	850m
Visual sensitivity	Moderate - Experienced predominantly by adjacent residents and rural workers, with some visitors travelling on local road.		
	Sensitivity	Magnitude of change	Visual Impact
Construction	Moderate	The Project works would be location behind vegetation visible in the middleground. Further vegetation and a large shed near the residence would screen views towards the Project and thus presents a negligible magnitude of change.	Negligible
Day 1 of operation		The Project components would not be visible, as screened by vegetation in the middleground and further screened from the residence with a shed and vegetation to the foreground. The magnitude of change at operation is negligible.	Negligible

ADVERTISED PLAN

Viewpoint 6: Brookers Road - west



Figure 4-7 Viewpoint 6: View east from Brookers Road

Viewing location	Brookers Road stockyard		
Visual receivers	Representative of views from adjacent rural residential dwelling located to the north of the viewpoint, to the west of the Project. The viewpoint is the closest publicly accessible location with views towards the Project, without intervening roadside vegetation. The dwelling is approximately 500m north (left) of the viewpoint. The dwelling has open views in the direction of the Project.		
Existing setting	<p>The view (Figure 4-7) is directed east towards the Project from Brookers Road, adjacent a fenced stockyard with small sheds. Grassed paddocks surround the stockyard to the east.</p> <p>The landform falls slightly towards the middleground where there is a higher presence of native trees. The middleground is partially screened by foreground trees and the sheds. A hill range is visible in the background.</p> <p>The view from the dwelling would comprise less foreground elements and views of large paddocks. The HV transmission line and towers would also be visible in the middleground from the dwelling, with the closest tower at a distance of approximately 350m from the dwelling.</p>		
Viewing context	Static – views from dwelling typically experienced for long periods	Viewing angle	Perpendicular
Land use	Farm zone	Distance to nearest component	1,040m
Visual sensitivity	Moderate - Experienced predominantly by adjacent residents and rural workers		
	Sensitivity	Magnitude of change	Visual Impact
Construction	Moderate	Construction works within the Site would be barely visible from this viewpoint, due to the distance observed from the dwelling and obscured by intervening scattered vegetation. The magnitude of change during construction is negligible.	Negligible
Day 1 of operation		There is potential for partial views including the BESS containers and ancillary structures, from the dwelling which has open views in the direction of the Project. The scale of the Project components would appear small due to the diminishing effect of distance and be partially screened by intervening scattered trees. The Project would appear in a narrow field of view, which would not provide much of a contrast to the rural landscape. The magnitude of change at operation is Very Low.	Very Low

ADVERTISED PLAN

4.3 Cumulative impacts analysis

A desktop search of renewable energy projects within the Study Area, identified Shady Creek Solar Farm (approved – not operational), is located approximated 4 km east of the site on Bayleys Road, Yarragon.

Given that the Project is only partially visible from the closest public and private viewpoints, and with a low number of sensitive receivers located between North Yarragon BESS and Shady Creek Solar Farm, there is low potential for cumulative visual impacts of the two projects.

The key components within a solar farm are typically up to 4m in height (PV panels, switchroom, O&M building, substation), similar to that in a BESS. The area of higher visual prominence (5 degrees of the vertical field of view) equates to 460 m. The area for cumulative impacts to occur between the two Projects, at 4 km apart, does not overlap. Therefore there are no cumulative impacts expected between the Project and other approved or built renewable energy projects.

4.4 Management of impacts

The following recommendations are included as a guide to assist the development of the detailed design of the Project and during construction management. These are not intended as compulsory mitigation measures due to the absence of significant adverse impacts, however, would contribute to minimise adverse visual impacts.

4.4.1 Construction phase recommendations

There are potential very low visual impacts during the construction phase of the Project which occur to a low number of neighbouring rural dwellings. These occur due to partial visibility of the earthworks and set up of construction compounds within the site.

The following mitigation measures are recommended to be included in a Construction Environmental Management Plan (CEMP).

- Site lighting is to be designed to minimise glare issues and light spillage into adjacent areas and generally consistent with the requirements of Australian Standard 4282.2023 - Control of the obtrusive effects of outdoor lighting.
- Existing trees adjacent to the works will be retained and protected where possible to screen construction support sites, minimising clearing where possible.
- All areas disturbed by construction and not required for operation of the project are to be restored to existing condition.

4.4.2 Operational phase recommendations

There are potential very low visual impacts of the Project which occur to the closest rural residential dwellings. The key modification factors include the introduction of built form in a farm paddock.

The following mitigation measures are recommended to minimise and reduce the landscape and visual impacts during operation.

Built form

- Architectural materials - cladding, materials and colour used to mitigate appearance of bulky structures. 'Environmental green' colouring adopted for structures visible beneath the horizon, to blend with vegetation and ground surfaces.
- Signage to place on proposed fencing, within site entranceway to limit visual distraction of passing motorists.

ADVERTISED PLAN

Vegetation

- Planting along the south and west boundaries of the site, including shrub and tree planting would screen views of the Project from neighbouring properties.
- Earthworks – use of landform to integrate the facility components into the surrounding landscape, including planted embankments for additional visual screening. This is subject to operational requirements and fire hazard offsets.

Application of these mitigation measures has the potential to reduce the adverse visual impacts of the Project from viewpoints where it is noticeable, including VP1 and VP6.

4.5 Summary of findings

The following section provides a summary of the landscape and visual impact assessment at construction, operation and the resulting residual impacts.

Table 5-3 Summary of landscape character impacts

Landscape Character Type	Description	Potential Construction impacts	Potential Operational impacts	Potential Residual impacts
LCT 1 Agricultural hills	The introduction of the BESS and ancillary structures changes the land use for a small piece of farmland, in a widely dispersed LCT.	Very Low	Very Low	Very Low

The viewpoint assessments are representative of rural residential dwellings from publicly accessible locations and the closest local road. The assessments take into consideration the representative viewpoint panoramic image which indicates the clearest view in the direction of the Project, as well as screening elements that are present surrounding the dwelling.

Table 5-4 Summary of visual impacts

Viewpoint no. and location	Description	Potential Construction impacts	Potential Operational impacts	Potential Residual impacts
VP1 678 Yarragon-Shady Creek Road	The distance of the Project from receivers lessens the visual prominence and the Project is commensurate with the adjacent HV towers and farm buildings which are more prominent in foreground views. Planting to the south boundary of the Project would reduce views towards the Project.	Very Low	Low	Very Low
VP2 699 Yarragon-Shady Creek Road	There is potential for partial views of the Project from the slightly elevated view from the dwelling, though partially screened by intervening vegetation and the shed to the rear of the dwelling.	Very Low	Very Low	Very Low
VP3 755 Yarragon-Shady Creek Road	Projects components are screened by foreground vegetation and not expected to be seen from the dwelling.	Negligible	Negligible	Negligible
VP4 771 Yarragon-Shady Creek Road	The Site has potential partial visibility from the dwelling. Construction works would be barely noticeable, and BESS components once built are screened by intervening vegetation.	Negligible	Negligible	Negligible
VP5 815 Yarragon-Shady Creek Road	Views towards the Site are screened by intervening sheds and vegetation, resulting in negligible visual impact from the dwelling.	Negligible	Negligible	Negligible
VP6 Brookers Road	The Project would occupy a narrow field of view at the distance of 1,040m and be partially screened by vegetation. Construction works would be barely noticeable, though there is potential for partial views of BESS components once built, from the dwelling to the west.	Negligible	Very Low	Very Low

5 Conclusion

The Project is located in land zoned Farming with existing HV towers. The desktop study on existing legislation and policy, along with the field analysis on the physical or visual environment, did not identify landscape or visual constraints which would be significantly impacted by the Project.

The assessment to the Landscape Character (LCT 1 Agricultural hills), indicate that the Project will have very low impacts to landscape character. It is adjacent to an existing transmission line, within land that is modified by farming practices; with the Project introducing land use change to a small area in what is a widely distributed character type.

There are a limited number of sensitive receivers identified within the Study Area, with main visual receivers of the site including motorists on Yarragon-Shady Creek Road and local rural residents. Six viewpoints were assessed that are representative of the nearest rural dwellings, at different aspects and distances, to determine the extent of impact.

The visual impact ratings during construction are very low to negligible, as would be experienced temporarily by the nearest receivers.

Other photomontages at closer viewing points have been produced to depict the appearance of the Project from private property, however these are not indicative of the views from the representative viewpoints which have been assessed.

The visual impact ratings during operational phase include:

- **Very Low** visual impacts for one rural dwelling and motorists on Yarragon-Shady Creek Road as assessed from VP1 and VP2; and one dwelling on Brookers Road (VP6). The Project would introduce electrical infrastructure that would be noticeable from the dwellings, though appear small at the distance the view is experienced and be partially screened by intervening vegetation.
- **Negligible** visual impacts are experienced by three of the six assessed viewpoints (VP3, VP4 and VP5), due to intervening vegetation and topography screening views of the Project.

Shady Creek Solar Farm is an approved, currently non-operational project located approximately 4km east of North Yarragon BESS. There are no cumulative impacts expected to be experienced by sensitive receivers between the two Projects, based on relative distance and visual prominence.

In the absence of moderate to high adverse impacts, the recommended mitigation measures provide an opportunity to soften the appearance of new infrastructure. One of these measures is vegetation planting to the south and west site boundaries which diminish views of the Project as experienced (at low to very low impact ratings) by a few rural dwellings and local motorists.

**ADVERTISED
PLAN**

References

Baw Baw Shire Council, Strategies, Plans and Guidelines: Rural Land Use Review, September 2016 (Hansen Partnership)

Department of Environment, Land, Water and Planning: Victoria Renewable Energy Zones Development Plan Directions Paper, February 2021

Department of Transport and Planning, 'Browse EES projects and referrals', accessed 28/02/2025
<https://www.planning.vic.gov.au/environmental-assessments/browse-projects>

Department of Transport and Planning, Baw Baw Planning Scheme, 28/02/2025

Landscape Institute and Institute of Environmental Management & Assessment, UK - The Guidance for Landscape and Visual Impact Assessment, Third Edition, 2013

The Landscape Institute and the Institute of Environmental Management and assessment, New York - Guidelines for Landscape and Visual Impact Assessment, Second Edition, 2002.

Julius Panero and Martin Zelnik, Human Dimension Interior Space, 1979 – Vertical Field of View

Scottish Natural Heritage Visual Representation of Wind Farms, Version 2.1 December 2014

Shang, Haidong, and Ian D. Bishop. 2000. Visual Thresholds for Detection, Recognition, and Visual Impact in Landscape Settings. Journal of Environmental Psychology Vol. 20: pp. 125.

**ADVERTISED
PLAN**

Appendix A

Indicative photomontages



ADVERTISED PLAN



Legend

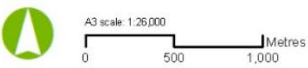
Road	Local government area	Battery Yard
Viewpoints	Storm Water Detention Basin	O&M Buildings / Storage & Parking
Viewpoint on private land	Water Tanks	New Transmission Tower 220kV
Watercourse	Substation Area	Transmission Tower 220kV
Project area	Terminal Station	220kV Easement
Viewshed	Temporary Facilities	
Study area (2 km buffer from project area)		

Basemap: Vicmap, Esri, TomTom, Garmin, FAO, NOAA, USGS

Other data: DEECA, Aurecon

Date: 23/06/2022

Version: 3



Job No: P528157
Coordinate System: GDA2020 MGA Zone 56

North Yarragon BESS Viewpoint and Viewshed

Figure 5-1 Viewpoint locations



Figure 5-2 Viewpoint 1: Existing view



Figure 5-3 Viewpoint 1: Indicative view of Project at Day 1 of Operation



Figure 5-4 Viewpoint 1: Red highlight of indicative view of Project at Day 1 of Operation



Figure 5-5 Viewpoint 4: Existing view



Figure 5-6 Viewpoint 4: Indicative view of Project at Day 1 of Operation



Figure 5-7 Viewpoint 4: Red highlighted indicative view of Project at Day 1 of Operation



Figure 5-8 Viewpoint a: Existing view



Figure 5-9 Viewpoint a: Indicative view of Project at Day 1 of Operation



Figure 5-10 Viewpoint a: Red highlighted indicative view of Project at Day 1 of Operation



Figure 5-11 Viewpoint a: Indicative view of Project at Year 10 of Operation



Figure 5-12 Viewpoint a: Red highlighted indicative view of Project at Year 10 of Operation

**ADVERTISED
PLAN**

ADVERTISED PLAN



Figure 5-13 Viewpoint b: Existing view



Figure 5-14 Viewpoint b: Indicative view of Project at Day 1 of Operation



Figure 5-15 Viewpoint b: Red highlighted indicative view of Project at Day 1 of Operation



Figure 5-16 Viewpoint b: Indicative view of Project at Year 10 of Operation



Figure 5-17 Viewpoint b: Red highlighted indicative view of Project at Year 10 of Operation

**ADVERTISED
PLAN**



Figure 5-18 Viewpoint c: Existing view from private farmland,



Figure 5-19 Viewpoint c: Indicative view of Project at Day 1 of Operation



Figure 5-20 Viewpoint c: Red highlighted indicative view of Project at Day 1 of Operation



Figure 5-21 Viewpoint c: Indicative view of Project at Year 10 of Operation



Figure 5-22 Viewpoint c: Red highlighted indicative view of Project at Year 10 of Operation

ADVERTISED PLAN

Document prepared by

Aurecon Australasia Pty Ltd

ABN 54 005 139 873

Aurecon Centre

Level 8, 850 Collins Street

Docklands, Melbourne VIC 3008

PO Box 23061

Docklands VIC 8012

Australia

T +61 3 9975 3000

F +61 3 9975 3444

E melbourne@aurecongroup.com

W aurecongroup.com

**ADVERTISED
PLAN**