LOCHARD ENERGY

FOR DTP APPLICATION

WINTON ENERGY RESERVE 1 FACILITY

PLANNING ASSESSMENT REPORT

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Winton Energy Reserve 1 Facility
Planning Assessment Report

Lochard Energy

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REV	DATE	DETAILS
A	16/04/22	Draft Planning Assessment Report
B	07/06/22	FINAL
C	18/07/22	Revised at the request of DELWP.
D	23/01/2023	Updated with additional information in response to DELWP RFI dated 29/06/2022
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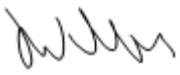
	NAME	DATE	SIGNATURE
Prepared by:	Jacqui Willis George Bazeley	15/04/22 13/01/2023	
Reviewed by:	George Bazeley Jeff Meynell	06/06/22 & 18/07/22 23/01/2023, 23/02/2023	
Approved by:	Kristy Finch	07/06/22, 19/07/22 23/01/2023	

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ABBREVIATIONS

AH Act	Aboriginal Heritage Act 2006
AEMO	Australian Energy Market Operator
ANO	Authorised Network Operator
BESS	Battery Energy Storage System
BPS	Benalla Planning Scheme
BCS	Bioregional Conservation Status
BMO	Bushfire Management Overlay
CHMP	Cultural Heritage Management Plan
CaLP Act	*Catchment and Land Protection Act 1994*
CMA	Catchment Management Authority
CEMP	Construction Environmental Management Plan
DAWE	Department of Agriculture, Water and the Environment
DEECA	Department of Energy, Environment and Climate Action
DELWP	Department of Environment, Land, Water and Planning
DTP	Department of Transport and Planning
EE Act	*Environment Effects Act 1978*
EES	Environment Effects Statement
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EP Act	*Environment Protection Act 2017*
EPA	Environment Protection Authority
EMF	Electromagnetic Field
EES	Environment Effects Statement
EVC	Ecological Vegetation Class
ESCP	Erosion and Sediment Control Plan
FFG Act	*Flora and Fauna Guarantee Act 1988*
FZ	Farming Zone
GPG	Gas-Powered Generator
GW	Gigawatt
GWh	Gigawatt hour
GTS	Glenrowan Terminal Station

HV	High Voltage
ICNIRP	International Commission on Non-Ionizing Radiation Protection
kV	Kilovolt
MNES	Matters of National Environmental Significance
MW	Megawatt
MWh	Megawatt hour
NEM	National Energy Market
NSAs	Noise Sensitive Areas
P&E Act	*Planning and Environment Act 1987*
PPF	Planning Policy Framework
PSI	Preliminary Site Investigation
REZ	Renewable Energy Zone
VHI	Victorian Heritage Inventory
VHR	Victorian Heritage Register
VPPs	Victorian Planning Provisions
Wildlife Act	*Wildlife Act 1975*

1 EXECUTIVE SUMMARY

Lochard Energy (Iona Operations) Pty Ltd as trustee for the Lochard Energy (Iona Operations) Trust, trading as Lochard Energy (Lochard Energy), an energy infrastructure company based in Australia, is seeking statutory approval for development of an energy hub at 386 Lee Road, Winton (the subject site). The proposed energy hub is known as the Winton Energy Reserve 1 facility (the project). The project aims to support the longer-term transition of the energy sector across the National Electricity Market (NEM) to lower emission energy sources.

This Planning Assessment Report has been prepared by WSP Australia Pty Ltd (WSP) on behalf of Lochard Energy in support of an Application for a Planning Permit under the Benalla Planning Scheme (BPS), which is required to facilitate the project.

It should be noted that since the preparation of this report and following the Victorian State Government election in November 2022, the responsibilities of the former Department of Environment, Land, Water and Planning (DELWP) have been split between the Department of Energy, Environment and Climate Action (DEECA) and the Department of Transport and Planning (DTP). References to DELWP should be read in this context.

Lochard Energy propose to use and develop the land for an energy generation facility (gas-fired power generator) and associated utility installations comprising a battery energy storage system, an underground gas pipeline, an underground transmission line, and an electrical substation as defined by Clause 73.03 Land Use Terms of the Benalla Planning Scheme (BPS). The project will also require approval for earthworks which change the rate of flow or discharge point of water across a property boundary and the removal of native vegetation.

Specifically, the project will utilise hybrid technology with lithium-ion (Li-ion) batteries and fast-start high-efficiency dual-fuel gas reciprocating engines and will comprise:

- A 200-megawatt (MW) Gas-Powered Generator (GPG) facility.
- A Battery Energy Storage System (BESS) facility. The BESS facility will supply and absorb 200 MW real power with 400-megawatt-hour (MWh) energy storage capacity.
- A single electrical substation for both battery and GPG which then feeds into the local network.
- A ~3 km 220-kilovolt (kV) underground transmission line from the boundary of the subject site to the Glenrowan Terminal Station (GTS). The transmission line will cross the Hume Freeway and follow the existing AusNet Services easement north west from the GTS. It will then head west within the road reserve of Lee Road before entering the subject site. It should be noted that the transmission line route is indicative and subject to refinement and discussion, Lochard Energy and AusNet are actively engaging with landowners.

Additionally, a ~200 metre gas pipeline including metering station from the GFG facility to the APA Gas Pipeline within the easement (E-2) will be subject to a pipeline licence in accordance with the *Pipelines Act 2005* (Pipeline Act) for the construction and operation of the pipeline included within the scope of the project. An application will be made to the Minister for Energy and Resources as a post-approval activity, should a planning permit be granted for the project.

The *2022 Integrated System Plan* by the Australian Energy Market Operator (AEMO) indicates that 46-gigawatt (GW) / 640 gigawatt-hours (GWh) of storage and 10 GW of gas-fired generation is required to support renewable energy generation and the accelerated retirement of coal fired power stations. The project will assist in meeting AEMO's objectives by providing energy security for the region during peak demand periods.

A summary of the application details and permit requirements is provided in Table 1.1 below.

1.1 PROJECT SNAPSHOT

Table 1.1 Details of the project

DETAILS	DESCRIPTION
Proposed Development	— Use and development of the land for an energy generation facility, utility installations, removal of native vegetation, earthworks, and associated works.
Address	— 386 Lee Road, Winton VIC 3673
Title Details	Subject Site: - Parcel 1: Lot 1 on Title Plan 95167 - Parcel 2: Plan of Consolidation 351488 Transmission Line route: - Lot 1 TP572058 1\TP572058, Lot 2 TP572058 2\TP572058, 2001\PP3843, Lot 1 TP572058 1\TP572058 (Lee Road, Winton) - Lot 1 LP112969 1\LP112969, Lot 2 LP112969 2\LP112969 (21 Bowers Road, Winton) - Lot 1 TP98336 1\TP98336 (6 Bowers Road, Winton) - Lot 1 TP836611 1\TP836611, Lot 2 TP836611 2\TP836611 (576 Winton-Glenrowan Road, Winton) Certificates of Title for the Transmission Line are included in this Planning Permit Application; the transmission line route is subject to further consultation with affected landowners.
Covenants / Easements / Agreements	<u>Easements</u> — Lot 1 on Title Plan 95167 is encumbered by two easements, being: — E-1 which is in favour of the State Electricity Commission of Victoria; and — E-2 which is in favour of the Gas and Fuel Corporation of Victoria <u>Agreements</u> — A prior, 10 Year Management Agreement between Goulburn Broken Catchment Management Authority (CMA) and the previous landowner for the Linking Landscapes and Communities: Conserving Greybox Grassy Woodlands. The project does not affect 'controlled land', or vegetation specified as per the agreement.
Planning Scheme	— Benalla
Zone	— Clause 35.07 Farming Zone (FZ)
Overlays	— Schedule 3 to Clause 42.02 Vegetation Protection Overlay (VPO3)

DETAILS	DESCRIPTION
General and Particular Provisions	— Clause 52.06 Car Parking — Clause 52.17 Native Vegetation — Clause 52.29 Land Adjacent to the Principal Road Network
Permit Triggers	Clause 35.07 — A permit is required for the use of land for an energy generation facility (GPG) — A permit is required for the use of land for a utility installation (BESS, electrical substation, underground transmission line) — A permit is required for earthworks which change the rate of flow or discharge point of water across a property boundary — A permit is required for buildings and works Clause 42.02 — None specified, An application must show the species of Native Vegetation to be removed and measures proposed to minimise the removal of Mugga Ironbark, White Box, Yellow Box and Blakeley's Red Gum. Clause 52.17 — A permit is required to remove native vegetation (removal of 1.393 ha)
Area of Aboriginal Cultural Heritage Sensitivity	— No, however a voluntary Cultural Heritage Management Plan (CHMP 18379) has been undertaken for the project and was approved by the Yorta Yorta Nation Aboriginal Corporation on 20 February 2022. The activity area included in the CHMP does not include the transmission line, the CHMP is currently being updated to include these works in the activity area and can be provided to DTP once completed.
Responsible Authority	— Minister for Planning
Applicant Name	Lochard Energy (Iona Operations) Pty Ltd (ACN 608 441 729)
Contact Information	C/- WSP Australia Pty Ltd Attention: Jeff Meynell Senior Environmental Consultant Level 11, 567 Collins Street Melbourne VIC 3000 Email: jeff.meynell@wsp.com

2 INTRODUCTION

2.1 PROJECT CONTEXT

2.1.1 OVERVIEW

Lochard Energy (Iona Operations) Pty Ltd as trustee for the Lochard Energy (Iona Operations) Trust, trading as Lochard Energy (Lochard Energy), an energy infrastructure company based in Australia, is seeking statutory approval for the use and development of the land for an energy hub at 386 Lee Road, Winton (the subject site). The proposed energy hub is known as Winton Energy Reserve 1 facility (the project).

The project will utilise hybrid technology with Li-Ion batteries and fast-start high-efficiency gas reciprocating engines and will comprise:

- A 200-megawatt (MW) Gas-Powered Generator (GPG) facility.
- A Battery Energy Storage System (BESS) facility. The BESS facility will supply and absorb 200 MW real power with 400-megawatt-hour (MWh) energy storage capacity.
- A single electrical substation for both battery and GPG which then feeds into the local network.
- A ~3 km 220-kilovolt (kV) underground transmission line from the boundary of the subject site to the Glenrowan Terminal Station (GTS). The transmission line will cross the Hume Freeway and follow the existing AusNet Services easement north west from the GTS. It will then head west within the road reserve of Lee Road before entering the subject site. It should be noted that the transmission line route is indicative and subject to refinement and discussion, Lochard Energy and AusNet are actively engaging with landowners.

Additionally, a ~200 metre gas pipeline including metering station from the GFG facility to the APA Gas Pipeline within the easement (E-2) will be subject to a pipeline licence in accordance with the *Pipelines Act 2005* (Pipeline Act) for the construction and operation of the pipeline included within the scope of the project. An application will be made to the Minister for Energy and Resources as a post-approval activity, should a planning permit be granted for the project.

The project is located approximately 9 km north-east Benalla and 175 km north east Melbourne withing the Rural City of Benalla (Local Government Area). Details relating to the location of the project and existing conditions can be found in Section 3 of this report.

2.1.2 PERMIT REQUIREMENTS

The project seeks planning permits for use and development of the land at subject site for an ‘energy generation facility’ (GPG) and a ‘utility installation’ (BESS, electrical substation, and underground transmission line) in accordance with the following provisions of the BPS:

- Use of the land for an ‘energy generation facility’ (GPG) and a ‘utility installation’ (BESS, electrical substation, and underground transmission line) in accordance with:
  - Clause 35.07-1 (Farming Zone)
- Buildings and works in accordance with:
  - Clause 35.07-4 (Farming Zone)
- Earthworks which change the rate of flow or discharge point of water across a property boundary in accordance with:
  - Table 2 in Sub-clause 1.0 in the Schedule to Clause 35.07 (Farming Zone)
- Removal native vegetation in accordance with:

- Clause 52.17-1 (Native Vegetation) - Removal of 1.393 ha is proposed
- Clause 42.02 - Schedule 3 (Regent Honeyeater Habitat/Lurg Ironbark Vegetation protection area)

- The provision of car parking spaces to the satisfaction of the Responsible Authority:
  - Clause 52.06-6 (Car Parking)

2.1.3 PROJECT NEED

The project will generate peaking electricity to meet demand and help reduce price volatility events for consumers. The *2022 Integrated System Plan* (ISP) by the Australian Energy Market Operator (AEMO) indicates that 46-gigawatt (GW) / 640 gigawatt-hours (GWh) of storage and 10 GW of gas-fired generation is required to support renewable energy generation and the accelerated retirement of coal fired power stations. The project will assist in meeting AEMO's objectives by providing energy security for the region during demand periods.

More specifically, the proposal aims to:

- lower power prices
- improve energy security
- increase economic activity
- support the transition to a lower carbon emission energy system
- support a greater mix of renewable energy in the National Energy Market (NEM).

The project will contribute to the diversification of energy sources in the Central Hume Region and contribute to achieving the strategies established in the Hume Regional Growth Plan, which identify expansion of energy production as a key contribution to improving growth and settlement opportunities in the region.

2.1.4 PROCUREMENT MODEL

Lochard Energy will run a competitive tender process for the project under an Engineering, Procurement and Construction (EPC) Contact. The EPC contractor(s) will complete the detailed engineering and design for the GPG based on their engine specifications, and BESS system respectively.

The EPC contractor will be required to address any planning permit conditions (should an approval be granted) and submit detailed drawings for endorsement. Accordingly, the development layout plan presented in this Application for a Planning Permit is indicative only, and the final design layout will be determined by the EPC contractor. Any changes as a result of the final design layout will be generally in accordance with the concept design enclosed in this application and subject to the identified site constraints.

2.1.5 SITE SELECTION

The subject site has been identified as a suitable location for an energy hub for the following reasons:

- Proximity to existing transmission lines and transmission easements, to allow connection to the transmission network (immediate and future).
- Availability of practical routes such as gas pipelines to allow connection to the distribution network.
- Proximity to transport infrastructure (i.e. roads) suitable for heavy construction vehicles.
- Proximity to consumer electrical load (based on AEMO's forecasts and 2022 ISP).

2.2 THE PROPONENT

The proponent of the project is Lochard Energy. Lochard Energy currently operates the Iona gas plant at Waarre (near Port Campbell), Victoria providing gas storage and independent natural gas processing services. Lochard Energy are the largest supplier of storage services to the East Coast gas market of Australia.

2.3 PLANNING PERMIT APPLICATION

2.3.1 PURPOSE OF THIS REPORT

WSP has been commissioned on behalf of Lochard Energy to prepare a Planning Assessment Report (this report) to support the statutory approvals requirements for the project. The purpose of this report is to respond to the statutory planning objectives, and to summarise the potential impacts and appropriate management measures during the construction and operation phases of the project. It is anticipated that the EPC contractor will complete the detailed design phase of the project generally in accordance with the development layout plan presented in this Application for a Planning Permit.

2.3.2 APPROVAL PATHWAY

In accordance with c72.01 of the BPS, Lochard Energy is seeking statutory approval from the Minister for Planning for the use and development of the land at the subject site for an energy generation facility with an installed capacity of 1 megawatt or greater, and associated utility installations used to transmit and distribute electricity. This report and supporting documentation form the Application for a Planning Permit which is deemed to be consistent with Section 47 of the *Planning and Environment Act 1987* (P&E Act).

2.3.3 SUPPORTING DOCUMENTATION

This Application for a Planning Permit comprises the following components:

- Completed application form, Certificate of Title and application fee.
- Development layout plan (Appendix A)
- Details of the subject site locality, key features and existing conditions.
- A description of the project.
- An outline of the legislative and strategic framework.
- An assessment of the planning and environmental considerations.
- Information, studies, and technical reports relating to:
  - Air Quality Impact Assessment (Appendix B)
  - Contamination Land Management (Appendix C)
  - Ecology Impact Assessment and Targeted Survey Report (Appendix D)
  - Geotechnical Factual Report (Appendix E)
  - Groundwater Impact Assessment (Appendix F)
  - Historical Archaeology Assessment (Appendix G)
  - Cultural Heritage Management Plan (Appendix H)
  - Landscape and Visual Amenity Impact Assessment (Appendix I)

- Noise Impact Assessment (Appendix J)
- Surface Water Impact Assessment (Appendix K)
- Traffic Impact Assessment (Appendix L)
- Feature and Level Survey (Appendix M)

These assessments are summarised within this Section 8 of this report.

3 SITE CONTEXT

3.1 SUBJECT SITE

The subject site is located at 386 Lee Road, Winton, Victoria. It is approximately 1.5 km north-east of the township of Winton; approximately 9 km north-east of the regional centre of Benalla; and approximately 175 km north-east of the Melbourne Central Business District (CBD). It is situated within the Benalla Rural City local government area (LGA), and forms part of the 'Hume Region' in north-eastern Victoria.

The subject site is positioned between the Hume Freeway to the south; the North-East Railway Line (Sydney-Melbourne Rail Corridor) to the north and bound by Lee Road to the south-east. It is irregular in shape, generally flat and has an approximate area of 41.35 ha.

The subject site, comprising two parcels of land, contains a single-storey weatherboard dwelling located adjacent to the south-eastern boundary fronting Lee Road. Utility infrastructure (including underground services and a transmission tower with overhead powerlines) is located on the northern parcel fronting Nelson Road. Please refer to Figure 3.1 below and Figure 3.3 for a map of the subject site.

Figure 3.1 Location of subject site

The following sections describe the key features of the subject site including legal description, land use, landscape and topography and existing infrastructure.

3.1.1 LEGAL DESCRIPTION

The footprint of the project spans across two freehold land parcels, both held by Lochard Energy. Title information is provided in Table 3.1 below and a Certificates of Title and Plan is provided with the submitted material.

Table 3.1 Details of parcels within project footprint

PLAN REFERENCE	VOLUME	FOLIO	TENURE	TOTAL LOT AREA
Land in Plan of Consolidation 351488	10032	617	Lochard Energy (Iona Operations) Pty Ltd	41.35 ha
Lot 1 on Title Plan 95167	10026	320	Lochard Energy (Iona Operations) Pty Ltd	
Lot 1 TP572058 and Lot 2 TP572058	10034	065	Sole Proprietor	53.81 ha
2001\PP3843	11782	969	Crown Allotment	0.3838 ha
Lot 1 LP112969	09059	755	Sole Proprietor	27.35 ha
Lot 2 LP112969	09059	756		
Lot 1 TP98336	09612	942	Sole Proprietor	34.24 ha
Lot 1 TP102454	10034	066	Sole Proprietor	41.96 ha
Lot 1 TP836611 and Lot 2 TP836611	09361	522	Joint Proprietors	15.47 ha
Lot 1 TP381841	08606	400	GPU Powernet Pty Ltd	3.14 ha

The North-East Railway Line intersects Lot 1 on Title Plan 95167. This lot hosts electricity, gas and telecommunications infrastructure.

The land in Lot 1 on Title Plan 95167 is made up of two pieces which are separated by Nelson Road/North East Railway Line while the land contained in Plan of Consolidation 351488 is made up of three pieces which are separated by unmade Government Roads at the western end of the parcel (refer Figure 3.3). Certificates of Title for the Transmission Line are included in this Planning Permit Application; the transmission line route is subject to further consultation with affected landowners.

3.1.1.1 EASEMENTS AND ENCUMBRANCES

Lot 1 on Title Plan 95167 is encumbered by two easements, being:

- E-1 which is in favour of the State Electricity Commission of Victoria; and
- E-2 which is in favour of the Gas and Fuel Corporation of Victoria

Please refer to the attached Plan for easements specific to the site and to the Title Plan TP95167P for more information.

An extract of the site survey plan prepared by Veris is provided at Figure 3.2 below.

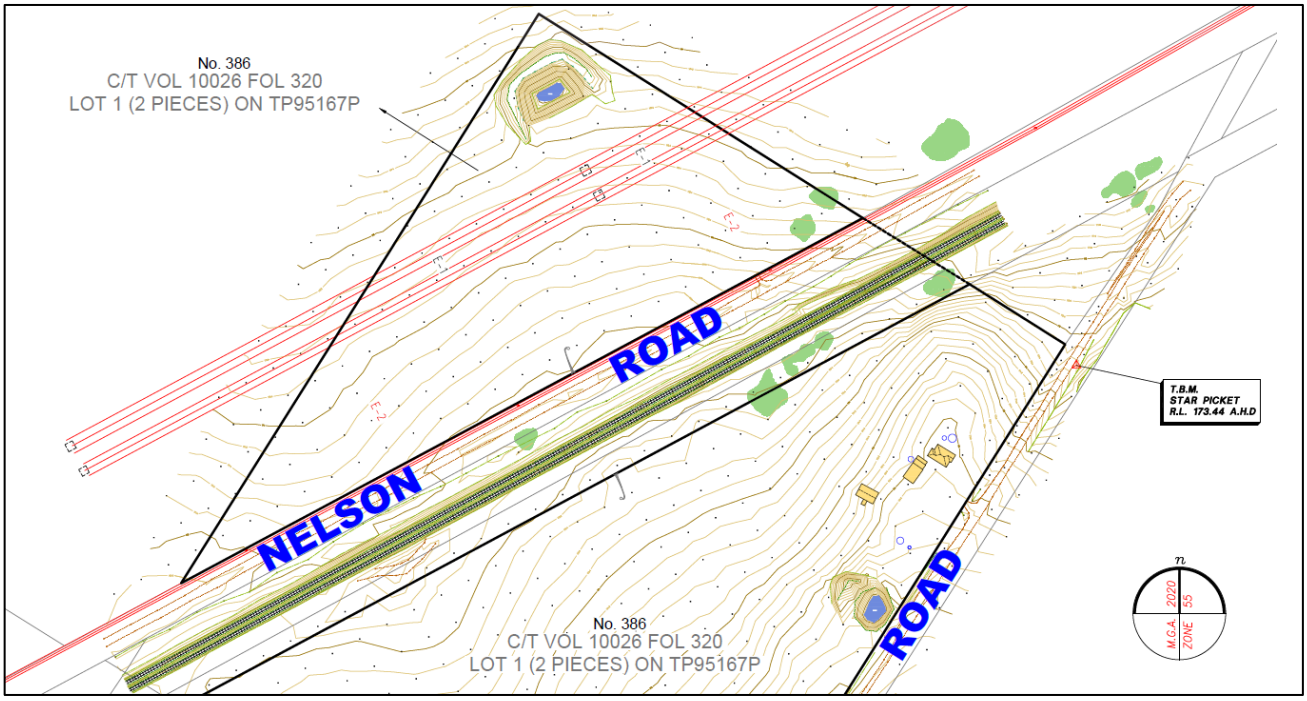


Figure 3.2 Extract of site survey plan

3.1.2 LAND USE

The subject site is currently used for agricultural purposes such as farming and livestock grazing and has been subject to vegetation removal. There is farming infrastructure located within the subject site, of which comprises a dwelling, sheds, stock yards and water tanks. The subject site also contains three damns for stock and domestic use.

3.1.3 LANDSCAPE

The subject site is situated approximately 175 m above sea level and is generally flat, with the topography falling approximately 2 m from southern boundary (Hume Freeway) towards the northern boundary (North East Railway Line).

The Ecology Impact Assessment and Targeted Survey Report (Appendix D) identified and recorded the following flora and fauna values within the site:

- The remnant understory is highly modified by weeds and agricultural utilisation to a degree that indigenous understory species are effectively absent, with the exception of some opportunistic colonising species recruiting across areas reserved for the purposes of revegetation along much of the north-western boundary.
- Much of the remnant canopy has been cleared, with a proportionately small amount of large old canopy species persisting at the western end of Plan of Consolidation 351488. The highest quality parches of remnant vegetation within the subject site occur to the north of the project between the property boundary and the North East Railway Line where patches of Plains Woodland EVC 803 are inclusive of a diverse suite of understory species. These areas also support channelised – reformed, wetter depressions supporting Tall Marsh EVC 821.
- 82 scattered trees were mapped within the study area, 54 of these are Large. 33 patches of native vegetation most attributable to Plains Woodland EVC 803, Spike-sedge Wetland EVC 819, and Tall Marsh EVC 821 were mapped within the study area.

- No species of conservation significance targeted during surveys were observed. No species listed under the *Flora and Fauna Guarantee Act 1988* (FFG Act or *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) were observed, or are considered likely to occur within the subject site. Dwarf Brooklime *Gratiola pumillio* – FFG Act endangered, was not recorded, although possibly occurs in wet areas outside the subject site. One planted Buloke *Allocasuarina luehmannii* – FFG Act endangered, was mapped in the Hume Freeway road reserve.
- One species of state significance, being the Brown Tree Creeper Climacteris picumnus victoriae – listed as near-threatened on the DELWP (now DEECA) Advisory List in Victoria (DSE, 2013) was observed during the initial site assessment, however this was no observed within the project footprint.

Additional information on the existing vegetation is contained in the Ecology Impact Assessment and Targeted Survey Report (refer Appendix D) and Section 8.4 of this report.

3.1.4 WETLANDS AND WATERCOURSES

The subject site is approximately 300 m south of the Winton Wetlands Natural Features Reserve (NFR). The Winton Wetlands NFR are an approximately 7000 ha seasonally wet depression and contains multiple DELWP mapped wetlands.

Lake Mokoan, the largest wetland forming the Winton Wetlands NFR, was constructed in 1971 and had a capacity of 365,000 mega litres (ML). It was an off-river water storage designed to provide water to the Murray and Goulburn irrigation areas. Lake Mokoan was decommissioned in 2004 and is being restored to its natural wetland habitat.

The subject site does not occur within the Winton Wetlands NFR. Winton Wetlands is not classified as a RAMSAR wetland, and none of the RAMSAR wetlands listed in the PMST fall within the study area.

3.1.5 EXISTING INFRASTRUCTURE

The following utility infrastructure is located on or within the vicinity of the subject site:

- Two 220 kV overhead transmission lines intersect Lot 1 on Title Plan 95167 to the north of Nelson Road. However, the project will utilise a new underground transmission line to be located within the Lee Road reserve and an existing AusNet easement to the existing Glenrowan Terminal Station.
- An Optus major optic fibre network running along the boundary fronting Nelson Road. Plans also show TPG underground services running along the same boundary.
- The APA services plans indicate that there is a high-pressure gas transmission pipeline and associated infrastructure located within Lot 1 on Title Plan 95167. These services appear to be located within the Gas and Fuel Easement (E-2).

Please refer to the attached survey plan and to Title Plan TP95167P for further information.

3.2 SURROUNDING CONTEXT

Land uses surrounding the project are varied, however the predominant land use in the area consists largely of land used for agricultural purposes. More broadly, the surrounding area is dedicated to renewable energy infrastructure – a number of solar energy facilities are operational in vicinity of the subject site. A summary of land uses is provided in Table 3.2 and a map depicting the surrounding land uses at Figure 3.4.

Table 3.2 Summary of adjacent land uses

DIRECTION	LAND USE DESCRIPTION
North	Undeveloped, vacant land and partly bound to Nelson Road. This land is known as the Winton Wetlands NFR and is zoned Public Park and Recreation Zone (PPRZ) and Public Use Zone - Service and Utility (PUZ1). This land includes utility infrastructure such as transmission lines and underground services.
East	Undeveloped, vacant land and partly bound to Lee Road used for agricultural purposes. Winton Solar Farm, Glenrowan West Solar Farm and Glenrowan Terminal Station
South	Hume Freeway including the Mokoan Rest Area (northbound and southbound). Undeveloped, vacant land used for agricultural purposes. Winton Bushland Reserve. Winton township including Winton Motor Raceway and campground.
West	Undeveloped, vacant land used for agricultural purposes and Seven Mile Creek.

3.2.1 SENSITIVE RECEPTORS

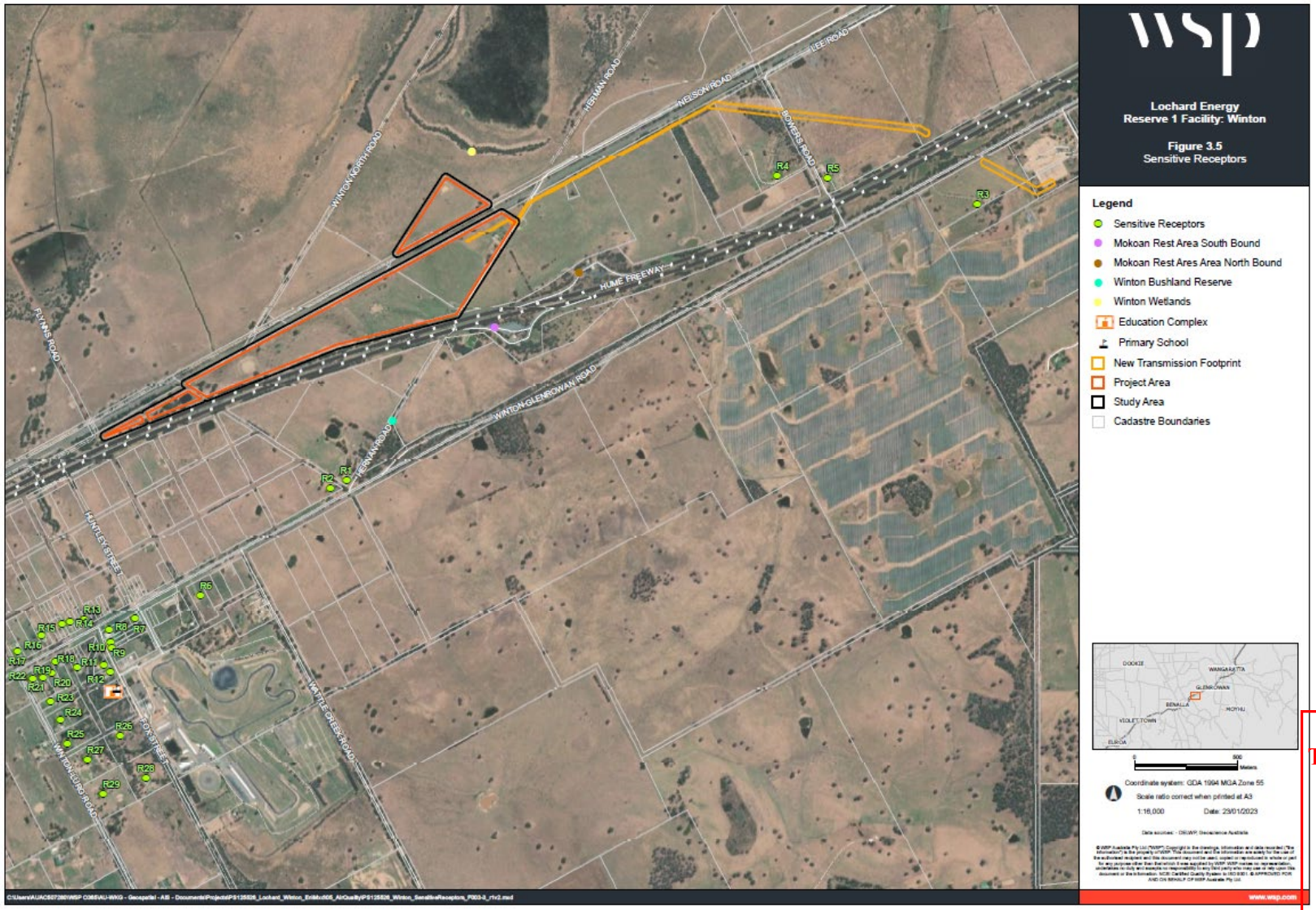
The sensitive receptors, such as residential dwellings, education and childcare facilities, nursing homes, retirement villages and hospitals, located within proximity of the subject site have been identified and include:

- Winton Wetlands NFR
- Residential dwellings
- Little Cedar – Farmhouse Goat Cheese
- Winton Primary School

As shown in Figure 3.5, there are 28 dwellings within a ~2000m radius of the project. Of these dwellings, 23 of them are located within the township of Winton.

Figure 3.3 Project location and subject site

Figure 3.4 Surrounding Land Use



ADVERTISED PLAN

Figure 3.5 Closest sensitive receptors to the project

Figure 3.6 View of subject site looking south-east from northern boundary

Figure 3.7 View of subject site looking south towards on-site dwelling

Figure 3.8 View from northern boundary toward existing overhead transmission line and rail corridor

Figure 3.9 View from east towards subject site

4 THE PROJECT

The project seeks a planning permit for the use and development of the land for an energy generation facility and utility installations (including a BESS; underground transmission line and an electrical substation), removal of native vegetation, earthworks and car parking associated with the project in accordance following provisions of the BPS:

- Use of the land for an Energy Generation Facility and Utility Installations in accordance with:
  - Clause 35.07-1 (Farming Zone)
- Buildings and works for an Energy Generation Facility and Utility Installations in accordance with:
  - Clause 35.07-4 (Farming Zone)
- Earthworks which change the rate of flow or discharge point of water across a property boundary in accordance with:
  - Schedule to Clause 35.07 (Farming Zone)
- Removal native vegetation in accordance with:
  - Clause 52.17-1 (Native Vegetation)
  - Clause 42.02 (Vegetation Protection Overlay – Schedule 3)
- The provision of car parking spaces to the satisfaction of the Responsible Authority:
  - Clause 52.06-6 (Car Parking)

The development layout plan presented in this Application for a Planning Permit is indicative only, and the final design layout will be determined by the successful EPC contractor during the detailed design phase the project.

A design response showing the key components of the project within the following section of this report.

4.1 KEY COMPONENTS

The project will utilise hybrid technology with Li-Ion batteries and fast-start high-efficiency dual-fuel gas reciprocating engines and will comprise:

- A 200 MW GPG facility.
- A future ~200 m gas pipeline including metering station connecting the GPG facility to the APA gas pipeline.
- A BESS facility.
- An electrical substation for both the GPG and BESS facility which will then feeds into the local network.
- A ~3 km 220-kilovolt (kV) underground transmission line from the boundary of the subject site to the Glenrowan Terminal Station (GTS). Auxiliary service buildings and services including: a workshop, administration buildings, lube oil and water tanks.
- Internal access roads and vehicle turning areas
- Security fencing.
- Landscaping
- Earthworks and associated drainage works.
- Removal of native vegetation.

Details of these component are outlined in the following sections. A development layout plan is also provided at Appendix A and an extract from that plan is provided at Figure 4.1.

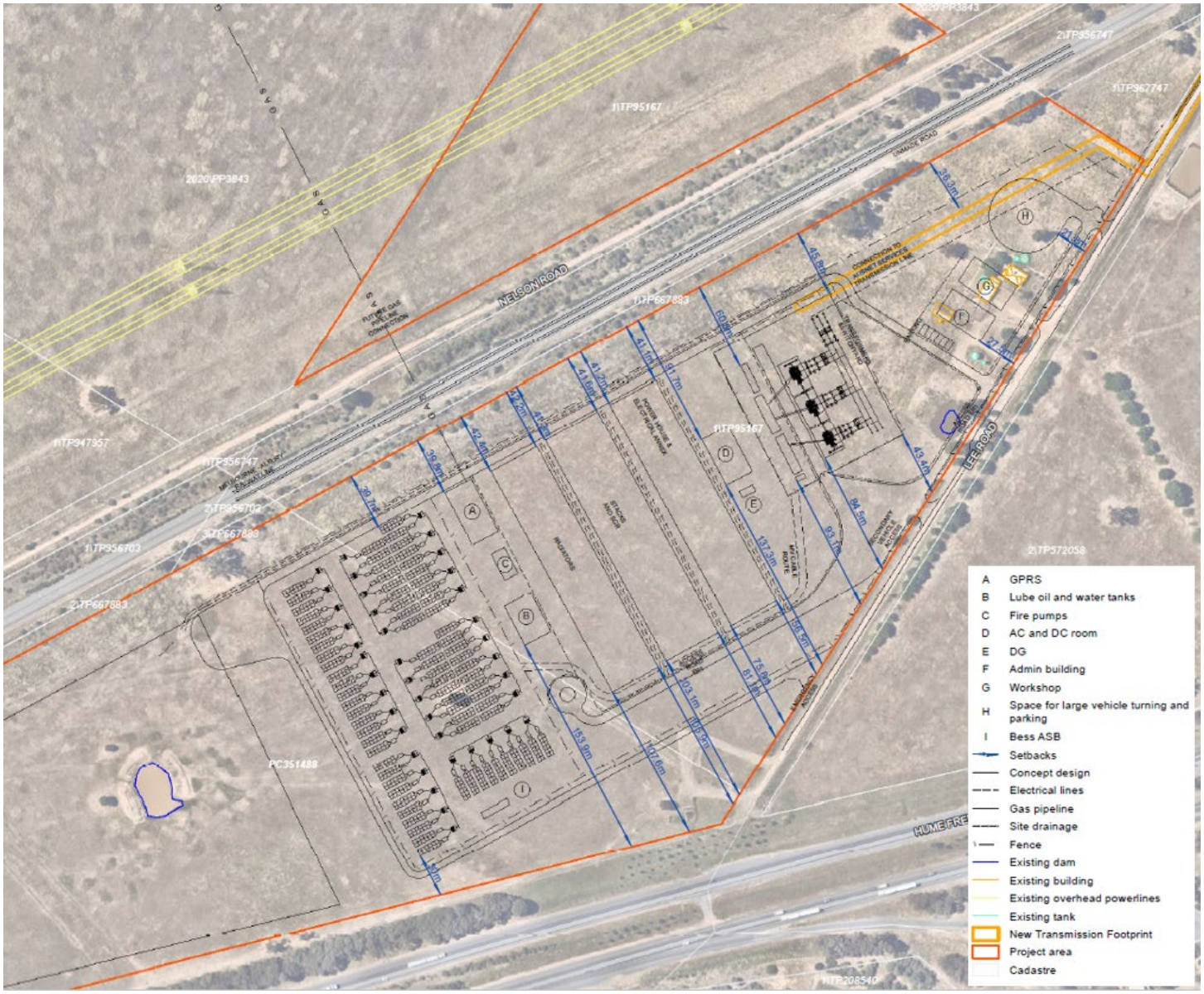


Figure 4.1 Extract of concept layout plan

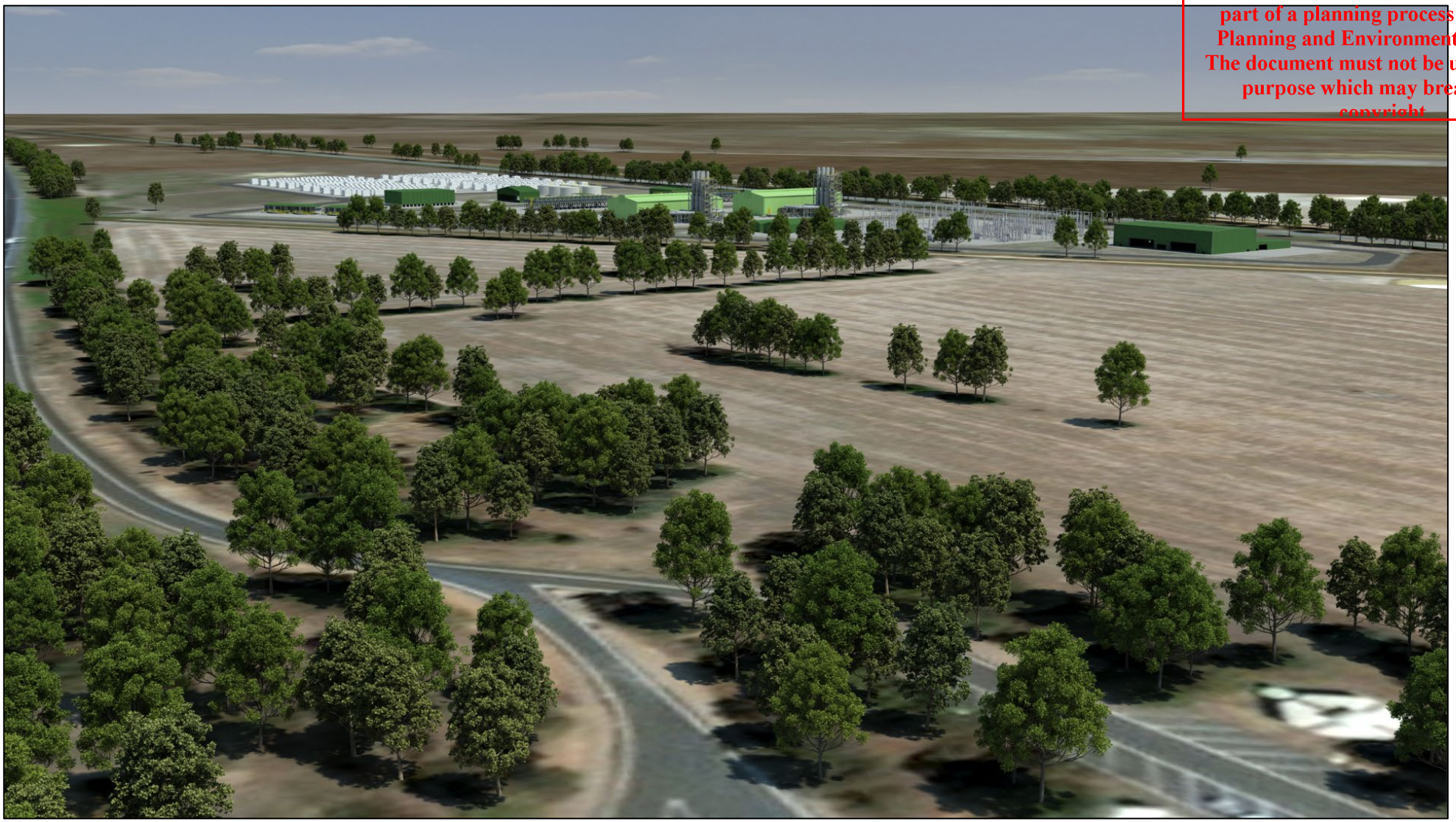


Figure 4.2 3D Render of the project. Elevated view north-west from Mokoan Rest Area (Northbound) along Hume Freeway.

4.1.1 GAS-POWERED GENERATOR

The GPG facility will consist of an open cycle gas reciprocating engine power station with a site rated capacity of approximately 200 MW. The GPG Facility will be made up of a number of engines in the range of 9 MW to 21 MW to make up the 200 MW capacity. The exact configuration and number of engines will be determined by the EPC contractor; however, the dimensions are expected to be as follows:

- Main powerhouse: 170.0 x 35.0 m (L x W).

  The powerhouse is a steel framed building with noise reducing walls, typically made of a sandwich panel of steel and mineral or stone wool. Height will depend on the engine supplier, but it will be in the range of 10 to 15m high at the wall and 14 to 19m high at the apex of the roof. It is possible that the engine hall will be provided as two smaller engine halls next to each other.

- Stacks and SCRs: 170.0 x 40.0 m (L x W).

  The height of the stack is typically at least 25m high. For some engine suppliers' stacks are grouped in sets of four to six to provide additional plume buoyancy and thus wider emission distribution. Exhaust temperature is relatively high compared to a conventional coal plant or a combined cycle plant, so the plume has a natural buoyancy in either case.

- Radiators: 170.0 x 35.0 m (L x W).

  The radiator fans are expected to be erected at 5 to 8 meters above ground.

- LV AC and DC building: 35.0 x 20.0 x 5.0 m (L x W x H)
- GPRS: 40.0 x 20.0 x 5.0 m (L x W x H)
- Lube oil and water tanks area: 30.0 x 20.0 x 5.0 m (L x W x H)
- Fire pumps area: 20.0 x 10.0 x 3.0 m (L x W x H)

The GPG facility is expected to operate as follows:

- Capable of fast starts, i.e., a start time of less than 4 minutes and 30 seconds to allow dispatch of full load within 5-minute settlement time limits.
- Maintain a near constant 'heat rate' and output at temperatures of approximately 40°C.
- Engines will operate using fuel gas available from the APA gas pipeline located within easement 'E-2' on the subject site.

The GPG facility will be 'blackstart' capable, meaning it will be capable of reliable start and run to full load from a standstill condition without the use of power or other facilities drawn from the external power grid.

Forecast modelling, undertaken by an independent consultant, has determined the expected case would see the GPG facility operate on average 12% of the time, ranging from 7% to 15% for majority of the forecasted years. This would equate to an average generation output of 206,000 MWh/annum, ranging between 118,000 MWh/annum to 258,000MWh/annum.

In certain rare conditions, such as wind resource droughts or loss of coal fired power stations, there is a potential for increased generation which occurs when the GPG facility is called upon more often to provide energy security and price moderation to Victorian electricity consumers.

4.1.1.1 GAS PIPELINE

The GPG facility will connect to the APA gas pipeline located within easement 'E-2' as outlined on the certificate of title. This connecting pipeline will be underground and is expected to be approximately 200 m in length. It will intersect Nelson Road and the North-East Railway Line. This will be subject to a pipeline licence in accordance with the *Pipelines*

Act 2005 (Pipeline Act) for the construction and operation of the pipeline included within the scope of the project. An application will be made to the Minister for Energy and Resources as a post-approval activity, should a planning permit be granted for the project.

4.1.2 BATTERY ENERGY STORAGE SYSTEM

The BESS facility will be able to supply and absorb 200 MW real power with 400 MWh energy storage capacity. The 200 MW real power capacity will be sustained across the BESS facility design life. 400 MWh energy capacity will be achieved in the pre-completion performance tests and may be adjusted from year to year in accordance with any the agreed guaranteed energy retention.

The BESS facility will include a number of battery packs, inverters, inverter transformers. The exact configuration and number of engines will be determined by the EPC contractor, however based on the dimensions of the products available from some of the leading manufacturers the dimensions are expected to be as follows:

- Battery pack each: 2.5 x 2.5 x 2.5 m (L x W x H).
- Inverter each: 5.0 x 2.5 x 2.5 m (L x W x H).
- Inverter transformer each: 5.0 x 3.5 x 3.5 m (L x W x H).
- MV RMU's: 5.0 x 2.5 x 2.5 m (L x W x H).
- Auxiliary service building: 20.0 x 4.5 x 5.0 m (L x W x H)

The concept design layout has considered 912 battery packs, 76 inverters, 38 inverter transformers and 8 RMU's

The BESS facility will be designed to achieve a target Guaranteed round trip efficiency (RTE) of at least 85% at the bringing of life (BOL) and at least 82% at 20 years of operation.

4.1.3 ELECTRICAL SUBSTATION

The electrical substation will service both the GPG facility and the BESS facility and will ensure power generated from the project can connect into the electricity grid. The electrical substation for the project is proposed to be located within the subject site.

The electrical substation is expected to consist of the three power transformers, auxiliary transformers and HV equipment like circuit breakers, disconnectors, earthing switches, current transformers, voltage transformers and busbars etc. The dimensions are expected to be as follows:

- Power transformer each: 12.0 x 6.5 x 5.0 m (L x W x H).
- Auxiliary transformers each: 2.5 x 2.5 x 2.5 m (L x W x H).
- Other HV equipment each: Max. 8.5 x 1.5 x 8.0 m (L x W x H)
- MV switchgear building each: 28.0 x 6.5 x 5.0 m (L x W x H)
- Auxiliary service building: 20.0 x 4.5 x 5.0 m (L x W x H)

4.1.4 CONNECTION AND TRANSMISSION LINE

The project will connect to the electricity transmission network via an underground service from the new electrical substation to the existing AusNet easement. The underground transmission line will be located within the Lee Road reserve and then utilise an existing AusNet easement to the existing Glenrowan Terminal Station

4.1.5 SITE ACCESS

Access to the subject site will be facilitated via utilisation of the existing Bowers Road/Hume Freeway intersection and the adjoining Lee Road connection. A network of new internal access tracks will also be used to provide access during construction and operation of the project. An indicative layout of internal access tracks is shown in Figure 4.1 and will be refined during detailed design.

4.1.6 LIGHTING

The location of lighting will be determined at the detailed design phase however, all external lighting will be fitted with suitable shields and baffles so that direct light is emitted only within the subject site boundaries.

4.1.7 LANDSCAPING

To mitigate likely visual impacts associated by the project, a buffer of landscaping is proposed along the boundary of the subject site, all roadways and the railway alignment. This will be confirmed during detailed design phase and carried by the successful tenderer.

4.1.8 FENCING AND SECURITY

Perimeter security fencing is proposed around the subject and is anticipated to have a maximum height of 2.4 metres and will be a chain link fence. Vehicle and pedestrian access gates will be incorporated into the fencing. Pedestrian access gates will have a width of about one metre and vehicle access gate will have a width of around six metres. Specific fencing details will be confirmed during detailed design.

A CCTV security system may be installed with cameras and infrared lighting.

4.2 REMOVAL OF NATIVE VEGETATION

The project has been designed using an iterative approach with the intent of avoiding and minimising native vegetation removal as much as practically possible. WSP ecologists have prepared an Ecology Impact Assessment and Targeted Survey Report (Appendix D) to quantify the amount of native vegetation proposed to be removed as part of the project and assess the impacts of native vegetation removal.

The assessment quantifies the amount of native vegetation and threatened species proposed to be removed as being within a development layout plan to represent the worst-case scenario. The construction footprint takes into account all works within the subject site, as well as associated construction within the transmission line, roads and hardstand areas. It is not planned or envisaged that works outside the envelope will be required to construct the project and associated transmission/pipelines. However, measures will be undertaken to reduce the amount of native vegetation removal wherever possible within that envelope.

Based on the current construction footprint, impacts of up to a total of 1.393 hectares of native vegetation including 8 large trees will be required. Approval of the DTP region and offsets – up to 0.328 general habitat units, and 8 large trees will be required for these losses. The final determination of the extent of vegetation removal, and as such, the NVR report results, will be finalised through DTP upon finalisation of the construction footprint.

4.3 PROGRAM DETAILS

4.3.1 CONSTRUCTION

The project is expected to be operational by 2025/26 to supply the forecast electrical demand.

The total construction time for the project is expected to be 12-18 months with a commencement time anticipated in 2024/25.

4.3.2 DECOMMISSIONING

The project would either be decommissioned or repowered at the end of its expected economic life (around 25 years). If the project is decommissioned, this will include the removal of all above ground infrastructure and rehabilitation of the subject site such that previous or improved agricultural uses can resume.

It is anticipated the decommissioning stage will occur over approximately twelve-month period and include the following key activities:

- The project will be disconnected from the GTS.
- The GPG and BESS facilities will be removed with infrastructure to be reused or recycled where possible.
- All site amenities and equipment will be removed, and materials recycled or reused where possible.
- Fencing will be removed, and
- The subject site will be rehabilitated.

Traffic required for decommissioning will be undertaken in consultation with the relevant authorities.

In the relevant lease documentation where the proponent does not own the land, the above mentioned decommissioning activities will be undertaken.

DTP and the Benalla Rural City Council will be advised of planned decommissioning activities in advance and provided with an Environmental Management Plan including (but not limited to) responsible authorities, timelines and the disposal location of panels and other equipment (including if any infrastructure can be recycled).

4.4 STAKEHOLDER ENGAGEMENT

Throughout the pre-planning and development of the project, Lochard Energy have undertaken consultation with interested and affected parties to inform the community and key stakeholders of the project and obtain their feedback. A Stakeholder Management Plan was developed by Lochard Energy aiming to involve stakeholders in line with best practice, as early as pre-development works.

The following have been contacted and/or consulted:

- Hon. Dr Helen Haines MP, Member for Indi
- Hon. Steph Ryan MP, Member for Euroa
- Hon. Lily D'Ambrosio, Minister for Energy Environment and Climate
- DTP including Impact Assessment Unit, Hume Region, Energy, Planning and Approvals
- EPA Victoria
- Benalla Rural City Council including CEO, Councillors, and departmental staff
- Relevant referral agencies including Goulburn Broken CMA and CFA
- Yorta Yorta Nation Aboriginal Corporation
- Relevant environmental groups including Winton Wetlands Committee of Management and the Regent Honeyeater Project
- Regional Development Victoria
- Community interest groups including Benalla Sustainable Future Network.
- Community members, in particular affected and adjacent landholders.

Methods of engagement undertaken to date includes mail notification, telephone calls, email enquiries and face-to-face and online meetings. As part of its governance process, Lochard Energy tracks all communications and enquiries.

Consultation was undertaken to ensure stakeholders impacted or interested in the project have had the opportunity to provide their feedback and ensure their concerns and issues were heard by Lochard Energy. By understanding these key concerns and issues, there was opportunity to refine the project, where appropriate, or else identify reasons why the alternative options could not be accommodated.

Lochard Energy has worked closely with these stakeholders in developing the development layout plan.

A summary of key issues outlined during the consultation and provides a summary of the outcome and response when considering this feedback as part of the ongoing design development. Key issues resulting from consultation were:

- Noise emitted from the facility and mitigation.
- Construction and operational impacts (truck movements along Lee Road and Bowers Road, worker accommodation during construction).
- Potential impacts to biodiversity and Winton Wetlands, including water management.
- Management of potential fire risks.
- Employment creation/job opportunities.
- Sustainability and decommissioning of the facility at end of life.
- Alignment with enabling uptake of variable renewable energy sources such as solar and wind farms.
- Alignment of facility vegetation strategy to the region's conservation activities.

Feedback and questions received as part of this engagement have been incorporated and addressed in this Application for a Planning Permit. Additionally, where applicable, direct responses have been provided to interested and affected parties who have requested further information.

5 LEGISLATIVE FRAMEWORK

5.1 COMMONWEALTH LEGISLATION

The key Commonwealth legislation that applies to the project is outlined in Table 5.1 below.

Table 5.1 Commonwealth legislation

LEGISLATION	SUMMARY
Environment Protection and Biodiversity Conservation Act 1999	The *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) protects Matters of National Environmental Significance (MNES) including nationally threatened species and ecological communities, wetlands of international importance, and migratory species. The Commonwealth Minister for the Environment is responsible for administering the EPBC Act. Under the EPBC Act, an action (i.e. project, an activity) will require approval from the Minister if the action will have or is likely to have a significant impact on a MNES. Three MNES may be impacted by proposed project. Species with the potential to be affected are: — Painted Honeyeater Grantiella picta Painted Honeyeater – EPBC Act Vulnerable — Sloane's Froglet Crinia Sloanei– EPBC Act Endangered — Growling Grass Frog Litoria raniformis – EPBC Act Vulnerable. An Ecological Impact Assessment (which included targeted surveys) has been prepared for the project. This assessment concluded that significant impacts on MNES are not anticipated and a referral of the project to DAWE under the EPBC Act is not recommended.

5.2 STATE LEGISLATION

The key State legislation that applies to the project is outlined in Table 5.2.

Table 5.2 State legislation

LEGISLATION	SUMMARY
Environment Effects Act 1978	*The Environment Effects Act 1978* (EE Act) provides for assessment of some proposed projects (works) that may have a significant effect on the environment. Assessment under the EE Act will inform the approval decisions but will not result in an approval in its own right. The Minister for Planning administering the EE Act decides whether an EES should be prepared. An Environment Effects Statement (EES) self-assessment has been prepared in accordance with the referral criteria set out in the Ministerial Guidelines for Assessment of Environmental Effects and the *Environment Effects Act 1978* (EE Act). The EES self-assessment was submitted to the Impact Assessment Unit of Department of Environment, Land, Water and Planning (DELWP) for consideration. On 14 April 2022, Impact Assessment Unit determined that the project, as presented, did not exceed the criteria thresholds and a referral was not required.
Planning and Environment Act 1987	The *Planning and Environment Act 1987* (P&E Act) provides the legal framework for the operation of Victoria's planning system. The P&E Act sets out procedures for preparing and amending the Victorian Planning Provisions (VPPs) and planning schemes, obtaining permits under schemes, settling disputes, enforcing compliance with planning schemes and other administrative procedures. The main functions of the P&E Act are to: — set the broad objectives for planning in Victoria — set the main rules and principles for how the Victorian planning system works — set up the key planning procedures and statutory instruments in the Victorian planning system; and — define the roles and responsibilities of the Minister, councils, governments, government departments, the community and other stakeholders in the planning system. The objectives of the P&E Act, of relevance to the project are: — 'provide for the fair, orderly, economic and sustainable use, and development of land' — 'facilitate appropriate development in accordance with the objectives' — 'balance the present and future interests of all Victorians.' Under the P&E Act, the project will require planning approval for: — use of land — buildings and works — native vegetation removal. — earthworks which change the rate of flow or discharge point of water across a property boundary

LEGISLATION	SUMMARY
Aboriginal Heritage Act 2006	The *Aboriginal Heritage Act 2006* (AH Act) and *Aboriginal Heritage Regulations 2018* provides the framework for protections to Aboriginal Heritage throughout Victoria. The *Aboriginal Heritage Regulations 2018* require a Cultural Heritage Management Plan (CHMP) to be prepared in circumstances involving both: — activities to be completed on land within an area of Aboriginal cultural heritage sensitivity, as described in the *Aboriginal Heritage Regulations 2018* (Part 2, Division 3), and — activities considered to be 'high impact' under the *Aboriginal Heritage Regulations 2018* (Part 2, Division 5). Section 52(3) of the AH Act provides that no statutory authorisation can be given before a CHMP is approved. The project is not located within an area of Aboriginal cultural heritage sensitivity and therefore does not meet the requirements for a mandatory CHMP, notwithstanding, a voluntary CHMP (#18379) has been undertaken for the project and was approved by the Yorta Yorta Nation Aboriginal Corporation on 20 February 2022.
Environment Protection Act 2017	The *Environment Protection Act 2017* (EP Act) aims to protect Victoria's air, water and land by adopting a 'general environmental duty' (GED) which imposes a broad obligation on entities and individuals to take proactive steps to minimise risks of harm to human health and the environment from pollution or waste. EPA Victoria administers the EP Act and subordinate legislation. Under the EP Act, the GED include duties relating to pollution incidents and duties relating to contaminated land. The project would be required to operate in accordance with these duties, to manage and respond to risks of harm and notify the EPA in the event of a notifiable incident or contamination. The EP Act regulates discharges to the environment including, but not limited to, emissions to air, surface water and groundwater by a system of permissions. Any discharge to the environment during the construction or operation of the project must be in accordance with the requirements of the Environment Protection Act. Schedule 1 of the *Environment Protection Regulations 2021* sets out prescribed permission activities. The project is included in an industry category (K: Utilities – 70 K01 (Power Generation) as a prescribed development activity and a prescribed operating activity (Generating electrical power from the consumption of a fuel at a rated capacity of at least 5 MW of electrical power). The project, therefore, will require a 'development licence' from EPA in accordance with the EP Act and the *Environment Protection Regulations 2021.* Discussions with the EPA Victoria have commenced. It is requested that public notice periods for both 'development licence' and the planning permit are undertaken in unison using an integrated process.
Flora and Fauna Guarantee Act 1988	The *Flora and Fauna Guarantee Act 1988* (FFG Act) provides a framework for the conservation and management of Victoria's native species, and the processes that threaten native flora and fauna are listed in the schedules of the Act. A permit from DEECA is required to 'take' (to kill, injure, disturb or collect) listed flora species from public land prior to construction.

LEGISLATION	SUMMARY
Wildlife Act 1975	The *Wildlife Act 1975* (Wildlife Act) is the primary legislation in Victoria for the protection of wildlife. The Act requires that wildlife research (i.e. fauna salvage and relocation) is regulated through a permit system, which is managed by DELWP. Authorisation for fauna removal/relocation must be obtained under the Wildlife Act through a licence granted by DEECA. Any persons involved in fauna removal, salvage capture or relocation of fauna during mitigation measures must hold a current Management Authorisation under the *Wildlife Act*. If vegetation containing fauna habitat is to be removed during construction and maintenance, a qualified fauna spotter catcher with accreditation under the Wildlife Act must be present during habitat removal.
Heritage Act 2017	The *Heritage Act 2017* (Heritage Act) regulates the protection and conservation of places of heritage significance. The Heritage Act establishes the Victorian Heritage Register (VHR) and the Victorian Heritage Inventory (VHI), for which consents or permits must be obtained before any historic site is disturbed. The project does not contain any items listed on the Victorian Heritage Inventory or Register. If items that meet the listing criteria are identified within the project during construction, permits and consents would be required.
Pipelines Act 2005	A pipeline licence is required under the *Pipelines Act 2005* (Pipeline Act) for the construction and operation of the pipeline included in the project. The proposed pipeline was the subject of a Notice of Pipeline Corridor pursuant to s27 *Pipelines Act 2005*. An application will be made to the Minister for Energy and Resources as a post-approval activity, should a planning permit be granted for the project.

6 STRATEGIC FRAMEWORK

There are a number of strategies and plans on a national and state level that aim to improve the NEM and its transition to renewables as well as the development of regional areas. Several of these are applicable to the project due to type of technology being proposed and the project's location in north-eastern Victoria.

6.1 RELEVANT STRATEGIES

6.1.1 VICTORIA'S RENEWABLE ENERGY ZONES

The State Government has made a commitment to develop strategic Renewable Energy Zones (REZs) around Victoria. The purposeful development of REZs will allow new energy projects to be connected in a timely manner, reducing risk premiums for investors, achieving better energy affordability and reliability outcomes for consumers, helping to achieve climate change goals and furthering regional economic development goals.

In November 2020, the Victorian Government announced a $1.6 billion clean energy package through the 2020–21 State Budget, to invest in renewables, grid infrastructure, energy efficiency and decarbonisation projects, including $540 million to establish six REZs, as shown in Figure 6.1 below.

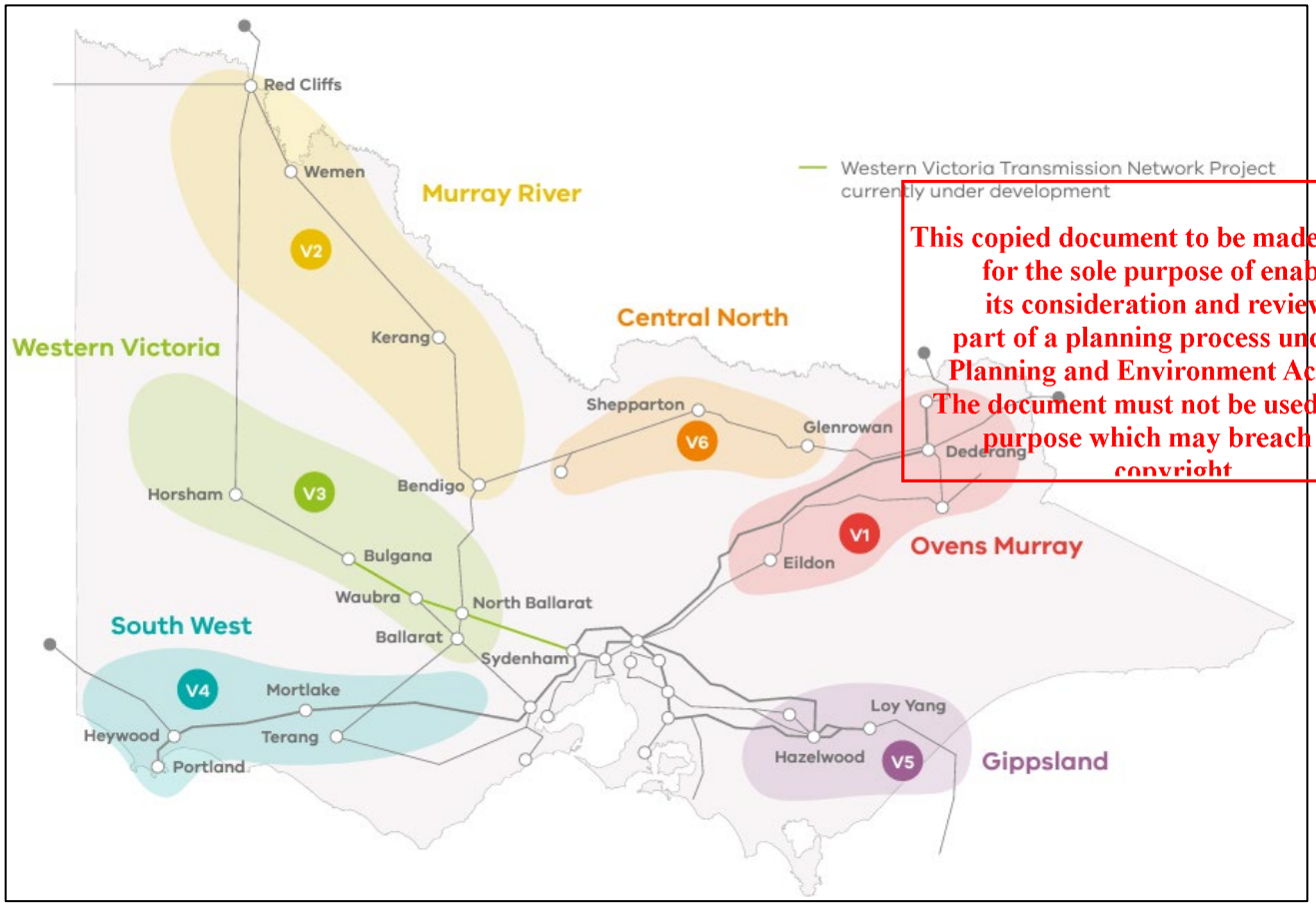


Figure 6.1 Map of Victoria's Renewable Energy Zones (Source: Victorian Renewable Energy Zones Development Plan Directions Paper)

The project is located in the Central North REZ (V6) and will connect to the Glenrowan Terminal Station. The BESS component of the project will enable the supply and absorption of 200 MW of real power with 400-megawatt-hour (MWh) energy storage capacity. The *Victorian Renewable Energy Zones Development Plan* directions paper was published in February 2021.

6.1.2 HUME REGIONAL GROWTH PLAN

The Hume Regional Growth Plan provides a regional approach to land use planning in the Hume Region. The subject site is located within the Central Hume sub-region of the plan which covers the municipalities of Benalla, Wangaratta, Mansfield and Alpine. The plan identifies opportunities for supporting regional infrastructure and identifies important economic, environmental, social and cultural resources to be preserved, maintained or developed. The plan identifies several strategies relevant to energy generation:

- Plan for a more diverse and sustainable regional economy by supporting existing economic activity and encouraging appropriate new and developing forms of industry, agriculture, tourism and alternative energy production
- Promote the establishment of renewable energy hubs to co-locate industries to maximise resource use efficiency and minimise waste generation. Key potential locations for such hubs include Shepparton, Wodonga, Wangaratta, Benalla and Seymour
- Support rural towns by providing access to key community infrastructure that can respond to changing needs over time
- Supports alternative energy generation
- Provides local employment and energy connections
- Explore opportunities for renewable energy generation

The plan also outlines that the electricity network will need to be augmented to accommodate future growth and that renewable generation and decentralised systems should continue to be developed as part of this network. The Plan also outlines that many parts of the region do not have access to reticulated natural gas. The plan acknowledges that access to natural gas will be important in the future and will help to make the Central Hume sub-region attractive for settlement and investment.

6.1.3 VICTORIA'S RENEWABLE ENERGY ACTION PLAN

The State Government's Renewable Energy Action Plan establishes the strategy for Victoria ensuring a renewable, affordable and reliable energy network whilst reaching net zero emissions energy sector by 2050. Key to the plan is using large scale renewable energy technology and ensuring grid stability. The plan includes a number of key actions relevant to the project:

- supporting local energy projects across Victoria
- delivering a more flexible approach to grid connections
- exploring innovative smart grid, microgrid and storage models.

6.1.4 AEMO'S 2022 INTEGRATED SYSTEM PLAN

AEMO manages electricity and gas systems and markets across Australia and has developed an Integrated System Plan (ISP) that provides an integrated roadmap for the efficient development of the National Electricity Market (NEM) over the next 20 years and beyond. The primary objective of the ISP is to maximise value to end consumers by designing the lowest cost, secure and reliable energy system capable of meeting any emissions trajectory determined by policy makers at an acceptable level of risk.

The *2022 Integrated System Plan* (ISP) by the Australian Energy Market Operator (AEMO) indicates that 46-gigawatt (GW) / 640 gigawatt-hours (GWh) of storage and 10 GW of gas-fired generation is required to support renewable energy generation and the accelerated retirement of coal fired power stations. AEMO's 2022 ISP "step change" scenario is considered by AEMO and industry stakeholders to be the most likely and most realistic scenario modelled, there is a reasonable expectation that Victoria will continue to rely upon facilities like the project for its long-term energy security.

7 PLANNING ASSESSMENT

7.1 PLANNING POLICY AND CONTROLS

The BPS establishes policies for the use and development of land and provides a framework within which land use planning decisions can be made. A summary of the relevant State and local planning policies is provided below. These have been assessed and applied to the project.

7.1.1 PLANNING POLICY FRAMEWORK

The Planning Policy Framework (PPF) sets the overall context for spatial planning and decision making for Victoria. It seeks to ensure that the 'objectives of planning in Victoria are fostered through appropriate land use and development planning policies and practices'. As demonstrated in the following tables, the project meets the requirements of the PPF as set out in the Victoria Planning Provisions (VPPs).

Table 7.1 Clause 11: Settlement

PLANNING POLICY FRAMEWORK – CLAUSE 11: SETTLEMENT
Clause 11 of the PPF outlines the objectives and strategies associated with 'Settlement'. The framework states that 'Planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure.' The objective of Clause 11 is to 'promote the sustainable growth and development of Victoria and deliver choice and opportunity for all Victorians through a network of settlements.' Clause 11 aims to support sustainable growth and development of regional centres and ensure that regions and their settlements are planned in accordance with their relevant regional growth plan. (c11.01-1S Settlement)
Assessment: The project supports c11.01-1S through developing a stronger energy network which will support the sustainable growth of settlement in the Central Hume Region as identified in Section 6.1.2 of this report.

Table 7.2 Cause 12: Environment and landscape values

PLANNING POLICY FRAMEWORK – CLAUSE 12: ENVIRONMENTAL AND LANDSCAPE VALUES
Clause 12 of the PPF outlines the objectives and strategies associated with 'Environmental and landscape values'. Clause 12 states that, 'Planning should help to protect the health of ecological systems and the biodiversity they support (including ecosystems, habitats, species and genetic diversity) and conserve areas with identified environmental and landscape values.' Clause 12 aims to assist the protection and conservation of Victoria's biodiversity (c12.01-1S Protection of biodiversity), ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation (c12.01-2S Native vegetation management), and protect and enhance river corridors, waterways, lakes and wetlands (c12.03-1S River corridors, waterways, lakes and wetlands).
Assessment: The project will avoid and minimise impacts to native vegetation and biodiversity where possible. Where vegetation removal is required *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP, 2017) will be followed. Additional information is included in the Ecology Impact Assessment and Targeted Survey Report (Appendix D). The Surface Water Impact Assessment (Appendix K) concludes that there are no designated Goulburn Broken CMA waterways within the study area boundary. However, the Winton Wetlands are located downstream of the project and likely to be hydraulically connected via surface drainage and / or groundwater interaction. Surface water runoff from the hardstands, buildings and sealed road areas are classified as urban runoff and as such will increase the stormwater pollutant loads within the local catchment. The project is required to demonstrate the development will meet the best practice performance objectives as per the *Urban Stormwater Management Guideline* (2021). Increases to pollutant loads need to be assessed and mitigated prior to discharge off site using Water Sensitive Road Design (WSRD) elements, such as swales, bioretention systems, basins and wetlands, as part of the design phase. The Groundwater Impact Assessment (Appendix F) has determined that the groundwater flow direction is to the north and northwest towards the Winton Wetlands. This assessment has identified potential impacts to groundwater quality and GDEs, related to the potential contamination of groundwater and the temporary reduction of groundwater levels. This could occur through the interception of groundwater levels during construction. Although the Winton Wetlands are located just north of the site are considered to be a sensitive receptor, the Groundwater Assessment concludes that potential impacts risk to the Wetlands and GDEs would be temporary and or managed through construction and operational mitigation measures. Mitigation measures would include appropriate design of project infrastructure to capture, contain and manage any spills or leaks, with procedures detailed in a project environmental management plan must also be followed.

Table 7.3 Clause 13: Environmental risks and amenity

PLANNING POLICY FRAMEWORK – CLAUSE 13: ENVIRONMENTAL RISKS AND AMENITY
Clause 13 of the PPF outlines the objectives and strategies associated with 'Environmental Risks and Amenity'. Clause 13 states that, 'Planning should strengthen the resilience and safety of communities by adopting a best practice environmental management and risk management approach. Planning should identify, prevent and minimise the risk of harm to the environment, human health, and amenity.' Clause 13 aims to strengthen the resilience of settlements and communities when responding to environmental risks including bushfire (c13.02-1S Bushfire planning), climate change (c13.01 Climate Change impacts) erosion (c13.04-2S Erosion and landslip), flooding (c13.03-1S Floodplain management) and natural hazards (c13.01-1S (Natural hazards and climate change). The Clause also provides a framework for planning for human health and amenity risks, which include Noise (c13.05-1S Noise abatement), Air Quality (c13.06-1S Air quality management) and Amenity and Safety (c13.07-1S Land use compatibility).
Assessment: The Contamination Land Management site assessment (Appendix C) noted that potentially contaminating activities and associated chemicals of potential concern (COPC) have been identified. A Source – pathway – receptor - linkage analysis identified exposure opportunities which may affect construction, maintenance and utility workers, recreational users, occupants as well as ecosystem and terrestrial receptors. However, it was noted that the exposure risk can be mitigated by the preparation of a Health and Safety Plan (HSP) and Construction Environmental Management Plan (CEMP). The closest sensitive residential receivers to the air and noise generating components of the facility are located approximately 800 metres to the south. Noise impacts generated project may present health hazards, causing general stress and annoyance and potentially disrupting the sleep of nearby residents. The noise assessment for the facility will consider noise impacts (including tonal/low-frequency characteristics) with respect to EPA1826. Where the adopted trigger levels are exceeded, reasonable and feasible mitigation measures will be proposed in the following order of priority; source mitigation (e.g. selection of quieter equipment, operational load), path mitigation (e.g. attenuators, enclosures, noise barriers), and receiver mitigation (e.g. architectural treatment to receivers). The main emissions during operation of the gas plant will be the oxides of nitrogen (NOx) and carbon monoxide (CO) to which, during operation of the gas fired generators, the local community is likely to be exposed over short periods of time. However, with good pollutant dispersal, distance from source to receptor and low levels of NOx and CO emissions, the local community would not be exposed to short or long term health hazards. This would be demonstrated through air dispersion modelling of emissions from the GPG facility. Air and Noise emissions emitted by the facility would be subject to approval requirements of the EPA. A Geotechnical Factual Report (Appendix E) identified variability in the ground profile across the study area, with subsurface conditions encountered being consistent with regional published geology. The report indicates the study area is located in an area with a low probability of occurrence of acid sulfate soils. A Surface Water Impact Assessment (Appendix K) reports that surface gradients at the site are relatively gentle, varying from 176 to 169 metres Australian Height Datum (AHD). This indicated minor erosion may occur if vegetation is not well established. The assessment recommends that an erosion and sediment control plan be prepared to minimise the risk of soil erosion and sediment laden runoff.

Table 7.4 Clause 14: Natural Resource Management

PLANNING POLICY FRAMEWORK – CLAUSE 14: NATURAL RESOURCE MANAGEMENT
Clause 14 of the PPF outlines the objectives and strategies associated with 'Natural Resource Management'. Clause 14 states that '*Planning is to assist in the conservation and wise use of natural resources including energy, water, land, stone and minerals to support both environmental quality and sustainable development. Planning should ensure agricultural land is managed sustainably, while acknowledging the economic importance of agricultural production*.' The clause aims to protect agricultural land (14.01-1S Protection of agricultural land) and encourage sustainable agricultural land use (14.01-2S Sustainable agricultural land use).
Assessment: The subject site is approximately 41.35 ha in size and is located within the Farming Zone. The project will retain agricultural land within the western portion of the subject site. This will enable future agricultural uses. Furthermore, the facility has been strategically sited in the north-east corner and will not result in significant fragmentation of agricultural land. Overall, the project will not detract from the rest of the property's ongoing or potential use of land for agricultural purposes.

Table 7.5 Clause 15: Built environment and heritage

PLANNING POLICY FRAMEWORK – CLAUSE 15: BUILT ENVIRONMENT AND HERITAGE
Clause 15 of the PPF outlines the objectives and strategies associated with 'Built environment and heritage'. Clause 15 states that, '*Planning should ensure all land use and development appropriately responds to its surrounding landscape and character, valued built form and cultural context. Planning should protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value*.' Clause 15 aims to encourage land use and development that is energy and resource efficient, supports a cooler environment and minimises greenhouse gas emissions (c15.02-1S Energy and resource efficiency), ensure the conservation of places of heritage significance (c15.03-1S - Heritage conservation) and ensure the protection and conservation of places of Aboriginal cultural heritage significance (c15.03-2S Aboriginal cultural heritage).
Assessment: The project aims to achieve the objectives of the clauses through creating a more reliable energy network and allowing for a greater use of renewable energy. The project will also protect and conserve aboriginal places of heritage significance where possible through carrying out the recommended measures contained in a detailed CHMP approved in accordance with the *Aboriginal Heritage Act 2006*. Although a mandatory cultural heritage management plan is not required for this activity, the Lochard Energy has undertaken a voluntary CHMP (#18379) in partnership with the YYNAC which is the designed RAP for the subject site. This voluntary CHMP was approved by the YYNAC on 20 February 2022.

Table 7.6 Clause 17: Economic development

PLANNING POLICY FRAMEWORK – CLAUSE 17: ECONOMIC DEVELOPMENT
Clause 17 of the PPF outlines the objectives and strategies associated with 'Economic development'. Clause 17 states that, *"Planning is to provide for a strong and innovative economy, where all sectors are critical to economic prosperity."* Clause 17 aims to strengthen and diversify the economy (c17.01-1S Diversified economy).
Assessment: The project aims to create further support for the existing energy industry by diversifying energy generation in the Central North REZ (V1).

Table 7.7 Clause 19: Infrastructure

PLANNING POLICY FRAMEWORK – CLAUSE 19: INFRASTRUCTURE
Clause 19 of the PPF outlines the objectives and strategies associated with 'Infrastructure'. Clause 19 states that, *"Planning for development of social and physical infrastructure should enable it to be provided in a way that is efficient, equitable, accessible and timely."* Clause 19 aims to facilitate appropriate development of energy supply infrastructure (19.01-1S Energy supply) and to promote the provision of renewable energy in a manner that ensures appropriate siting and design considerations are met in the Hume Region (19.01-2R Renewable energy – Hume)
Assessment: The project provides essential support for the NEM and will facilitate the further provision of energy generation in the Hume Region. The proposed project is consistent with objectives and key policies as follows: — The location of the project has been selected based on its proximity to existing transmission and gas pipeline infrastructure. — The project is in a zone where energy facilities are an acceptable development, and the site is currently surrounded by agricultural land uses. — The project has the capacity to supply peaking energy to Hume Region.

7.1.2 LAND USE

Clause 73.03 Land Use Terms of the Victoria Planning Provisions (VPP) defines land use associated with the project as an energy generation facility and associated utility installations. The table below outlines the definition of these land uses and their correlation to project components.

Table 7.8 Extract from Clause 73.03 (Land Use Terms) of the BPS

PROJECT COMPONENT	LAND USE TERM	DEFINITION
Gas-fired Power Generator Facility	*Energy Generation Facility*	*Land used to generate energy for use off site other than geothermal energy extraction. It includes any building or other structure or thing used in or in connection with the generation of energy.*
Gas Pipeline	*Utility Installation*	*Land used:* *b) to transmit or distribute gas or oil;*
Battery Energy Storage System Facility **Electrical Substation** **Transmission Line**	*Utility Installation*	*Land used:* *c) to transmit, distribute or store power, including battery storage;*

7.1.3 ZONES

Zones are the primary method of organising land and apply to all land in Victoria. Land is zoned for particular uses, such as residential, commercial and industrial.

The zone that the project sits within is shown in Figure 7.1 and assessed in Table 7.9 below.

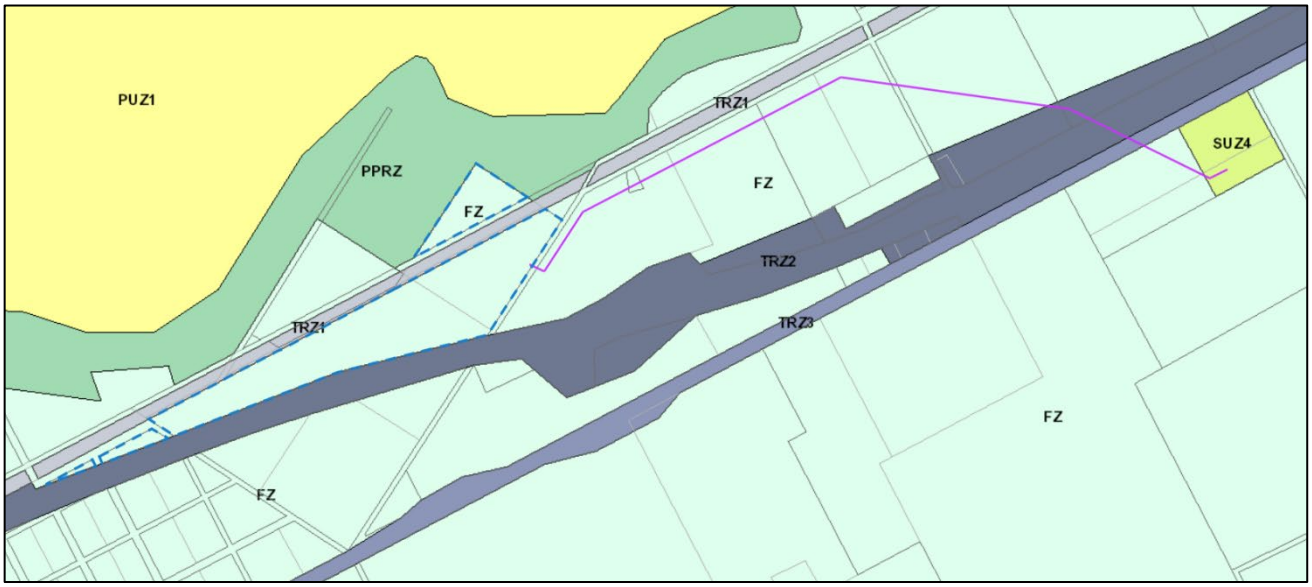


Figure 7.1 Map of zones applicable to the project.

Table 7.9 Planning Zones

PLANNING ZONE	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
Clause 35.07 Farming Zone (FZ)	The purpose of the Farming Zone (FZ) is to provide for the use of land for agriculture; to encourage the retention of productive agricultural land; to ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture; to encourage the retention of employment and population to support rural communities; to encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision; and to provide for the use and development of land for the specific purposes identified in a schedule to this zone.	**Use** In accordance with c35.07-2 Table of Uses, a 'utility installation' is a Section 2 Use. A planning permit is required to use the land for the purposes of a 'utility installation'. An 'energy generation facility' is not specifically listed in c35.07-2 Table of Uses and defaults to Section 2 Use '*Any other use not listed in Section 1 or 3*'. A planning permit is required for the use of land for an 'energy generation facility''. **Buildings and Works** In accordance with c35.07-4, a permit is required to construct a building or construct or carry out works for the project. In accordance with the Schedule to c35.07, a permit is required for change the rate of flow or the discharge point of water across a property boundary.	**A planning permit is required for the use and development of the land for the and 'energy generation facility' and a 'utility installation' and for earthworks which change the rate of flow or the discharge point of water across a property boundary.**
Clause 36.04 Transport Zone (TRZ2 and TRZ3)	The purpose of the Transport Zone is to implement the Municipal Planning Strategy and the Planning Policy Framework, provide for an integrated and sustainable transport system, identify transport land use and land required for transport services and facilities, provide for the use and development of land that complements, or is consistent with, the transport system or public land reservation and to ensure the efficient and safe use of transport infrastructure and land comprising the transport system.	**Use** In accordance with c36.04-1 Table of uses a 'utility installation' is a Section 1 – Permit not required use if carried out by or on behalf of a relevant transport manager. As the use and development of the transmission line is not for a transport manager, a planning permit is required.	**A planning permit is required for the use and development of the land for a utility installation (transmission line).**

7.1.4 OVERLAYS

Planning Overlays may include a schedule that enables more specific local objectives, purposes or requirements for specified land than its Zone. The Vegetation Protection Overlay – Schedule 3 for the Regent Honeyeater Habitat/Lurg Ironbark Vegetation protection area applies to part of the Transmission Line route. The location of the VPO is shown in Figure 7.2 and assessed in Table 7.10 below.

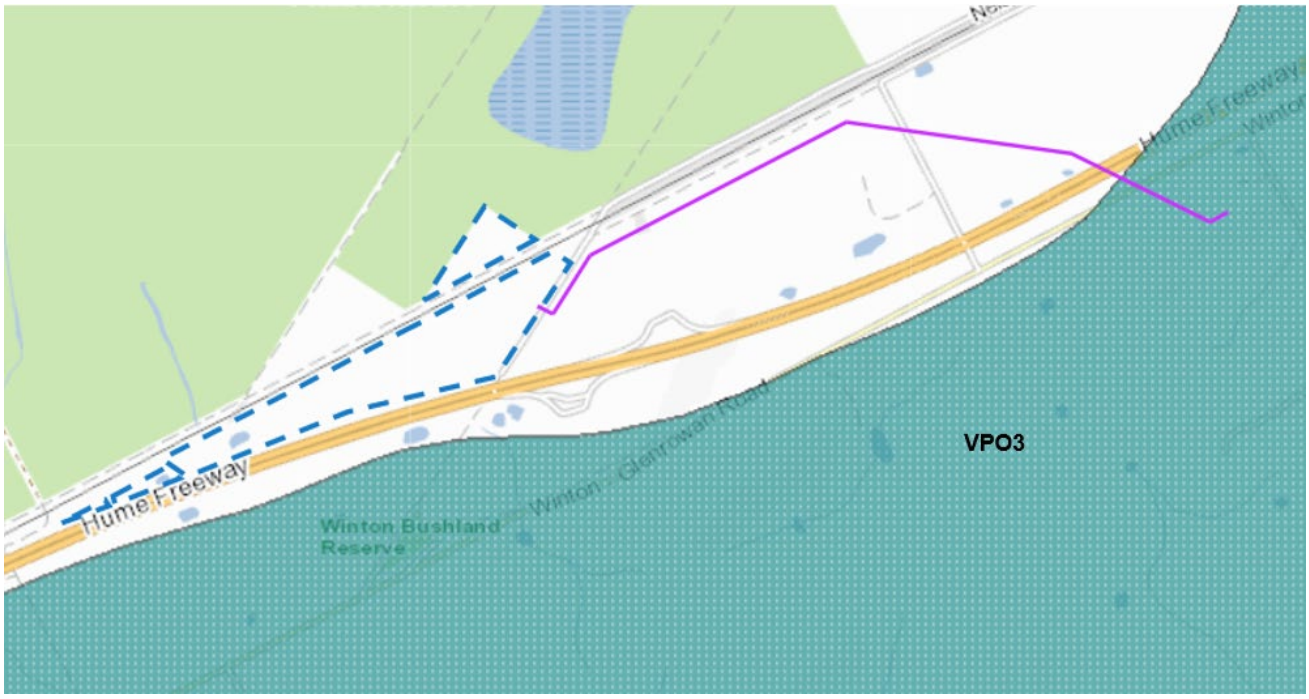


Figure 7.2 Map of overlays applicable to the project.

Table 7.10 Planning Overlays

PLANNING OVERLAY	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
Clause 42.02 **Vegetation Protection Overlay – Schedule 3 (VPO3)**	The purpose of Schedule 3 to the VPO is to protect remaining habitat areas of the Regent honeyeater which is listed as an endangered species under the Fauna and Flora Guarantee Act.	**None specified – application requirements.** An application must show the species of native vegetation proposed for removal and measures proposed to minimise the removal of Mugga Ironbark, White Box, Yellow Box and Blakeley's Red Gum all of which support the survival of the Regent honeyeater and the other threatened species.	**A planning permit is required for the removal of native vegetation under Cl52.17 of the Benalla Planning Scheme. The bore beneath the Hume Freeway has been extended to avoid High quality Box Ironbark Forest EVC 61 supported by the Winton-Glenrowan roadside reserve covered by VPO3. This is further detailed in Appendix D – Ecology Impact Assessment and Targeted Survey Report.**

7.1.5 PARTICULAR PROVISIONS

Particular provisions are specific planning requirements for a range of identified uses and developments. They apply consistently across the State and are common to all planning schemes.

Table 7.11 Particular provisions applicable to the project

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
Clause 52.06 **Car Parking**	The purpose of c52.06 is to ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework; to ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality; to support sustainable transport alternatives to the motor car; to promote the efficient use of car parking spaces through the consolidation of car parking facilities; and to ensure that car parking does not adversely affect the amenity of the locality.	In accordance with c52.06-2 (Provision of car parking spaces), before a new use commences the number of car parking spaces required under c52.06-5 must be provided to the satisfaction of the responsible authority. Pursuant to c52.06-6 (Number of car parking spaces required for other uses) states 'where a use of land is not specified in Table 1 or where a car parking requirement is not specified for the use in another provision of the planning scheme or in a schedule to the Parking Overlay, before a new use commences or the floor area or site area of an existing use is increased, car parking spaces must be provided to the satisfaction of the responsible authority'.	**Car parking for the project will be addressed in a CEMP or Traffic Management Plan during construction.** **During operation, car parking will comply with relevant car parking design standards and ensure that there will be no demand generated for on-street parking as a result of the project's operation.**
Clause 52.17 **Native Vegetation**	The purpose of c52.17 is to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. This is achieved by applying the three-step approach (avoid, minimise and provide an offset) in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017) (Guidelines); and, but not limited to, to manage the removal, destruction or lopping of native vegetation to minimise land and water degradation.	**Removal of Native Vegetation** In accordance with c52.17-1, a planning permit is required to remove, destroy or lop native vegetation, including dead native vegetation. This does not apply if the table to c52.17-7 specifically states that a permit is not required or to the removal, destruction or lopping of native vegetation specified in the schedule to this clause.	**A planning permit is required to remove, destroy or lop native vegetation.** **<u>Discussion</u>** **Based on the current construction footprint, impacts of up to a total of 1.393 hectares of native vegetation including 8 large trees will be required. Approval of the DTP region and offsets – up to 0.328 general habitat units, and 8 large trees will**

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
		The Schedule provides an exemption from needing a permit for the removal of native vegetation associated with a utility installation to the minimum extent necessary: — to maintain the safe and efficient function of a Minor Utility Installation; or — by or on behalf of a utility service provider to maintain or construct a utility installation in accordance with the written agreement of the Secretary to the DELWP (as constituted under Part 2 of the *Conservation, Forest and Lands Act 1987*). As neither of these circumstances are applicable, the exemption does not apply to the project. An application to remove, destroy or lop native vegetation must be supported by an ecological assessment that takes consideration the steps required to avoid, minimise and offset the loss of vegetation.	**be required for these losses. The final determination of the extent of vegetation removal, and as such, the NVR report results, will be finalised through DTP upon finalisation of the construction footprint.** **Further information regarding the impacts to native vegetation is available in Appendix D.**
Clause 52.29 **Land Adjacent to the Principal Road Network**	The purpose of c52.29 is ensure appropriate access to the Principal Road Network or land planned to form part of the Principal Road Network; and to ensure appropriate subdivision of land adjacent to Principal Road Network or land planned to form part of the Principal Road Network.	This clause applies to land adjacent to a road in the Transport Zone 2. In accordance with c52.29-2, a permit is required to: — Create or alter access to: • A road in a Transport Zone 2. • Land in a Public Acquisition Overlay	**A permit is not required.** **<u>Discussion</u>** **The project does not seek to alter access to a road in the Principal Road Network or subdivide land.**

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
		if a transport manager (other than a municipal council) is the acquiring authority and the acquisition is for the purpose of a road. — Subdivide land adjacent to: • A road in a Transport Zone 2. • Land in a Public Acquisition Overlay if a transport manager (other than a municipal council) is the acquiring authority and the acquisition is for the purpose of a road.	

7.1.6 GENERAL PROVISIONS

The general provisions also apply in addition to the requirements of a zone or overlay. Those considered relevant to the project are outlined below.

Table 7.12 Particular provisions applicable to the project

PROVISION	PURPOSE	PERMIT REQUIREMENTS	SUMMARY
66.02-4 **Use and Development Referrals**	Clause 66.02-4 lists application types which must be referred to the person or body specified as the referral authority. The table in Clause 66.02-4 specifies whether the referral authority is a determining referral authority or a recommending referral authority	In accordance with c66.02-4, the application for carrying out works on the land must be referred to the relevant electricity transmission authority if a transmission line is located within 60 metres of the land, as a transmission line intersects the project land this referral will be required. The relevant electricity transmission authority is a determining referral authority for this planning permit application.	**The planning permit application must be referred to the relevant electricity transmission authority, who are a determining referral authority for this application.**

7.1.7 DECISION GUIDELINES

In accordance with the provisions of Clause 65.01 of the Benalla Planning Scheme, before deciding on an application or approval of a plan, the responsible authority must also consider relevant decision guidelines. Table 7.13 below outlines the assessment of the project against this Clause.

Table 7.13 Clause 65 decision guidelines assessment

DECISION GUIDELINE	ASSESSMENT
The matters set out in Section 60 of the Act	The report has been written in accordance with the requirements of the P&E Act and addresses the requirements of the BPS.
The Municipal Planning Strategy and Planning Policy Framework	Refer to Section 7.1.1 of this report for discussion of the Municipal Planning Strategy and Planning Policy Framework.
The purpose of the zone, overlay or other provision.	Refer to Section 7.1.3 of this report for discussion of zones, overlays and other provisions.
Any matter required to be considered in the zone, overlay or other provision.	As outlined within this report.
The orderly planning of the area.	The project supports the provision of orderly infrastructure in the area and secures power supply to the NEM through developing a stronger energy network connection, creating a more reliable and sustainable energy supply for Victoria.
The effect on the amenity of the area.	The project would not have an increased impact on the amenity of the surrounding environment as it is located more than 500m from the nearest sensitive receiver. The removal of vegetation may impact the local landscape character.
The proximity of the land to any public land.	The project is not located on public land. The nearest public land is the Winton Wetlands Reserve, located approximately 500m north of the project land.
Factors likely to cause or contribute to land degradation, salinity or reduce water quality.	The project is not likely to have adverse impacts on land degradation, salinity or reduce the water quality of the area. Further discussion of the surface water impacts is available in Section 8.11.
Whether the proposed development is designed to maintain or improve the quality of stormwater within and existing on the site.	The project is designed to maintain the quality of stormwater existing on the site. Further discussion of the surface water impacts is available in Section 8.11.
The extent and character of native vegetation and the likelihood of its destruction.	This is discussed in further detail in Section 4.2 and Section 8.4.
Whether native vegetation is to be or can be protected, planted or allowed to regenerate.	This is discussed in further detail in Section 4.2 and Section 8.4.

DECISION GUIDELINE	ASSESSMENT
The degree of flood, erosion or fire hazard associated with the location of the land and the use, development or management of the land so as to minimise any such hazard.	Risks associated with the project have been outlined within this report.
The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.	Traffic volumes as generated by the site during peak construction are anticipated to be adequately accommodated within the wider surrounding road network with minimal change to existing operations and functionality at the Bowers Road and Hume Freeway intersection. Based on the Traffic Impact Assessment, attached as an appendix to this report, the project is considered appropriate from a traffic engineering perspective given surrounding conditions and the nature of the development.

8 ENVIRONMENTAL ASSESSMENT

This section provides a summary of the project's environmental impacts and should be read in conjunction with the following specialist assessments (enclosed in the Appendices) that were undertaken in support of the project.

8.1 AIR QUALITY

An operational air quality impact assessment was prepared WSP (refer Appendix B) to assess potential air quality impacts on sensitive receptor locations in proximity to the project during its operation. Air dispersion modelling using AERMOD was also conducted for one operational scenario to assess potential air quality impacts for continuous normal operating conditions (100% load). The following pollutants were modelled:

- NOx (as NO2)
- CO
- particulate matter
- NH3

Contemporaneous (i.e., the same time period) background data were added to the predicted concentrations from the project to determine cumulative impacts. Incremental impacts for NH3 were assessed only given no background data is available. The modelling results indicate that under normal operating conditions at 100% load:

- the predicted 1-hour and annual average ground level concentrations of NO2 are below their respective assessment criteria at all sensitive receptors assessed.
- the predicted 8-hour rolling average ground level concentrations of CO is below its assessment criterion at all sensitive receptors assessed.
- the predicted 24-hour and annual average ground level concentrations of PM10 is below its assessment criteria at all sensitive receptors assessed. This assumes all particulate matter is emitted in the form of PM10 only.
- the predicted 24-hour and annual average ground level concentrations of PM2.5 is below its assessment criteria at all sensitive receptors assessed. This assumes all particulate matter is emitted in the form of PM2.5 only.
- the predicted 1-hour, 24-hour and annual average ground level concentrations of NH3 (incremental only) is below its assessment criteria.

In summary, the air dispersion modelled demonstrated that emissions from the gas engines are low, below assessment criteria and contribute a much lower proportion of the total impact. Management measures detailed in the Air Quality Impact Assessment (Appendix B) are recommended to ensure emissions are minimised from the project.

8.2 CONTAMINATED LAND MANAGEMENT

A Preliminary Site Investigation (PSI) for the project was completed to identify current site conditions, site history and potential contamination associated with historic and/or current site activities. The intent of the investigation is to provide advice in relation to the presence of any land contamination within or in the vicinity to the project. The preliminary site investigation report is provided within Appendix C.

Based on the findings of the PSI, the potential for contamination to be present at the site as a result of past/present land use activities is considered plausible. It is recommended that an intrusive soil assessment be undertaken prior to the construction works, so that any potential human health and/or environmental contamination risks can be assessed and managed accordingly, including a waste classification assessment (i.e. to enable future offsite disposal of material generated during construction activities).

8.3 FIRE RISK MANAGEMENT

No Bushfire Management Overlay (BMO) applies to the subject site, however the Minister for Planning has determined the subject site to be a 'designated bushfire prone area' which requires future development to comply with applicable guidelines, standards, controls and management measures.

Lochard Energy have considered fire risk management in the design and early planning phase of the project and it is expected that the project would adopt the nominated permit conditions should an approval be granted. Fire risks associated with the project are considered below:

- The major fire risk comes from the gas supply system used to feed the GPG facility however, the risk is considered to be low subject to the project being designed to meet all local and national Australian regulations, codes and standards for safety and construction.
- Another major fire risk comes from power transformers associated with the electrical substation on account of significant quantity of oil contained in them however, the risk of such an event happening is low. The fire risk is mitigated by using fire walls or by maintaining clearances to the surrounding equipment and buildings
- For the BESS facility, the major fire risk comes from the battery packs on account of thermal runaway or short circuits however, the risk of such an event happening is low

Noting the above, the project must respond to Fire Rescue Victoria (FRV) and the Country Fire Authority's (CFA) the following design, operation and management guidelines for battery installations and dangerous goods, as outlined in:

- *Design Guidelines and Model Requirements for Renewable Energy Facilities (CFA, 2022);* and relevant Australian Standards
- *Dangerous Goods Act 1985*; the *Dangerous Goods (Storage and Handling) Regulations 2012*; and relevant Australian Standards

Direct access to the subject site is proposed off Lee Road and will be easily accessible via the surrounding road network (for fire-fighting purposes).

A Construction and Environmental Management Plan will be prepared following permit issue to capture:

- Specifications from the battery equipment manufacturer for safe operating conditions for temperature and the effects on battery storage if involved in fire. This information will also be kept in an Emergency Information Book for the facility.
- Regular inspection and maintenance schedules and requirements, including a requirement to keep the facility free of extraneous or combustible materials
- Regular servicing schedule and requirements in accordance with manufacturers recommendations

8.4 ECOLOGY

An ecological impact assessment for the project is provided at Appendix D. The project study area is comprised of the subject site, selected adjacent private property, surrounding vacant land and highly modified roadsides that support remnant and planted vegetation.

A database search and literature review were undertaken for an indication of the ecological values of the study area, and potential ecological constraints to the project. This review was used to prepare a list of threatened flora and fauna species, ecological communities, listed migratory species and any significant habitat previously recorded or predicted to occur in the study area and the broader locality (listed under the EPBC Act and FFG Act).

A standard site assessment was undertaken by WSP ecologists on 25 July 2021, 2 March 2022 and 15 November 2022. Additional assessments were undertaken by WSP sub-consultants on 8 & 9 December 2022. The assessments involved

mapping native vegetation patches and scattered trees as per The *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP, 2017d) (the Guidelines). Habitat Hectare assessments were undertaken as per the *Vegetation Quality Assessment Manual* (DSE, 2004), and incidental flora and fauna observations were recorded and potential fauna habitat assessed.

Based on the fauna habitat assessment, targeted surveys were undertaken for species of conservation significance thought to possibly occur within the study area. These included:

- Squirrel Glider (*Petaurus norfolcensis*)
- Brushed-tailed Phascogale (*Phascogale tapoatafa tapoatafa*)
- Growling Grass Frog (*Litoria raniformis*)
- Sloane's Froglet (*Crinia sloanei*)
- Painted Honeyeater (*Grantiella picta*)
- Australian Little Bittern (*Ixobrychus dubius*)
- Lewin's Rail (*Lewinia pectoralis*)
- Blue-billed Duck (*Oxyura australis*)
- Latham's Snipe (*Gallinago hardwickii*)

The study area is, in general, highly modified from its likely condition pre-European settlement, which was likely to have been a biodiverse diverse grassy woodland most attributable to Plains Woodland Ecological Vegetation Class (EVC) 803 and Box Ironbark Forest EVC 61. Currently, within the proposed project area the remnant understory is highly modified by weeds and agricultural utilisation to degree that indigenous understory species are effectively absent, with the exception of some opportunistic colonising species recruiting across areas reserved for the purposes of revegetation along much of the north western boundary.

Much of the remnant canopy has been cleared, with a proportionately small amount of large old canopy species persisting at the western end of the study area. The highest quality parches of remnant vegetation within the study area occur to the north of the proposed project area between the property boundary and the rail reserve where parches of Plains Woodland EVC 803 are inclusive of a diverse suite of understory species. These areas also support channelised – reformed, wetter depressions supporting Tall Marsh EVC 821.

A total of 83 scattered trees were mapped within the study area, and a total of 77 patches and 8.293 hectares (ha) of native vegetation most attributable to Plains Woodland EVC 803, Spike-sedge Wetland EVC 819, Plains Woodland / Herb-rich Gilgai Wetland Mosaic EVC 235, and Tall Marsh EVC 821 were mapped within the study area. It is likely that clearance of 1.393 hectares of native vegetation occurring as patches, inclusive of 8 Large trees (6 scattered and 2 patch trees) will be required. Another 8 small tree are being removed. There are no anticipated significant impacts to any EPBC Act or FFG Act listed fauna or flora species.

8.5 GROUNDWATER

A preliminary groundwater assessment was undertaken and is provided at Appendix F. This assessment included a review of available geological and hydrogeological information for the project to identify potential impacts on groundwater levels, quality and sensitive receptors.

Based on the findings of this assessment, the potential for the construction and operational phases of the project to lead to groundwater related impacts is low as there is no interaction with groundwater during construction or operation of the currently proposed Facility.

There is potential for groundwater quality impacts from uncontrolled fuel and chemicals spills from vehicles and project equipment. This risk will be mitigated by appropriate design of project infrastructure to capture, contain and manage any spills or leaks. Procedures detailed in a project environmental management plan will also be followed.

It is recommended that an intrusive groundwater assessment, consisting of the installation of shallow monitoring bores should be undertaken prior to the planned construction works. Site specific groundwater data will inform the project design and ensure any potential environmental risk can be assessed and managed accordingly. Installation of shallow monitoring bores intercepting the water table will be utilised to monitor the local groundwater conditions (levels and quality) and detect any changes to the groundwater resource that may occur during the operating life of the project. The installation and management of the shallow monitoring bores will be done in accordance with Construction and Environmental Management Plan (CEMP) for the project. Locations of the proposed monitoring bores will be targeted in between the proposed Facility and local sensitive receptors (stock and domestic bores and GDE's including the Winton wetland).

8.6 HERITAGE

8.6.1 ABORIGINAL CULTURAL HERITAGE

A Cultural Heritage Management Plan (CHMP) has been prepared and approved for the project. The approval was provided by the Yorta Yorta Nation Aboriginal Corporation on the 20 January 2022 (CHMP No. 18379). The activity area included in the CHMP does not include the transmission line, the CHMP is currently being updated to include these works in the activity area and can be provided to DTP once completed.

The CHMP included desktop, visual inspections and intrusive investigations. The results of the investigations are detailed below.

8.6.1.1 DESKTOP ASSESSMENT

The desktop assessment identified sixty-eight Aboriginal cultural heritage places within 8 km of activity area, primarily consisting of artefact scatters and scarred trees. Aboriginal places are focused to the north of the activity area, around the Winton Wetlands. The desktop assessment concluded that the activity area consists of seasonally waterlogged Shepparton formation clay soils, and that the archaeological sensitivity of this landform is generally very low. However, the density of Aboriginal places in proximity to the activity area indicated the possibility of Aboriginal cultural heritage being present in the activity area itself.

8.6.1.2 STANDARD ASSESSMENT

A standard assessment was undertaken on the 12 November 2021 with a representative of Yorta Yorta Nation Aboriginal Corporation. This assessment took place after a week of heavy rain and noted that the majority of the activity area was located on a waterlogged low-lying clay plain, indicative of the Shepparton formation. The standard assessment achieved 5.82 per cent effective survey coverage, and noted areas of major disturbance across the activity area in the form of dam and homestead construction. It was concluded that there was a very low likelihood of any Aboriginal cultural heritage

being present in the activity area, and pursuant to regulation 64 of the *Aboriginal Heritage Regulations 2018* (Vic), the CHMP was therefore concluded at standard assessment level.

8.6.2 HISTORIC ARCHAEOLOGY

A desktop and visual site inspection for historic archaeology was conducted for the project study area. The assessment focused on the following:

- whether any known historical cultural heritage exists in the project study area
- the potential for as yet unidentified historical cultural heritage to exist in the project footprint; and
- legislative requirements in relation to historical heritage in light of the proposed works.

8.6.2.1 DESKTOP ASSESSMENT

The desktop assessment completed by Extent Heritage identified the Legislative Context, Development History and Previous archaeological studies to determine significant features and locations.

8.6.2.2 SITE ASSESSMENT

A site inspection was undertaken on the 6th of October 2021 by Extent Heritage. The inspection targeted parts of the study area which had increased potential based on the land use history presented in the development history. Any associated archaeological evidence of former use of the study area would provide insight into the social and economic development of rural Victoria from the 1850s onwards and would need to be included on the Victorian Heritage Inventory prior to commencement of the proposed activity.

The inspection of the study area did not identify any significant historical archaeological remains. However, low ground surface visibility limited the effectiveness of the survey. Grass cover may have obscured any intact ground level historical archaeology, such as artefact scatters or low-lying building foundations.

While unable to be reinspected, further analysis of the recorded Survey Blaze tree has reiterated its potential historical modification and that it was used as a reference point to mark property boundaries and the 'Out Station Road' alignment, which once intersected the study area. However, as the tree is associated with early European settlement of the region, it does retain some historical significance to the local community as a tangible link to the early development of the region.

The study area has been assessed as having low archaeological potential, and the identified survey blaze tree has been determined as having local heritage significance. As there are no registered items within the study area, and there have been no discoveries of significant historical archaeological remains, there is no requirement to obtain any consents or permits under the *Heritage Act 2017* or P&E Act prior to works commencing.

8.7 LANDSCAPE CHARACTER AND VISUAL AMENITY

8.7.1 LANDSCAPE IMPACT

The site is located in a highly modified flat agricultural landscape. The recently completed Glenrowan West Solar Farm on land east of the proposed site and the under-construction Winton Solar Farm to the immediate south reinforces that the landscape is undergoing a transformation, one where the objectives of the Central North REZ will introduce energy infrastructure visually complementing declining pastural farming activities. The project would require some vegetation clearing and trimming but minimal landform changes.

8.7.2 VISUAL IMPACT

Overall, the visual impacts of the project are relatively low and have a relatively small influence as there are a relatively small number of receptor locations. The Landscape and Visual Impact Report (Appendix I) identifies two sensitive receptors, one where no change or impact is anticipated and the second where a slight adverse impact has been identified, which can be mitigated through selection of materials and finishes

8.8 NOISE AND VIBRATION

An operational noise impact assessment was prepared WSP (refer Appendix J) to assess noise impacts on sensitive receptor locations in proximity to the project during its operation.

Operational noise limits have been set in line with EPA 1826 - *Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues* (EPA 1826) with the potential for annoyance from low-frequency noise considered in line with *Noise Policy for Industry*, NSW EPA 2017 (NPfI).

Noise Sensitive Areas (NSAs) in the form of residential properties were identified within 1 km distance from the project. A site survey was carried out to establish the existing background noise levels at two NSAs surrounding the facility using unattended noise loggers.

The results of the survey were used to set noise limits in accordance with EPA 1826. Meteorological data has been analysed to consider the frequency of noise-enhancing weather conditions occurring at the project site.

The potential for noise generated by the operation of the Project has been assessed. Predicted noise levels generated by the BESS Facility is >10 dB below the operational noise limits at the nearest NSAs and therefore does not contribute to any exceedances. Noise levels from GPG Facility are predicted to exceed at all receivers during all periods without at-source noise mitigation controls, with an exceedance of up to 43 dB at the most impacted receiver during the most stringent period (night).

The following at-source noise mitigation treatments are recommended for the GPG Facility to reduce predicted noise impacts to comply with operational noise criteria:

- The building fabric of the engine hall (all walls and roof sections) is to be constructed of a pre-fabricated masonry panel, such as Speed panel (400 kg/m3). The internal walls and roof are to be lined with 50mm of rockwool insulation (60 kg/m3) with perforated steel sheeting.
- The exhaust gas stacks and intake air filters are to be fitted with high-performance silencers to achieve the sound power levels outlined in the impact assessment.
- All engine radiators are to be fitted with low-noise fans to achieve the sound power levels outlined in the impact assessment.
- Include low frequency noise limits to the plant specification and allow manufacturers to engineer solutions such as sound walls at to comply with NSW EPA's 2017 *Noise Policy for Industry*.

Identified risks and constraints, including recommended further studies, are outlined in Section 4.3 of Appendix J – Noise Impact Assessment.

8.9 SURFACE WATER

A surface water impact assessment has been prepared for the project and is provided at Appendix K. It covers the flooding, drainage and water quality components of water environments for the project. It also includes a conceptual drainage layout plan based on contour data and the concept layout for the project.

The project is located within the Goulburn Broken catchment, with the Goulburn Broken CMA managing and regulating local surface water approvals. The following are key surface water and drainage characteristics of the subject site:

- There are no Goulburn Broken CMA designated watercourses within the project boundary.
- The project does not intersect with flood planning overlays or Goulburn Broken CMA defined floodplains.
- Based on the 2019 survey, no external transverse drainage channels intersect the site.

- The key hydrology features at the site are the four farm dams located across the project site. Surface water runoff from the site is directly via overland flow paths towards the existing farm dams. The dams are bunded with an inlet channel.
- While the site grades towards the northern boundary, site contours indicate gradients are shallow resulting in water logging of the site during wetter months.

Based on the above existing conditions, no significant flood risk from external catchments or existing drainage features were identified.

In terms of surface water sensitive receptors, a channelised seasonally wet depression was identified within the site near the northern boundary and provides shallow and *Tall Marsh EVC 821* habitat. This seasonally wet shallow swale provides habitat for native frogs, reptiles, birds local to the study area and dispersing throughout the landscape.

The Winton Wetlands located downstream and north of the project is not classified as a RAMSAR wetland. However, the Winton Wetlands may be hydraulically connected via the outfall and drainage channel to the project. Individual wetlands are located within the Winton Wetland complex, the closest to the project is Bill Friday Swamp located approximately 350m.

Considering the potential for hydraulic connectivity between the project and sensitive receptors, consultation with Goulburn Broken CMA is recommended to determine if additional water quality requirements other than the *Urban Stormwater Management Guideline (2021*) is required.

Increases in surface water volumes may be caused by the removal of existing farm water dams and proposed impervious surfaces. A rainwater harvesting or water re-use scheme to meet the *Urban Stormwater Management Guideline (2021)* flow volume is required.

The project is also required to demonstrate the proposed works will meet water quality objectives as per the *Urban Stormwater Management Guideline (2021).* The project presents a spills risk assessment together with management and disposal controls for oil leakage at the BESS and GPG facility.

Water quality data for the drainage channel downstream of the proposed outlet location is not available. To establish a baseline of water quality in the downstream channel, it is recommended monitoring should commence prior to construction and preferably for a period of 18 months.

8.10 TRAFFIC, MOVEMENT AND ACCESS

A Traffic Impact Assessment for the project has been prepared by WSP traffic engineers (refer Appendix L).

The purpose of the assessment was to assess the operational capability of the local road network to facilitate the additional traffic associated with the construction of the project and the potential impacts of the project on traffic and transport conditions within the region.

Traffic volumes as generated by the site during peak construction are anticipated to be adequately accommodated within the wider surrounding road network with minimal change to existing operations and functionality at the Bowers Road and Hume Freeway intersection.

A summary of the traffic impact assessment is provided, as follows:

- Construction of the site will take 12-18 months, during which time peak construction periods of 4 – 5 months duration are anticipated to occur.
- The project is anticipated to generate in the order of 230 daily vehicle movements during the peak construction stage. These movements are anticipated to comprise: — 200 light vehicle movements (Based on 100 staff travelling to and from the site each day).
- 30 heavy vehicle movements.

- Sight lines and turn treatment provisions at the existing Bowers Road and Hume Freeway intersection are all in accordance with the relevant design requirements and are considered appropriate to facilitate access to the proposed development.
- Swept path diagrams confirm that the Bowers Road and Hume Freeway intersection will adequately accommodate construction vehicle movements up to the size of a 19.0 m semi-trailer, with larger vehicles also accommodated subject to traffic management and the potential removal of signage to allow for vehicle overhang.
- Due to their length and the need to avoid impeding traffic flows along the Hume Freeway, B-double vehicles departing the site will be required to turn left from Bowers Road and utilise the next interchange at Winton-Glenrowan Road (8 km east) in order turn around and travel back to Melbourne.
- It is noted that there will be no storage of B-double vehicles in the central median of the Hume Freeway.
- Traffic volumes as generated by the site during peak construction are anticipated to be adequately accommodated within the wider surrounding road network with minimal change to existing operations and functionality at the Bowers Road and Hume Freeway intersection.

Based on these findings, the project is considered appropriate from a traffic engineering perspective given surrounding conditions and the nature of the development.

9 CONCLUSION

This report has been prepared in support of an Application for a Planning Permit for:

- Use of the land for an energy generation facility and utility installations in accordance with c35.07-1.
- Buildings and works for an energy generation facility and utility installations in accordance with c35.07-4
- Earthworks which change the rate of flow or discharge point of water across a property boundary in accordance with the Schedule to c35.07
- Removal native vegetation in accordance with c52.17-1

This report describes Lochard Energy's Winton Energy Reserve 1 facility and assesses the potential environmental and amenity impacts of the project. The project is consistent with the purpose of the relevant zones and overlays and the objectives of the relevant planning polices of the BPS.

The project has been designed in consideration of the surrounding community, environment and other land uses and is considered appropriate for the following reasons:

- The project will contribute to the diversification of energy sources in the Central Hume Region and contribute to achieving the strategies established in the Hume Regional Growth Plan, which identifies expansion of energy production as a key contributor to improving growth and settlement opportunities in the region.
- The project has been informed by a number of technical investigations and consultation with key stakeholders including Hon. Steph Ryan MP, DELWP, EPA Victoria, Benalla Rural City Council, Goulburn Broken CMA, CFA, Yorta Yorta Nation Aboriginal Corporation, AusNet Services, APA Group, Winton Wetlands Committee of Management, Regent Honeyeater Project, Regional Development Victoria, and affected and adjacent landholders.
- A key consideration of the project design has been the avoidance and minimisation of potential environmental, landscape and amenity impacts, whilst ensuring the project can effectively service the Victorian community and the NEM.

Overall, the assessments undertaken demonstrates that the project represents an appropriate land use and developmental outcome, with respect to relevant planning controls and the subject site's context, and therefore it is respectively requested that approval is granted for this permit application.

9 LIMITATIONS

This Report is provided by WSP Australia Pty Limited (*WSP*) for Lochard Energy (*Client*) in response to specific instructions from the Client and in accordance with WSP's project dated September 2019 and Variation 013 Scope dated 24 April 2020 and agreement with the Client dated 31 October 2019 and 04 May 2020 (*Agreement*).

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APPENDIX A

DEVELOPMENT LAYOUT PLAN

APPENDIX B

AIR QUALITY IMPACT ASSESSMENT

APPENDIX C

CONTAMINATED LAND MANAGEMENT

APPENDIX D

ECOLOGY IMPACT ASSESSMENT AND TARGETED SURVEY REPORT

APPENDIX E

GEOTECHNICAL FACTUAL REPORT

APPENDIX F

GROUNDWATER IMPACT ASSESSMENT

APPENDIX G

HISTORICAL ARCHAEOLOGY ASSESSMENT

APPENDIX H

CULTURAL HERITAGE MANAGEMENT PLAN

APPENDIX I

LANDSCAPE AND VISUAL AMENITY IMPACT ASSESSMENT

APPENDIX J

NOISE IMPACT ASSESSMENT

APPENDIX K

SURFACE WATER IMPACT ASSESSMENT

APPENDIX L

TRAFFIC IMPACT ASSESSMENT

APPENDIX M

FEATURE AND SITE SURVEY