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lightsource bp

GOULBURN RIVER SOLAR FARM

Response to Submissions Report

FINAL

December 2023

lightsource bp

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Response to Submissions Report

FINAL

Prepared by
Umwelt (Australia) Pty Limited
on behalf of
Lightsource bp

Project Director: Malinda Facey
Project Manager: Jessica Henderson-Wilson
Report No. 23485/R02
Date: December 2023

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Environmental & Social Consultants

Acknowledgement of Country

Umwelt would like to acknowledge the traditional custodians of the country on which we work and pay respect to their cultural heritage, beliefs, and continuing relationship with the land. We pay our respect to the Elders – past, present, and future.

Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
V1	J Henderson-Wilson	26/09/2023	M Facey	26/09/2023
V2	J Henderson-Wilson	29/09/2023	M Facey	29/09/2023
Final	J Henderson- Wilson	11/12/2023	M Facey	12/12/2023

Executive Summary

Lightsource Development Services Australia Pty Ltd is proposing to develop the Goulburn River Solar Farm (the Project) to generate solar renewable energy to supply New South Wales (NSW). The Project is located within the Upper Hunter Local Government Area of NSW, approximately 28 kilometres south-west of the township of Merriwa. The Project is located on an agricultural property which is surrounded by the Goulburn River National Park.

Following submission of the Environmental Impact Statement (EIS) in May 2023, Lightsource Development Services Australia Pty Ltd has continued to consult with landholders and stakeholders. Ongoing consultation and consideration of the submissions received has led to amendments to the Project and the preparation of an Amendment Report to assess these changes. The Project, as defined in the EIS (Umwelt, 2023) will be referred to herein as the EIS Project and the Project encompassing the proposed changes will be referred to as the Amended Project.

The EIS Project was placed on public exhibition from 13 June 2023 to 10 July 2023. During the public exhibition period, 64 public submissions were received. In accordance with the Guideline (DPE, 2022) multiple submissions from the same person or group are counted as one submission. Accordingly, 11 duplicate submissions from within the community were not counted as separate submissions, resulting in a total of 53 unique submissions being received.

This Response to Submissions Report provides a summary of actions since exhibition, details the comments received in the public submissions phase of the EIS, provides an analysis of these submissions and offers a detailed response to key themes. This Response to Submissions Report should be read in conjunction with the Amendment Report (Umwelt, 2023b).

The Goulburn River Solar Farm represents an essential part of the energy transition and:

- Is a direct response to the NSW and Commonwealth's Government's commitments to transition to renewable electricity generation in NSW.
- Will materially assist in addressing this shortfall by delivering approximately 550 MW of renewable energy capacity to the National Electricity Market to help reduce the need to keep coal fired power stations like Eraring Power Station online beyond their current committed retirement date.
- Supports the firming and storage of renewable energy in NSW through the development of either a 450 megawatt peak alternating current or 580 megawatt peak direct current Battery Energy Storage System, or a combination of the two (to a maximum 1,030 megawatt peak).
- Contributes significant capital investment within the Upper Hunter region, generating jobs during the construction and operational phases, providing indirect benefits to local services throughout the life of the Project (e.g. indirect employment creation in local and regional economies would include jobs supported through transportation, trade supplies, services, accommodation, catering, retail services, etc.), delivering additional income to host and other associated landowners, and providing benefits to the local community through the implementation of the proposed Benefit Sharing Program and planning agreements with local Councils.

The Project EIS confirms that, while there will be some unavoidable impacts, the extent of these impacts has been minimised through the design process to the extent practicable and appropriate management, mitigation and offset measures have been committed to address the residual impacts. On this basis, it is considered that the Project will result in a net benefit to the local and regional NSW community.

Abbreviations

Term/Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AEMO	Australian Energy Market Operator
AES	Accommodation and Employment Strategy
BDAR	Biodiversity Development Assessment Report
BESS	Battery Energy Storage System
BCD	Biodiversity Conservation Division
CEMP	Construction Environmental Management Plan
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSWMP	Construction Soil and Water Management Plan
CTMP	Construction Traffic Management Plan
DA	Development Application
DPI	Department of Primary Industries
DPE	NSW Department of Planning and Environment
DRMF	Decommissioning and Rehabilitation Management Framework
EIS	Environmental Impact Statement
ESCP	Erosion and Sediment Control Plan
FMP	Fire Management Plan
FRNSW	Fire & Rescue NSW
FSS	Fire Safety Study
FTE	Full Time Equivalent
HIPAP	Hazardous Industry Planning Advisory Paper
km	Kilometres
kV	Kilovolt
LGA	Local Government Area
Lightsource bp / LSbp	Lightsource Development Services Australia Pty Ltd
LLS	Local Land Services
m	Metres
MEG-GSNSW	Mining, Exploration & Geoscience Geological Survey of Sydney
MW	Megawatt (unit of power equivalent to 1 million watts)
MWRC	Mid-Western Regional Council
NEM	National Electricity Market
OEMP	Operational Environmental Management Plan
PHA	Preliminary hazard analysis

Term/Abbreviation	Definition
PV	Photovoltaic
RAP	Registered Aboriginal Party
RNP	NSW Road Noise Policy
Rts	Response to Submissions
SIA	Social Impact Assessment
SISD	Safe Intersection Sight Distance
TfNSW	Transport for NSW
TSR	Travelling Stock Route
TTIA	Traffic and Transport Impact Assessment
UHSC	Upper Hunter Shire Council
VPA	Voluntary Planning Agreement

Project-Specific Glossary of Terms

Project-Specific Term	Description
Amended Project	The Amended Project includes the elements of the Project as described in the EIS as well as changes which have been made in response to submissions on the EIS. These include: Project site access/egress amendments, upgrades to additional sections of Wollara Road and Ringwood Road, increased BESS capacity and an option of a decentralised BESS, minor Project layout modifications, construction of an additional transmission tower and a revised approach for workforce accommodation.
Access route	The proposed route for transporting material and equipment via Wollara Road to the Project Area during construction. Note: the Amended Project includes a revised access route for egress with a left turn at the Ringwood Road/Golden Highway intersection and use of a turnaround facility at Barnett Street, Merriwa.
Battery Energy Storage System (BESS)	The entire battery system comprising of a power conversion system (battery storage units and inverters), either centralised or distributed throughout the solar farm site. The BESS is housed in a series of outdoor containers. Note: the Amended Project details the amendments to the proposed BESS arrangements, including a centralised alternating current (AC) 450 MWp BESS option and a decentralised 580 MWp direct current (DC) BESS option plus the option for both.
Development Footprint	The maximum extent of ground disturbance associated with construction and operation of the Goulburn River Solar Farm as presented in the EIS and subsequently the Amendment Report. Note: the Amended Project has an amended Development Footprint.
Emergency access points	Proposed along Wollara Road to facilitate emergency and NPWS vehicle access, these access points would not be utilised for the construction of the Project.
Involved dwelling	Dwelling located on land owned by landholders involved in the Project.
Primary access point	The Project's main access from Wollara Road, located on the southern portion of the Project Area.
Project Area	The total area investigated during various specialist studies and the broader property the Development Footprint will be located on. The Project Area covers approximately 2,000 ha and includes the Solar Farm Site, the BESS development area and ancillary infrastructure. This includes a 10 m set back (i.e. APZ) from the perimeter of the Site boundary. This does not include road upgrades and repairs on Wollara Road and Ringwood Road. It also comprises the proposed Biodiversity Stewardship Site.
Proponent	Lightsource Development Services Australia Pty Ltd (Lightsource bp).
The EIS Project	The proposed Goulburn River Solar Farm. The Project includes the construction, operation and decommissioning of a solar farm with capacity of up to 550 MW, BESS and associated infrastructure. Including the various road repairs and upgrades to Ringwood Road.
Road Repairs and Upgrades	Road repairs including resealing, regrading and re-sheeting various sections along Ringwood Road, upgrade of the intersection of the Golden Highway and Ringwood Road as well as upgrades to parts of Wollara Road and Ringwood Road.

Project-Specific Term	Description
	Note: the Amended Project includes additional road repairs and upgrades.
Road Repairs and Upgrades Area	The total area which forms the road repairs proposed in the EIS and subsequently the Amendment Report.
Sensitive Receiver	Non-host landholders' dwellings in proximity to the Project Area that may be sensitive to noise, vibration, visual, traffic and other impacts. Potential impacts to sensitive receivers were investigated in the EIS and the Amendment Report.
Site	The propert(ies) in which the Project Area is located.
Solar Farm Site	The part of the Project Area where the solar farm and associated infrastructure are located on two freehold properties.
Transmission line	The existing 500 kV overhead transmission line located in the south-eastern corner of the Project Area that would connect the solar farm to the grid connection point into the National Energy Market network.

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1.0 Introduction

Lightsource Development Services Australia Pty Ltd (Lightsource bp; LSbp) is proposing to develop the Goulburn River Solar Farm (the Project) to generate solar renewable energy to supply New South Wales (NSW). The Project is located within the Upper Hunter Local Government Area (LGA) of NSW, approximately 28 km south-west of the township of Merriwa. The Project's location and regional context is shown in **Figure 1.1**. The Project is located on an agricultural property between Merriwa (to the north-east) and Coggan (to the south-east) NSW, and is immediately surrounded by the Goulburn River National Park.

The Project Area comprises two freehold properties that span across multiple lots and cover an area of approximately 2,000 hectares (ha). The majority of the Project Area is located on freehold land, with some areas of Crown Land (road and travelling stock route) in proximity to or within the Project Area (refer to **Figure 1.2**).

The Project, as described in the Environmental Impact Statement (EIS) (Umwelt, 2023), encompassed a Development Footprint of approximately 799.5 ha and included the construction, operation, maintenance and decommissioning of approximately 550 megawatt peak (MWp) of solar photovoltaic (PV) generation with a Battery Energy Storage System (BESS) with 280 MWp and 570 megawatt hour (MWh) capacity. The Project as described in the EIS also included supporting infrastructure, a substation and connection to an existing 500 kilovolt (kV) transmission line. Parts of Ringwood Road were proposed to be upgraded, including two culverts at Bow River and Killoe Creek.

The Project is a State Significant Development (SSD) under the State Environmental Planning Policy (Planning Systems) 2021, being a development for the purposes of electricity generating works and with a capital investment value of over $30 million. An EIS for the Project was submitted in May 2023. Public exhibition of the EIS took place between 13 June 2023 and 10 July 2023 where a total of 53 unique submissions were received, including one (1) from Upper Hunter Shire Council (UHSC) and one (1) from Mid-Western Regional Council (MWRC). Of the 53 total unique submissions, the Project received 45 objecting submissions, five (5) supporting submissions and three (3) submissions providing comment.

This Response to Submissions (RtS) Report provides a summary of actions since exhibition, details the comments provided in the public submissions phase of the EIS, analysis of these submissions and offers a detailed response to each (in **Section 4.0** and **Section 5.0**).

LSbp has continued to consult with landholders and stakeholders. Ongoing consultation and consideration of the submissions received has led to amendments to the Project and the preparation of an Amendment Report (see **Section 1.1**) to assess the proposed Amended Project, as described in **Section 1.2.2** and **Section 3.1** of this RtS. The Project, as defined in the EIS (Umwelt, 2023) will henceforth be referred to as the EIS Project and the Project encompassing the proposed changes will be referred to as the Amended Project.

The Project aligns with the renewable energy strategies of the State and Federal governments. The National Electricity Market (NEM) needs to rapidly transition to renewable energy to support the NSW Climate Change Policy Framework, as well as the Commonwealth Government's commitments under the Paris Agreement. At present, additional renewable energy capacity is being added to the NEM at a lower rate than what the Australian Energy Market Operator (AEMO) has identified as required to achieve the transition to renewable energy (Parkinson, 2023). The Project will materially assist in addressing this shortfall by delivering renewable energy capacity to the NEM to help replace the generation capacity which will be lost when NSW's largest power station, Eraring, closes in 2025.

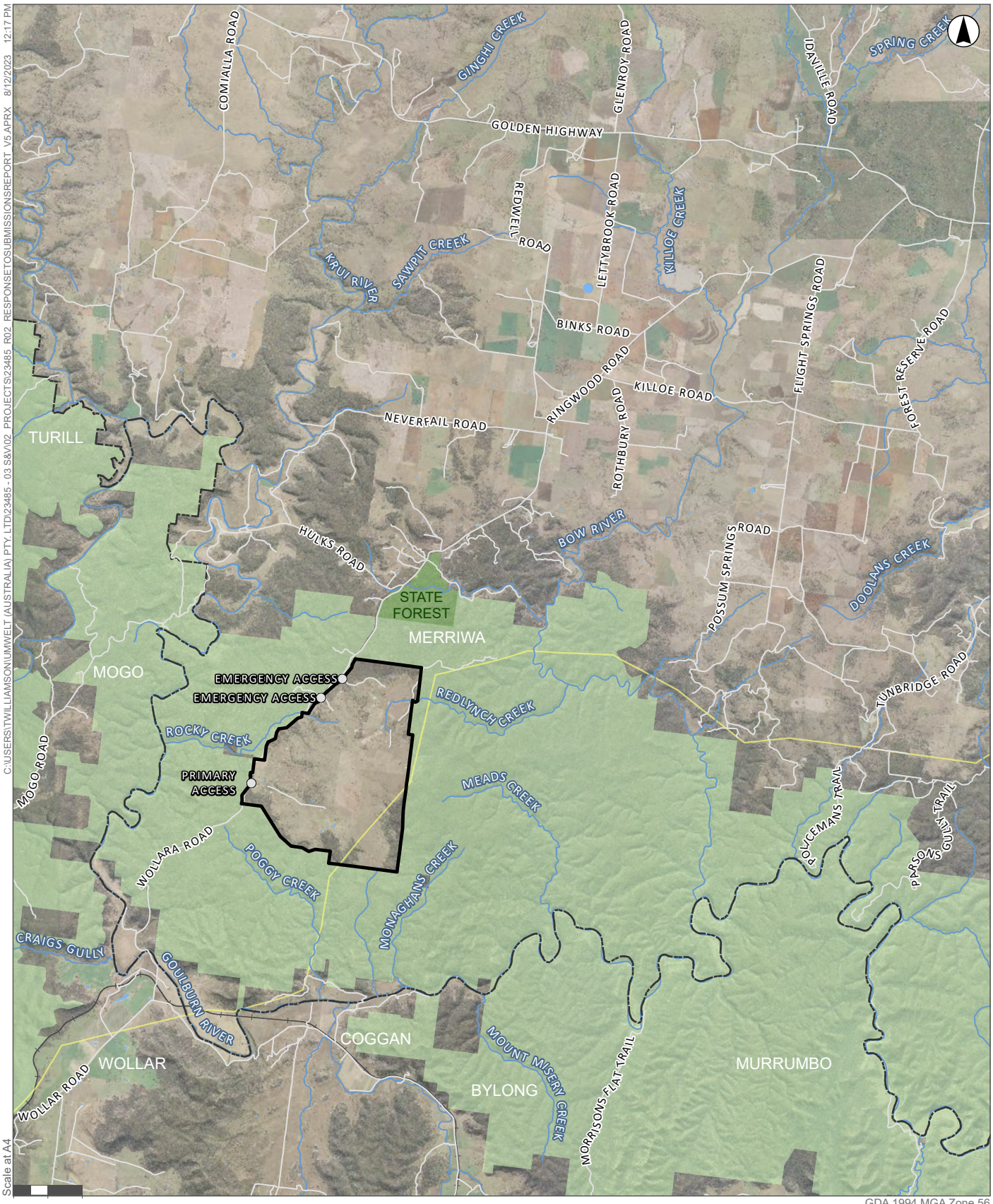
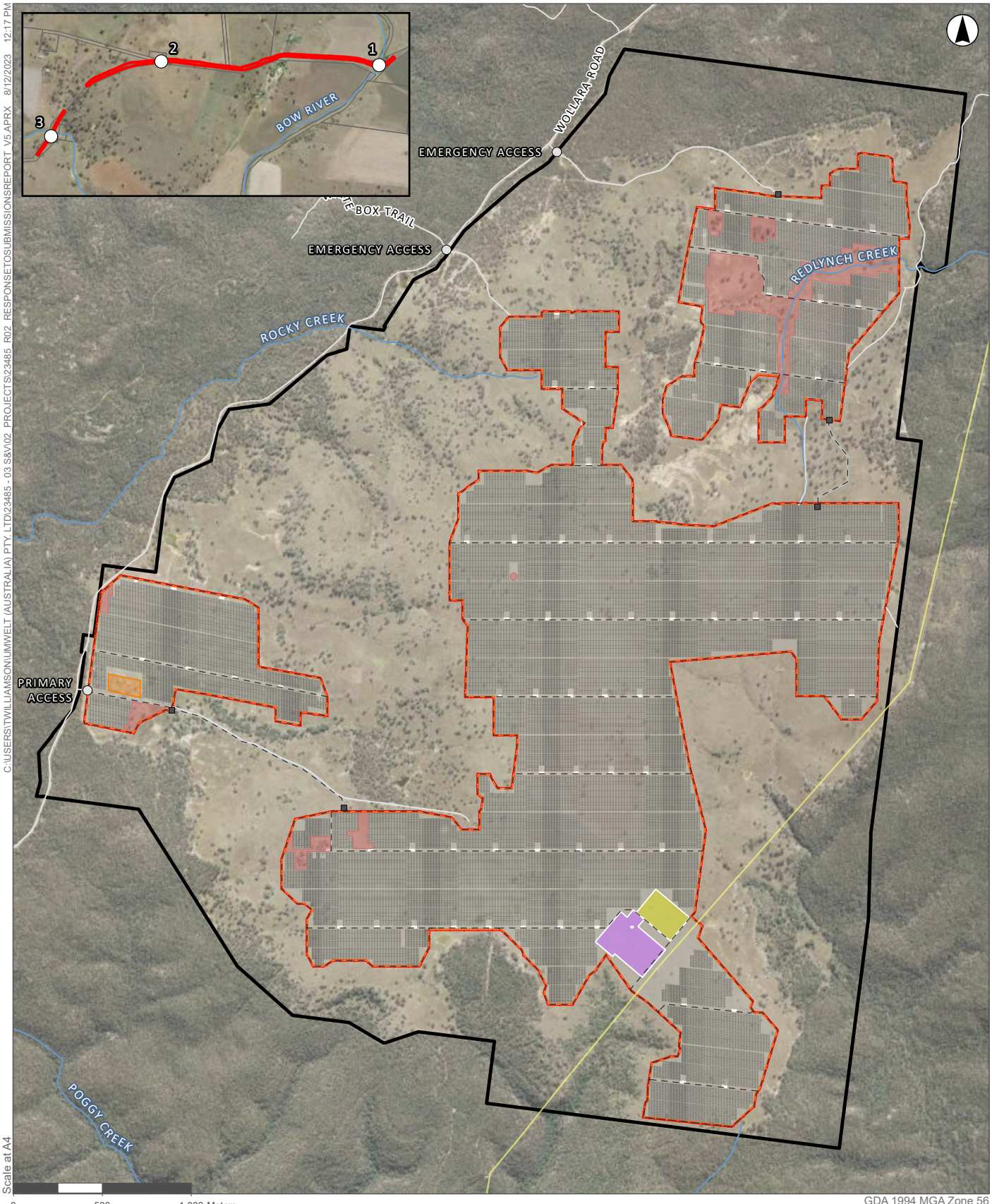


FIGURE 1.1

Location and Regional Context

Image Source: ESRI Basemap (2022) **Data source:** NSW LPI (2022), NSW DSFI (2022); NPWS Estate (2022); Lightsource BP (2022)



Legend

- Gate
- Access Points
- Electricity Transmission Line
- Proposed Access Tracks
- Watercourse
- Roads and Tracks
- Security Fence
- Project Area
- Road Upgrades Area
- Fire Break
- Battery Energy Storage System
- Substation
- Inverters
- Compound Area
- Exclusion Zones - Environmentally Sensitive Areas
- Development Footprint
- Solar Panel Footprint

FIGURE 1.2

EIS Project Layout

Image Source: ESRI Basemap (2022) **Data source:** NSW LPI (2022), NSW DSFI (2022); NPWS Estate (2022); Lightsource BP (2022)

1.1 Amendment Report

Ongoing consultation and consideration of the submissions received has led to several Project design amendments. These changes are detailed in an Amendment Report (Umwelt, 2023b) which undertakes further assessment of potential environmental and social impacts as a result of these changes.

The Amendment Report is provided in two parts. Part A comprises all the assessments except for Biodiversity. Part B includes the Assessment of Impacts for Biodiversity. This RtS should be read in conjunction with the Amendment Report (Umwelt,2023b).

1.2 Project Overview

1.2.1 The EIS Project

The Project, as described in the EIS (Umwelt, 2023), included the construction, operation, maintenance, and decommissioning of a PV solar farm with a capacity of approximately 550 MWp, to supply electricity to the national electricity grid. The EIS Project proposed a BESS with a capacity of 570 MWh and an electrical substation to connect the solar farm to the existing 500 kV transmission line that runs through the Project Area. In addition to this, the Project would include road repair and upgrades along Ringwood Road.

The key components of the Project are shown in **Figure 1.2.**

1.2.2 The Amended Project

The Amended Project is described in detail within the Amendment Report (Umwelt, 2023b) and in accordance with the Guideline summarised in **Section 3.1** of this Report.

1.2.3 Comparison of Project Components

A summary of key changes between the EIS Project and Amended Project is provided in **Table 1.1** below.

Table 1.1 Comparison of proposed amendments to the Project to that assessed in the EIS

Project Stage	EIS Project	Amended Project	Difference between EIS Project and Amended Project
Project Component			
Transport and Road – comprising Amendment 1. Transport Route Amendments and Wollara Road and Ringwood Road Upgrades			
Transport route to and from the Site	Proposed to utilise the Golden Highway, Ringwood Road, and Wollara Road from the north, and Wollar Road from the south. It is noted that a small number of light vehicles for workers who reside to the south may use Wollar Road.	Amendments to transport route to restrict construction vehicles to a left in and left out movement at the Golden Highway and Ringwood Road intersection. Amendment to distribution of trips with a larger proportion utilising the northern (and preferred) route. It is noted that a small number of light vehicles for workers who reside to the south may use Wollar Road. Note: 6–12 oversize overmass (OSOM) vehicle movements will still use a right turn movement onto Golden Highway, as they will be under traffic management.	A larger proportion of project-related transport utilising the northern (and preferred) route. As above, change to the traffic and social impacts associated with the accommodation of workforce and transport to Site.
Wollara Road	Use of 4.7 km of unsealed road network.	Realignment, widening and sealing a 4.7 km section of Wollara Road prior to use.	Realignment, widening and sealing a 4.7 km section of Wollara Road prior to use.
Ringwood Road	1.8 km of existing sealed road network and upgrade of two (2) culvert bridges.	Realignment, widening and sealing of 3.4 km of Ringwood Road across two sections and upgrade of two (2) culvert bridges.	An additional 1.6 km of Ringwood Road will now be widened and sealed.
Golden Highway and Ringwood Rd	No works proposed in EIS.	Improvements to safe intersection sight distance (SISD) for left turn movements into and out of Ringwood Road from the Golden Highway. • Vegetation removal and minor lane widening works on the eastern side of the intersection. • Addition of an acceleration lane on the western side of the intersection including tree removal. • Formalisation of the bus stop pullover area.	Upgrade works are proposed at the intersection to improve SISD.

Project Stage	EIS Project	Amended Project	Difference between EIS Project and Amended Project
Barnett Street	No works proposed in EIS.	Diversion of construction vehicle egress west at the Golden Highway and Ringwood Road intersection to a vehicle turning area on Barnett Street, Merriwa. Note: 6-12 Oversize Overmass (OSOM) vehicles will still use a right turn movement onto Golden Highway as they will be under traffic management.	Use of the Barnett Street vehicle turning area to allow the safe movement of construction-related vehicles (up to 19 m) and facilitate the left in/left out traffic route during construction.
BESS – comprising Amendment 3 BESS Design Amendments			
BESS Configuration	Centralised BESS option proposed.	Centralised and decentralised BESS options proposed.	Addition of a decentralised BESS option or a combined centralised and decentralised combined BESS option. Project will be delivered with one of the three options permitted.
Centralised BESS capacity (MWp)	280 MWp	450 MWp	+170 MWp
Centralised BESS capacity (MWh)	570 MWh	900 MWh	+330 MWh
Decentralised BESS capacity (MWp)	Not proposed in EIS.	580 MWp	+580 MWp
Decentralised BESS capacity (MWh)	Not proposed in EIS.	1160 MWh	+1160 MWh
Centralised and Decentralised BESS capacity (MWp)	Not proposed in EIS.	1,030 MWp	+750 MWp
Centralised and Decentralised BESS capacity (MWh)	Not proposed in EIS.	2,060 MWh	+1,490 MWh
Transformers	4	4	No change.
Inverters (PCS)	104	140	+36

Project Stage	EIS Project	Amended Project	Difference between EIS Project and Amended Project
Project Layout – Comprising Amendment 4 Development Footprint Modifications			
Project Area	Approximately 2,000 ha.	Approximately 1,996.5 ha.	Reduced following the amendments to the Project Area to avoid further development on TSR 44841.
Development Footprint (ha)	Approximately 799.5 ha.	Approximately 792.19 ha.	Reduced following the relocation of solar arrays, access road and infrastructure away from Box Gum Woodland and Regent Honeyeater habitat, and TSR 44841.
Internal Access Road width (m)	Four (4) m, with a six (6) m access road leading to the substation.	10 m at selected locations between Project areas to accommodate the proposed buried cable easements. Relocation of the access road connecting the northern portions of the site to cover a shorter distance.	Increase ten (10) m at selected locations to accommodate the proposed buried cable easements. Relocation of the access road connecting the northern portions of the site to further reduce impacts on Box Gum Woodland and Regent Honeyeater habitat.
Development Footprint – Comprising Amendment 4 Development Footprint Modifications			
Development Footprint (physical relocation description)	Solar arrays located within the Development Footprint as per Figure 3.1 of the EIS.	Relocation and removal of solar arrays within the Development Footprint. Removal of TSR4481 from the Development Footprint and Project Area including panels, fencing and landscaping.	Modifications to the internal layout within the Development Footprint. Reduction of total size of Development Footprint. Reduction of Regent Honeyeater credits and Box Gum Woodland credits.
Transmission Network – Comprising Amendment 5 Additional Transmission Tower			
Transmission tower	Not included in EIS.	Transmission tower to be constructed within south-eastern portion of the Project Area, within the existing transmission line easement.	One (1) additional transmission tower.
Accommodation – Comprising Amendment 6 Workforce Accommodation			
Location of Accommodation	Dispersed across nearby towns and villages within the Upper Hunter and Mid-Western Local Government Areas (LGAs).	Largely consolidated to Merriwa Workers Accommodation.	A large proportion of the workforce will be accommodated in a central location approximately 31 km from the Site in Merriwa. Change to the traffic and social impacts associated with the accommodation of workforce and transport to Site.

1.3 Exhibition and Submissions Overview

The EIS was placed on public exhibition from 13 June 2023 to 10 July 2023. During public exhibition, the EIS received:

- 64 submissions, of which 12 submissions were received from the same person or group, resulting in 53 unique submissions (including two council submissions).
- Of these 64, the Project received:
    - 45 objecting submissions
    - five (5) supporting submissions
    - three (3) submissions providing comment.

An analysis of the submissions received is provided in **Section 2.0**.

The NSW Department of Planning and Environment (DPE) issued correspondence dated 11 July 2023 requesting the preparation of a RtS to detail responses to issues raised in the submissions and agency advice. This RtS has been prepared by Umwelt on behalf of LSbp in accordance with the *State Significant Development Guidelines – Preparing a Submissions Report* (the Guideline) (DPE, 2022) to address the key issues raised in the submissions and agency advice.

An Amendment Report (Umwelt, 2023b) has been prepared separately to this RtS which further details the Project amendments since submission, provides an updated project description, revised assessment of impacts supported by relevant updated technical reports and an updated summary of management and mitigation measures. This RtS should be read in conjunction with the Amendment Report.

1.4 Report Structure

The structure of this RtS is presented in **Table 1.2** below, in accordance with the DPE Guideline (2022).

Table 1.2 Structure of the RtS Report

Section	Heading	Description
Section 1.0	Introduction	Brief summary of the Approved Project and the EIS Project to provide context for the submissions.
Section 2.0	Analysis of Submissions	Analysis of the issues and themes raised in the submissions.
Section 3.0	Actions taken since exhibition	Summarises the actions taken since the exhibition, including a summary of the Amended Project.
Section 4.0	Response to submissions – Government agency	Detailed response to the issues raised in the government submissions.
Section 5.0	Response to submissions – Community	Detailed response to the issues raised in the community submissions.
Section 6.0	Justification for Project	Updated justification and evaluation of the merits of the EIS Project.
Section 7.0	References	References.
Appendix A	Submissions register	A register of all the submissions received during public exhibition.
Appendix B	Updated mitigation measures	Updated mitigation measures table.

2.0 Analysis of Submissions

2.1 Breakdown of Submissions

The EIS Project was placed on public exhibition from 13 June 2023 to 10 July 2023. During the public exhibition period, 64 public submissions were received. In accordance with the Guideline (DPE, 2022) multiple submissions from the same person or group are counted as one submission. Accordingly, 11 duplicate submissions from within the community were not counted as separate submissions, resulting in a total of 53 unique submissions being received. The analysis contained within **Section 2.0** is undertaken for the 53 unique submissions. Of the 53 unique submissions, the Project received 45 objecting submissions, five (5) supporting submissions and three (3) submissions providing comment.

Two (2) Government submissions were received from local councils (UHSC and MWRC). Twelve (12) submissions were also received from NSW Government agencies.

Table 2.1 provides a breakdown of the submissions received. **Appendix A** includes the Submissions Register.

Table 2.1 Submission Breakdown

Category		No. Submissions
Government	State agencies or public authorities	12
	Local Councils	2
Public	Stakeholder groups	2
	Individuals	49

2.1.1 Government Submissions

As outlined in **Table 2.1**, submissions were received from 12 NSW Government agencies, including:

- Biodiversity Conservation Division (BCD)
- National Parks and Wildlife Service (NPWS)
- Mining, Exploration & Geoscience Geological Survey of Sydney (MEG-GSNSW)
- NSW Rural Fire Service
- Heritage NSW
- Fire & Rescue NSW
- Transport for NSW (TfNSW)
- Forestry Corporation of NSW
- Department of Primary Industries (DPI) – Agriculture

- DPI – Fisheries
- DPE – Water
- DPE – Crown Lands.

Submissions from government agencies are not identified as support or object. The content of government submissions is further detailed and addressed in **Section 4.0**. Submissions were also received from two (2) local councils (refer to **Table 2.1**):

- MWRC
- UHSC.

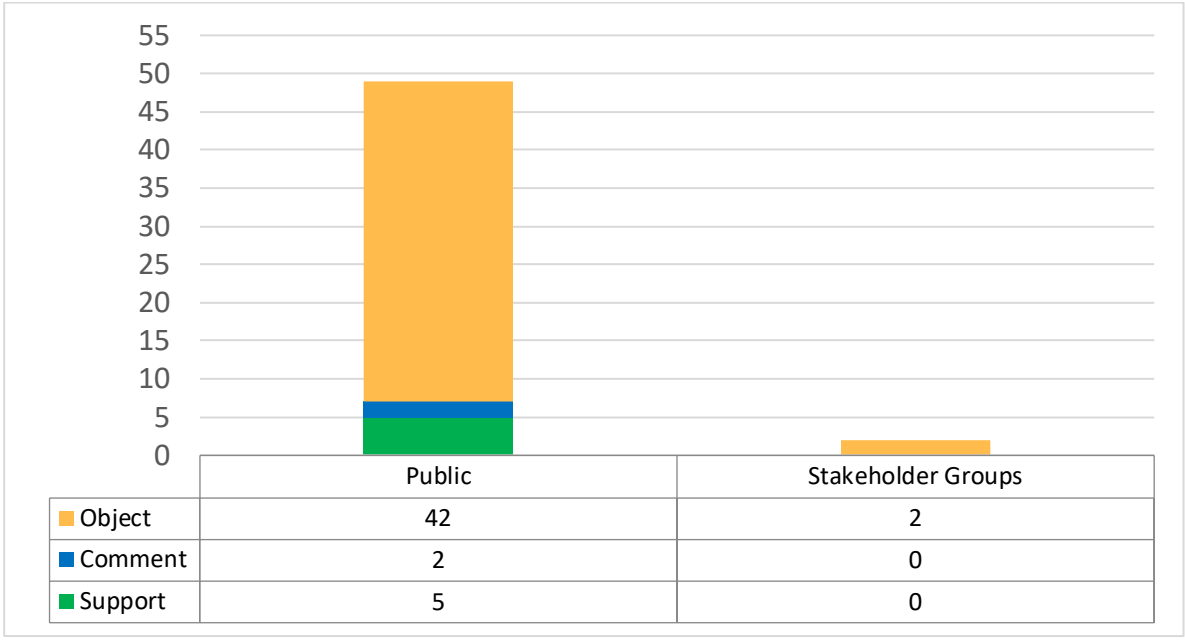
Of the two submissions received from local Councils, MWRC objected and UHSC did not identify opposition or support for the Project but provided comment only. It is noted the Project is wholly within the UHSC area, and as such the objecting council submission received from MWRC does not trigger a referral to the NSW Independent Planning Commission (IPC) for determination.

2.1.2 Public Submissions (Stakeholder Groups and Individuals)

During the exhibition period, a total of 53 unique submissions were received. Two of these were from local government and do not contribute to calculation of the total public submissions.

Of the total public submissions, two were submitted by stakeholder groups, and 49 were from individual contributors totalling 51 unique public submissions. The two stakeholder groups were Save Our Surroundings and the Hay Riverina State Group, both of which objected to the Project.

Of the 51 public submissions (excluding duplicate submissions), 42 (82.4%) were individual objections, two (3.9%) were stakeholder group objections, two (3.9%) provided comment, and five (9.8%) were in support of the EIS Project as illustrated on **Graph 2.1** below.



	Public	Stakeholder Groups
Object	42	2
Comment	2	0
Support	5	0

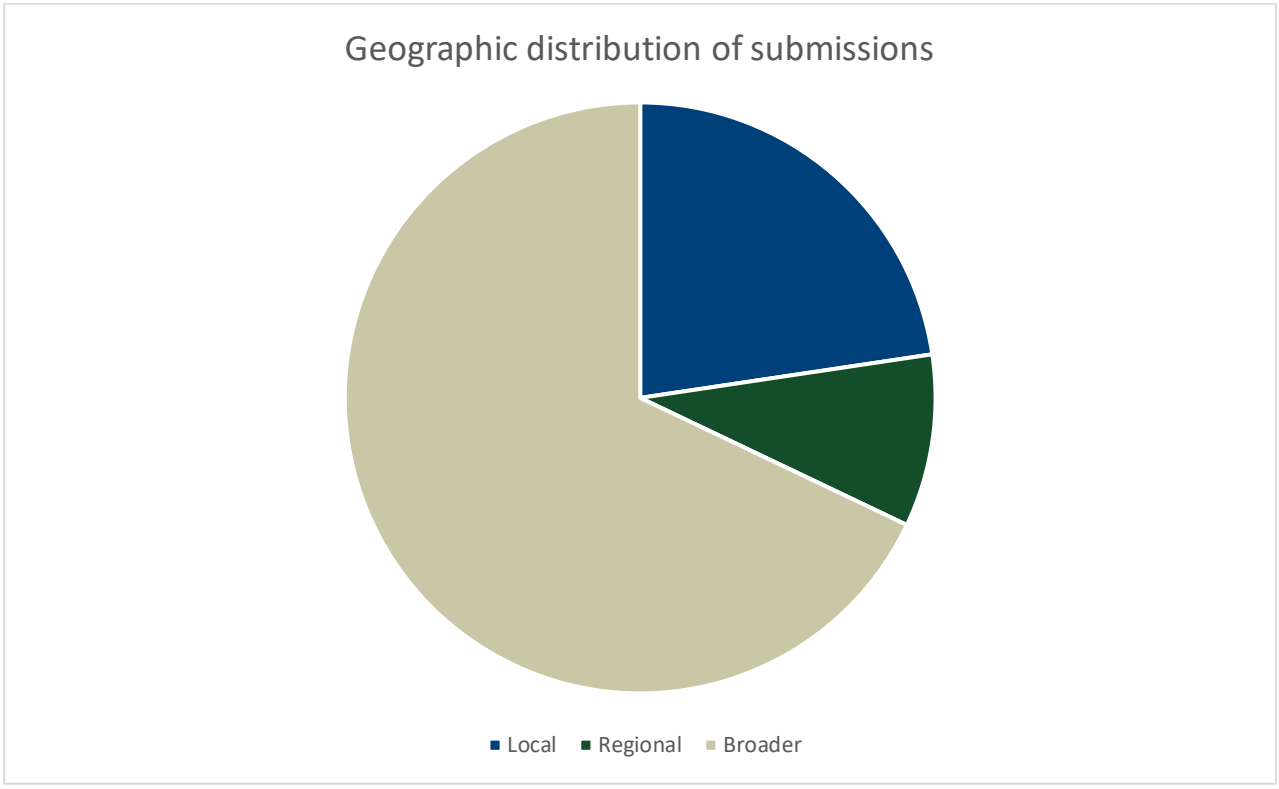
Graph 2.1 Public Submissions Classification

Submissions were analysed based on proximity to the Project Area to assess the level of community interest across the following four categories, in accordance with the Guideline (DPE, 2022):

- local (within approximately 5 km from the Project Area, including the locality of Merriwa)
- regional (between 5 and 100 km from the Project Area)
- broader community (more than 100 km from the Project Area)
- address withheld.

It is noted that some residences in the towns listed as local may be greater than 5 km (i.e., the township of Merriwa) from the Project Area. The analysis by suburb is therefore conservative in its approach as further interrogation is not possible with the data available.

Of the 53 unique submissions received, 12 (22.6)% were received from the local area, five (9.4)% from the regional area and 36 (67.9)% from the broader community (i.e. beyond 100 km from the Project), as illustrated on **Graph 2.2** below.



Graph 2.2 Geographic Distribution of Unique Submissions

As illustrated above, the majority of submissions were received by the broader community, as opposed to the local and regional communities. The geographic distribution of the submissions received on the Project is visually presented on **Figure 2.1** below.

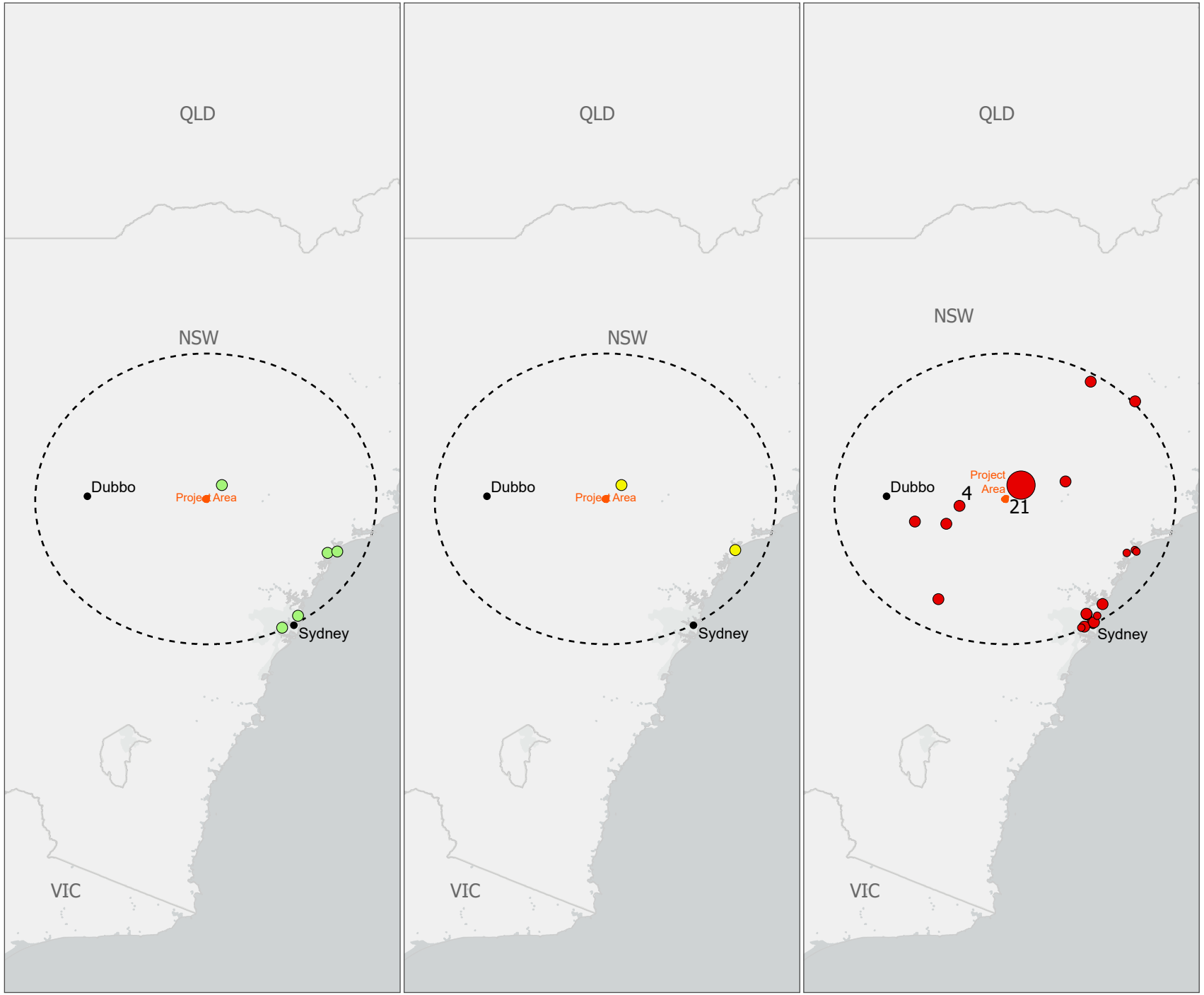


FIGURE 2.1

Submission Locations

Legend

- Major cities and towns
- State border

Support submissions

- 1

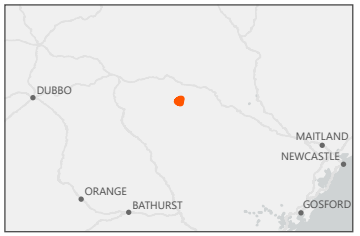
Comment submissions

- 1

Object submissions

- 1 - 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25

Please note, submissions mapped are only those within a 200km boundary of the Project site. Submissions from locations outside this boundary are listed below.
- NSW = 15 objecting submissions
- Queensland = 3 objecting submissions
- Victoria = 4 objecting submissions



0 250

Kilometers

Scale: 1:0 at A4
GDA2020

Image Source: ESRI Basemap (2022) | **Data Source:** NSW DFSI (2022)

2.2 Categorisation of Issues – Public Submissions

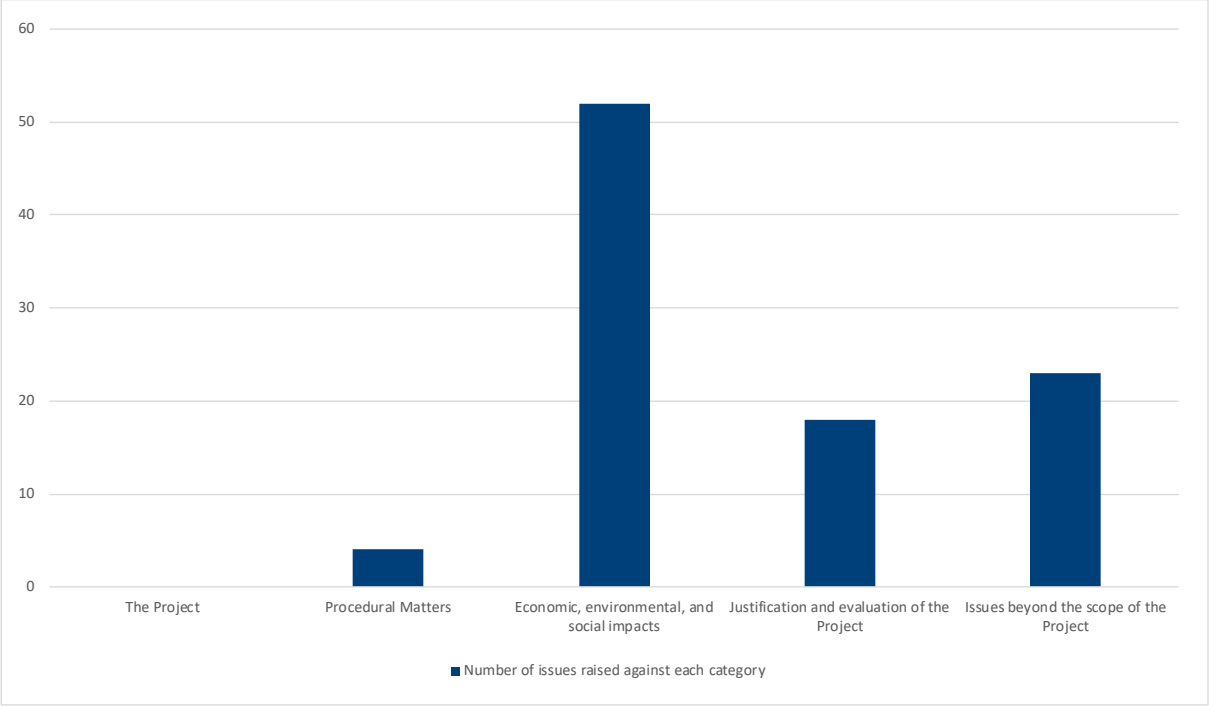
Analysis was undertaken to categorise the issues raised in public submissions, in accordance with the Guideline (DPE, 2022) into key categories, including:

- the EIS Project (e.g. the site, the Project Area, the physical layout and design, key uses and activities, timing)
- procedural matters (e.g. level or quality of engagement, compliance with DPE requirements, identification of relevant statutory requirements)
- economic, environmental and social impacts of the EIS Project (e.g. amenity, traffic, biodiversity, heritage, etc.)
- justification and evaluation of the EIS Project (e.g. consistency with Government plans, policies or guidelines)
- issues that are beyond the scope of the EIS Project (e.g. broader policy issues), or not relevant to the Project (e.g. solar farms in general).

These issue categories were then divided into themes and sub-themes where relevant to provide greater definition of the issues raised. Further details of the categorisation of issues are provided in the following sections.

2.2.1 Objecting Issues – Public Submissions

The economic, environmental and social impacts of the EIS Project were the most frequently raised category of issues in the objecting submissions (refer to **Graph 2.3** below). Issues beyond the scope of the EIS Project were the second most frequently raised category, followed by justification/evaluation issues and procedural matters. It should be noted that many submissions raised multiple issues categories and multiple themes and sub-themes within each issue category, resulting in a larger number of issues when compared to the total number of unique public submissions.



Graph 2.3 Categorisation of Objecting Submissions

General Issues Related to the EIS Project

No issues were raised in objecting public submissions in relation to the Project as a whole.

Procedural Matters

Procedural matters were raised on four (4) occasions in objecting public submissions, and mainly related to the adequacy of the EIS, and the adequacy of consultation undertaken throughout preparation of the EIS.

Responses to objections raised in relation to procedural matters are addressed in **Section 5.1.2**.

Economic, Environmental and Social Impacts of the Project

Economic, environmental and social impacts of the Project were raised on 52 occasions in objecting public submissions. There were 13 key themes to the environmental, social and economic issues raised in the objecting submissions, including:

- Roads
- Change of land use
- Economic
- Biodiversity
- Project end of life (i.e. decommissioning and rehabilitation)
- Hazards and risks
- Visual

- Impacts to water and waterways
- Noise
- Heritage (historic)
- Social and community cohesion disturbance
- Cumulative impacts
- Livelihoods.

The most frequently raised themes in objecting submissions related to economic, environmental and social impacts including potential livelihood, socio-economic, roads and biodiversity impacts. Responses to objections raised in relation to economic, environmental and social impacts are provided in **Section 5.1.3**.

Justification and Evaluation of the EIS Project

Issues regarding the justification and evaluation of the EIS Project were raised on 18 occasions in objecting public submissions. Issues raised were generally related to the perceived reliability and inefficiencies of solar energy and its role in the State's transition to renewable energy, as well as the financial viability of the Project.

Responses to objections raised in relation to the justification and evaluation of the EIS Project are addressed in **Section 5.1.4**.

Issues Beyond the Scope of the EIS Project

Issues that were beyond the scope of the EIS Project were raised on 23 occasions in objecting public submissions. These were generally related to the potential for increased electricity prices for NSW residents, a general disbelief in renewable energy and solar farms in general, and lack of trust in decision-making governing bodies.

Responses to objections raised in relation to issues beyond the scope of the EIS Project are addressed in **Section 5.1.5**.

2.2.2 Supporting Submissions and Comments

Themes raised in supporting submissions and comments from the community generally related to the reduction in greenhouse gas emissions as a result of the transition to renewable energy. Example quotes from supporting submissions are included below.

Supporting submissions are acknowledged and will not be addressed further in this report.

> *'I support this project to continue the transition to clean energy.'* S-59631996
>
> *'I believe this project is very sound from an environmental viewpoint. In an attempt to curve greenhouse emissions this project will be an outstanding contribution to the cause.'* S-59264957

3.0 Actions Taken Since Exhibition

Since the exhibition of the EIS Project (Umwelt, 2023), a number of actions have been taken in response to submissions and ongoing consultation with landholders and stakeholders more broadly. These include:

- Project amendments to address issues raised during consultation with stakeholders and EIS submissions (refer to **Section 3.1 and the Amendment Report**).
- Further assessment of Project amendments and issues raised in submissions (refer to **Section 3.2 and the Amendment Report**).
- Further consultation with relevant agencies, stakeholders, landholders and the broader community (refer to **Section 3.3 and the Amendment Report**).

3.1 Project Amendments

Several amendments have been made to the EIS Project in response to ongoing consultation with agencies, progression of detailed design and submissions received during the exhibition period. The proposed Project amendments are summarised in **Table 3.1** and shown in **Figure 3.1**.

Table 3.1 Summary of Proposed Amendments to the EIS Project

Amendment Number	Description	Detailed Description
1.	Transport Route Amendments	Amendments to the transport route including: • A revised transport access/egress route to improve road safety, including the diversion of construction vehicles egress west at the Golden Highway and Ringwood Road intersection to a vehicle turning area on Barnett Street, Merriwa; and • An upgrade of the intersection of the Golden Highway and Ringwood Road with an acceleration lane added and the formulation of two bus stops on Ringwood Rd to support these movements.
2.	Wollara Road and Ringwood Road Upgrades	• Additional upgrades to 4.7 km of Wollara Road and 1.6 km of Ringwood Road.
3.	BESS Design Amendments	• Increased centralised BESS capacity and option of a decentralised BESS including the option to host both centralised and decentralised BESS units.
4.	Development Footprint Modifications - Minor	Modifications to the Development Footprint and internal layout including: • A re-alignment of the Development Footprint to avoid TSR 44841, noting that existing access will be maintained across TSR 44841. • Relocation or removal of solar arrays within the Development Footprint to further avoid serious and irreversible impacts (SAII) to important habitat for the Regent Honeyeater and Box Gum Woodland.

Amendment Number	Description	Detailed Description
		• Relocation of the access road connecting the northern portions of the site to cover a shorter distance and further avoid SAII to important habitat for the Regent Honeyeater and Box Gum Woodland. • An increase in the width of two (2) internal access roads which connect the western and northern portions of the site from 6 m (as originally proposed in the Project EIS) to <10 m, to allow for underground transmission corridors as part of the internal reticulation network, rather than overhead transmission cables. • Reduction of the development footprint to 792.19 ha as a result of the above modifications.
5.	Additional Transmission Tower	• Construction of an additional transmission tower within the existing easement of the 500 kV transmission line adjacent the BESS/substation.
6.	Workforce Accommodation	• Additional assessment and revised approach for workforce accommodation.

A more detailed description of the proposed Amended Project is provided in the Amendment Report (Umwelt, 2023b), submitted alongside this RtS Report.

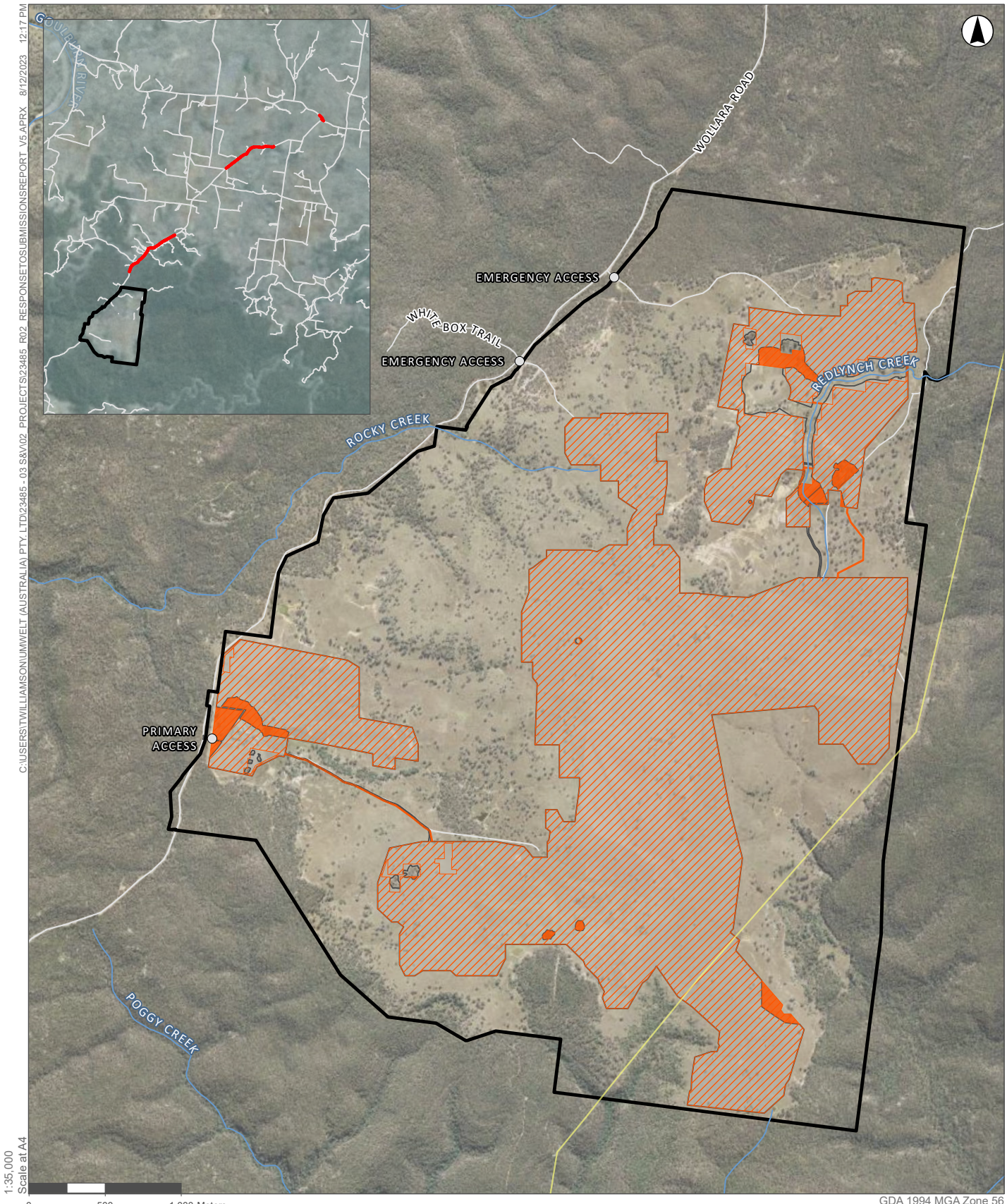


FIGURE 3.1

Project Amendments

Image Source: ESRI Basemap (2022) **Data source:** NSW LPI (2022), NSW DSFI (2022); NPWS Estate (2022); Lightsource BP (2022)

3.2 Further Assessment

Several specialist reports originally prepared to support the Project EIS have been amended or updated to address the amendments proposed as part of the Amended Project and submissions received during the exhibition of the EIS Project. These documents are referenced throughout this RtS and are included as appendices to the Amendment Report (Umwelt, 2023b). Detailed summaries of assessment findings are provided in the Amendment Report (Umwelt, 2023b) and are referenced where appropriate in the responses to agency and public submissions in **Section 4.0** and **Section 5.0**, respectively.

- Amended Traffic and Transport Impact Assessment (TTIA).
- Amended Aquatic Impact Assessment.
- Preparation of an Accommodation and Employment Strategy (AES), a new document not included in the Project EIS.
- Amended Noise and Vibration Impact Assessment.
- Amended Preliminary Hazard Analysis (PHA).
- Amended Landscape Character and Visual Impact Assessment.
- Addendum Aboriginal Cultural Heritage Assessment Report (ACHAR).
- Amended Water Resource Impact Assessment.
- Amended Solar Farm and Public Road & Culverts Upgrades Biodiversity Development Assessment Reports (BDAR).

3.3 Ongoing Consultation

Since the public exhibition of the Project EIS, LSbp has continued to consult with landholders and stakeholders more broadly. LSbp has also undertaken further consultation with government agencies in response to the advice received during exhibition of the EIS Project. Further details on the consultation undertaken is provided in the Amendment Report (Umwelt, 2023b).

3.3.1 Accommodation and Employment Strategy

LSbp has prepared an AES in response to agency and community submissions received regarding the appropriate planning and management of accommodation and housing for the Project's construction workforce. Further information regarding the AES are detailed in Section 7.3.1 of the Amendment Report. The AES is appended to the Amendment Report (Umwelt, 2023b) and will be finalised as part of the required post-approval management plans.

Since submitting the EIS, LSbp has negotiated an option for up to 300 personnel to be accommodated at a proposed Merriwa workforce accommodation camp, with potential to increase the number of rooms if required. This option will substantially avoid placing increased pressure on existing accommodation providers.

3.3.2 Agency Consultation

Consultation has been undertaken by LSbp with government agencies since submission of the EIS, as summarised in **Table 3.2** below.

Table 3.2 Summary of Ongoing Agency Consultation

Agency consulted with	Date of consultation	Summary of consultation
DPE	20 July 2023	• Submissions and confirmation of the determining authority being DPE and not the Independent Planning Commission. • Proposed Project amendments. • Proposed agency consultation to address submissions, including BCD/NPWS, TfNSW and Crown Lands.
BCD	October 2023	• BCD recommendations and proposed response. • Additional field survey and updates to BDARs. It is noted that ongoing consultation with BCD has occurred throughout the design of the Amended Project, as outlined in the Amendment Report (Umwelt, 2023b).
NPWS	August - November	• NPWS recommendations and proposed response. • Ongoing consultation. • BSA. It is noted that ongoing consultation with NPWS has occurred throughout the design of the Amended Project, as outlined in the Amendment Report (Umwelt, 2023b).
Crown Lands	August - November	• Landowner approval. • Closure of crown roads.
TfNSW	August - November	• Summary of proposed Project amendments to address TfNSW submission. • Discussion on additional traffic and transport assessment to adequately assess proposed Project amendments. It is noted that ongoing consultation with TfNSW has occurred throughout the design of the Amended Project, as outlined in the Amendment Report (Umwelt, 2023b).
UHSC	July-December	Ongoing consultation in preparation of the RtS, Amendment Report and AES.
MWRC	6 July 2023	Consultation to discuss MWRC concerns as detailed within the MWRC submission.
	July-October	Consultation in preparation of the AES.
Muswellbrook Shire Council	October 2023	Consultation in presentation of the AES.

3.4 Registered Aboriginal Party Consultation

A Project update letter was distributed to the Registered Aboriginal Parties (RAPs) for the Project on 29 August 2023. The letter included a status update following public exhibition of the Project, and a summary of the amendments proposed under the Amended Project. The letter also notified the RAPs that additional Aboriginal heritage surveys would not be required to assess the Amended Project. Further details are provided in the Amendment Report.

4.0 Response to Government Submissions

4.1 Agency Submissions

4.1.1 Biodiversity Conservation Division (BCD)

A response to BCD's submission, including additional field survey results and assessment, is included in Part B of the Amendment Report, which comprises the Solar Farm BDAR and Public Roads and Culverts Upgrade BDAR (Umwelt, 2023b).

4.1.2 National Parks and Wildlife Services (NPWS)

The NPWS submission comprises four key themes which are summarised below. Further detail is also provided within the Amendment Report (Part A and B).

Recognition of the known and likely impacts to environmentally sensitive areas of state significance in Goulburn River National Park, inclusion of the network connection and implications of landowners' consent.

LSbp confirm that no works are proposed within or encroaching upon the Goulburn River National Park.

The Project Area:

- Is contained to private landholdings as outlined in Appendix 4 Schedule of Land of the EIS. Landowners consent is provided for this land.
- Contains several Crown Roads ('paper roads') as outlined in Section 1.7 of the EIS. LSbp have liaised with Crown Lands and commenced the process for closure and acquisition of these roads. Further details are provided in the Amendment Report (Umwelt, 2023b).
- Previously contained part of travelling stock route (TSR) 44841, however this has been removed from the Development Footprint as part of the Amended Project. Access, as per existing use of a vehicle track, will continue to occur across the TSR. LSbp have consulted with Crown Lands and Local Land Services, with further details provided in the Amendment Report (Umwelt, 2023b).

It is also confirmed that:

- No upgrades are required to the transmission line as part of this project. Connection to the transmission line is wholly contained within the Project Area (private land).
- Road upgrades are proposed to Ringwood Road and Wollara Road and landowner consent has been provided by Upper Hunter Shire Council as the road authority for these roads and Forestry Corporation of NSW.

It is noted that discussion with Forestry Corporation of NSW, NPWS and UHSC is ongoing to discuss the legal alignment of the road reserve.

Indirect impacts will be managed through the operational management plans including BMP and EMP. All necessary landowners' consent has been obtained for the proposed works.

Access road works are likely to encroach on to the park and NPWS management will require access through the project area.

Wollara Road is a public road and will be used by light vehicles, shuttle buses and heavy vehicles to access the Project. As a result of amendment to the proposed workers accommodation the majority of the workforce will travel to the site from the north. As outlined in Section 3.3.4 of the EIS all heavy vehicles will access the site from the north.

As outlined in Section 6.9 of the EIS, two emergency access points would be used for emergency and NPWS access only, and is not for construction access. LSbp reiterate that this existing access will be maintained for NPWS use, with the ability to travel through the Development Footprint by agreement with LSbp during construction and operation.

As agreed during consultation with NPWS during preparation of the EIS (Umwelt, 2023a), no road upgrades or road sealing is proposed on the portion of Wollara Road adjacent Goulburn River National Park. Works required to formalise the primary access point (at the existing access point) will be wholly located on private land or TSR 44841.

As above, it is noted that discussion with Forestry NPWS and UHSC is ongoing to address the legal alignment of the road reserve, as the cadastre does not reflect the made road. All necessary landowners' consent has been obtained for the proposed works.

4.1.2.1 Adequacy of Bush Fire Protection Planning

As noted in Section 6.11.3 of the EIS, bushfire risk has been assessed in accordance with 'Planning for Bush Fire Protection 2019' and with the development and implementation of the proposed management measures, including a 10 m APZ, it is considered that potential hazards associated with the Project can be appropriately managed. This aligns with expectations and requirements of RFS and FRNSW.

For clarification, the APZ is proposed within the Development Footprint, which itself is further set back from the Goulburn River National Park boundary and the Project Boundary, resulting in a defendable area in excess of 10 m from areas of woody vegetation at a majority of locations. Furthermore, the following is noted:

- The 10 m APZ and additional setbacks provide sufficient separation distances to limit the spread of bushfire and provide adequate defendable space for firefighting.
- The nature of the landform and vegetation mean that vehicles are expected to be able to drive around the outside of the Development Footprint in an emergency.

This is in addition to the provision and maintenance of access, water supply and an Emergency Plan. As outlined in section 6.11.3.3 of the EIS, an Emergency Plan will be prepared in consultation with relevant emergency organisations (Fire and Rescue NSW, NSW Rural Fire Service, NSW Ambulance and the Local Emergency Management Committee). LSbp also commit to further consideration of the Goulburn River National Park and Munghorn Gap Nature Reserve Fire Management Strategy and consultation with NPWS with regards to the Emergency Plan and other management plans. The proposed biodiversity stewardship area (remainder of the Project Area outside of the Development Footprint) will be actively managed, including for fire.

LSbp will consult with NPWS on Construction and Operational Environmental Management Plans including Emergency Plans.

4.1.2.2 Consideration of Waterways, Biodiversity, Landscape Character and Cumulative Impacts to Goulburn Valley National Park

The EIS included an assessment of the direct, indirect and cumulative impacts associated with the Project including waterways, biodiversity and landscape character. Potential impacts on the National Park have identified within the EIS and avoided where possible. Where avoidance was not possible appropriate management and mitigation measures have been identified including the preparation of Construction and Operational Environmental Management Plans. LSbp commit to consultation with NPWS on the preparation of Construction and Operational Environmental Management Plans.

Further information has also been included in the relevant specialist reports appended to the Amendment Report specifically the WRIA, LVIA and BDARs.

4.1.3 Mining, Exploration & Geoscience Geological Survey of NSW

MEG-GSNSW has reviewed the Environmental Impact Statement for Goulburn River Solar Farm and has no comments or issues to raise in relation to resource sterilisation and the proposed Solar Farm project.

Comments from MEG-GSNSW of NSW are noted.

4.1.4 NSW Rural Fire Service (RFS)

A Fire Management Plan (FMP) shall be prepared for the solar farm and BESS development. The FMP shall be prepared in consultation with NSW RFS Upper Hunter Fire Control Centre. The FMP shall include:

- *24 hour emergency contact details including alternative telephone contact;*
- *Site infrastructure plan;*
- *Fire fighting operations plan including:*
- *methods and resources to manage and extinguish Lithium Battery Fires.*

The Project EIS has committed to preparing a FMP. This measure has been amended to include the specific requirements suggested by RFS above, as documented in **Appendix B**.

The solar farm development footprint is to be managed as an Asset Protection Zone in accordance with Appendix 4 of 'Planning for Bush Fire Protection 2019'.

The Project EIS has committed to an APZ, which will be maintained around the inside perimeter of the Solar Farm Site. This measure has been amended to include specific reference to Appendix 4 of 'Planning for Bush Fire Protection 2019' as documented in **Appendix B**.

A 10,000 litre water supply (tank) fitted with a 65 mm storz fitting shall be located adjoining the internal property access road within the required APZ.

The Project EIS has committed to an appropriate dedicated water supply for bushfire protection being provided in accordance with the requirements of the NSW Rural Fire Service. This measure has been amended to include the additional detail suggested by RFS above. This updated measure has been included in **Appendix B**.

LSbp confirms that a dedicated water supply will be provided. Provision of supply via farm dams is subject to availability and where not available will be sourced from commercial suppliers and rainwater tanks. It is understood that this aligns with expectations and requirements of RFS and FRNSW.

Table 6.32 of the EIS also identifies that LSbp will provide training and site tours for local Rural Fire Service, Volunteer Rescue Association, and Fire & Rescue members and employees to familiarise them with the access points and procedures and to also provide solar farm specific bushfire skills. Additionally, fulltime workers on site during operations are to live locally and be 'on-call' to respond to issues on the site.

To allow for emergency service personnel to undertake property protection activities, a 10 metre defendable space (APZ) that permits unobstructed vehicle access is to be provided around the perimeter of the solar farm footprint including associated infrastructure.

The Project EIS has committed to the inclusion of an APZ. This has been amended to include the additional detail suggested by RFS above. This measure has been included in **Appendix B**.

4.1.5 Heritage NSW

Heritage NSW notes that the Aboriginal Heritage Information Management System (AHIMS) search is greater than 12 months old at the time of submission. Heritage NSW requires, as per Requirement 1b of the Code of Practice, that AHIMS searchers are contemporaneous with the project. We consider that AHIMS searches of over 12 months old need to be updated. In future, please ensure that an updated AHIMS search is provided.

The submission from Heritage NSW is noted.

Heritage NSW requires that consultation with Registered Aboriginal Parties (RAPs) is continuous. Under our guidelines, breaks in consultation of over six months may not constitute continuous consultation. If an unexpected break of greater than six months has occurred, the applicant may be required to restart the consultation process. In future, please ensure that consultation is kept continuous, and all consultation included in the submitted ACHAR.

Appendix 1 of the ACHAR, contained as Appendix 9 of the Project EIS, is a maintained record of consultation with RAPs. This record shows a six (6) month period between 16 November 2021 to 26 May 22 (six months and 10 days) during which no consultation is recorded. This time period is considered of minimal cultural importance, during which the proponent was awaiting SEARs from DPE, and was progressing with EIS-related studies. However, the submission from Heritage NSW is noted.

It is also noted that additional consultation with the RAPs was undertaken on 29 August 2023, as outlined in **Section 3.4** above. This engagement is included within the Addendum ACHAR prepared to support the Amendment Report (Umwelt, 2023b).

Heritage NSW recommends that an ACHMP be developed and implemented for the project. Heritage NSW recommends the ACHMP should be included in the Conditions of Approval and that an ACHMP be created and approved by Department of Planning and Environment prior to any development activities occurring within the project area. Recommended conditions for an ACHMP have been included in Attachment A.

Section 6.4.6 of the EIS confirms that following development consent and prior to the Project construction period, an Aboriginal Cultural Heritage Management Plan (ACHMP) will be developed in consultation with the RAPs, Heritage NSW and DPE.

Please ensure that the ACHMP includes provisions for the reassessment and thorough mapping of AHIMS site #37-1-0053.

This comment is noted and provisions for the reassessment and thorough mapping of AHIMS site #37-1-0053 have been included as a revised mitigation measure in **Appendix B**.

4.1.6 Fire & Rescue NSW (FRNSW)

That a comprehensive Fire Safety Study (FSS) is developed. The FSS is to be developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper (HIPAP) No.2[1] and is to meet the operational requirements of FRNSW.

The Project EIS has committed to developing a FSS prior to commencing construction of the BESS. This measure has been amended to include the additional detail suggested by FRNSW above. This measure has been included in **Appendix B**.

That the development of the FSS consider the operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence. The FSS should consider worst-case fire scenarios including a full BESS unit fire and demonstrate no fire propagation within the facility.

As noted above, a FSS will be developed as the Project develops. In order to address this submission, LSbp confirms that the FSS will consider the operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence. Fire propagation and a worst-case scenario will be considered within the FSS. These measures have been included in **Appendix B**.

That the development of a FSS be a condition of consent.

Comment from the FRNSW is noted.

That a comprehensive Emergency Plan is developed for the site in accordance with HIPAP No.1.[2]
The findings of the FSS should inform the development and content of the ERP.

The Project EIS has committed to developing an Emergency Plan. This measure has been amended to include the additional detail suggested by FRNSW above. The updated requirements for the Emergency Plan have been included in **Appendix B**.

That an Emergency Services Information Package (ESIP) be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.[3]

That an Emergency Responders Induction Package is developed for the site in consultation with, and to the satisfaction of FRNSW prior to commissioning of the site. The package should inform first responders of site-specific features and safety measures to ensure they are able to undertake their duties effectively in accordance with agency specific Standard Operational Guidelines. The format of the Induction Package should be such that it can be readily shared across all Agencies.

The requirements to prepare an Emergency Response Plan and an Emergency Services Information Package are noted and have been included in **Appendix B**.

4.1.7 Transport for NSW

The Traffic Impact Assessment proposes to use the Ringwood Road/Golden Highway intersection as a construction route for light and heavy vehicles. TfNSW notes that safe intersection sight distance (SISD) at this intersection does not comply with Austroads requirements. TfNSW does not support the proposed use of this route for the development without compliant SISD, alternative access options need to be investigated.

LSbp propose changes to the proposed transport route and upgrades to the intersection of the Golden Highway and Ringwood Road as described in **Section 3.1**.

The transport route changes and upgrades to the Ringwood Road / Golden Highway intersection have been designed in accordance with Austroads Safe Intersection Site Distance (SISD) standards and in consultation with TfNSW.

Further details regarding this change, upgrades and associated environmental assessments are provided in Section 7.1 of the Amendment Report (Umwelt, 2023b).

Provide or update information related to cumulative impacts of traffic on the classified road network:

- *The cumulative impacts from traffic generated from the construction workforces in terms of the origin-destination routes, access, AM/PM peaks where there is overlap with other projects.*
- *The cumulative impacts of heavy vehicle movements in terms of AM/PM peaks and routes where there is an overlap with other projects.*
- *Cumulative impacts and consideration in relation to the timing of movements of OSOMs where other projects will be utilising the same routes as proposed for this development.*
- *The background traffic volumes identified within the TIA for the Golden Highway/Ringwood Road intersection are to be reflective of the cumulative traffic volumes associated with the other projects occurring concurrently that will be utilising this route for OSOM/LV/HV movements.*

Anticipated construction vehicle routes were assessed in Section 4.1.5 of Appendix 15 of the EIS and compared with relevant projects in proximity to the site in Table 4.5. In the construction traffic modelling assessment, light vehicle and shuttle bus trips were assumed to be evenly distributed on the road network, with equal proportions travelling to and from the site from the north (via Golden Highway) and the south (via Wollar Road). As a result of changes to the transport route following confirmation of the location of workers accommodation (from the north), trip distribution has also been updated and cumulative impacts re-assessed within an updated TTIA appended to the Amendment Report (Umwelt, 2023b).

Cumulative impacts from heavy vehicles during AM/PM peaks relating to other Projects were also raised. Sections 3.2.3, 3.2.4, 3.3 and 4.1 of the TTIA appended to the Amendment Report (Umwelt, 2023b) has been updated to consider cumulative traffic volumes for heavy vehicles. This has also informed the design of upgrades proposed at the Golden Highway / Ringwood Road intersection.

As outlined in Section 6.9.3.4 of Appendix 15 of the EIS, due to the spare capacity at the Golden Highway / Ringwood Road and Wollar Road / Ringwood Road intersections, the addition of cumulative traffic volumes in the traffic models would likely have minimal impact on the intersection performance reported.

Provide or update information related to

Heavy vehicle and OSOM routes:

– Identify the return routes for OSOMs.

– National Heavy Vehicle Regulator (NHVR) approved routes identified on the Restricted Access Maps (RAV MAP) are to be utilised for the heavy vehicle routes for the proposed development.

– The TIA is required to include details on the number of OSOM movements, the types of OSOM (escort by pilot or police), the intended time for OSOM movements to occur and identify the location of pullover bays / rest areas (including identification of the sufficient widths, lengths to accommodate the largest OSOM vehicles within the rest areas) along the OSOM routes.

Due to the significant scope of the transport logistics for OSOM transit, a concept-level route analysis is required to be provided with the SSD application based on high-level swept path analysis to generally indicate locations where civil works are likely to be required.

Sections 3.2.4, 3.2.5 and Appendix F and G in the updated TTIA appended to the Amendment Report provides further information and analysis of the OSOM route including the return route and number of OSOM movements. The OSOM load will be under permit, utilising the Golden Highway, Ringwood and Wollara Road. No other currently known projects are proposing to use Ringwood Road or Wollara Road. OSOM movements can be facilitated without additional civil works (as shown in the swept paths appended to the TTIA) beyond those described within the Amended Project and no changes to the OSOM route described within the EIS Project are proposed.

A Construction Transport Management Plan will be provided for the same OSOM configuration utilising the same proposed OSOM route from Newcastle Port (Mayfield Berth) to the intersection of Golden Highway.

Provide or update information related to:

1. Traffic volumes and characteristics
2. Origins, destinations and routes for all vehicle types
3. Access and infrastructure upgrades
4. Road safety assessment
5. Local climate conditions
6. Internal road network
7. *Impact on rail corridors and public transport*

Sections 2.8, 3.2, 3.3 and 4.1 of the updated TTIA appended to the Amendment Report provides updates to all components of the TTIA impacted by the Amended Project and in response to the TfNSW submission.

4.1.8 Forestry Corporation of NSW

For all intents and purposes, Wollara Road is managed by Upper Hunter Shire Council. Property boundaries sourced from NSW Land and Property Information demonstrate Wollara Road is not intended to be an asset of FCNSW.

In June 2023 Lightsource BP has made representations to FCNSW that it would secure a tripartite agreement between themselves, FCNSW and Upper Hunter Shire Council to formalize for the purposes of project development, the above administrative intent.

With the tripartite agreement in place (or similar written instrument between the parties) FCNSW will not object to offering (if necessary) a forest permit permitting Lightsource BP access to State forest for project purposes. FCNSW awaits the drafting of the agreement.

LSbp has continued to liaise with Forestry Corporation of NSW and UHSC and have a letter of consent from UHSC to enable road upgrades to occur on Wollara Road. Forestry Corporation of NSW have also provided landowner's consent.

These letters of consent have been appended to the Amendment Report (Umwelt, 2023b) as they relate to proposed road upgrades as part of the Amended Project.

4.1.9 DPI Agriculture

The sheep trial needs to consider the current stocking rate and the changes to this examined to determine the changes in agricultural production and show how the solar operation impacts sheep numbers, wool yield (if relevant) and final returns. The agricultural impact assessment does not address these parameters in its assessment of agricultural productivity. It will also build more tangible local evidence to demonstrate land sharing with sheep grazing outcomes.

As outlined in Section 2.6 of Appendix 11 of the EIS, the Development Footprint has been extensively cleared for agricultural use, comprising cropping and (beef) cattle grazing. Sheep grazing is not currently undertaken in the Project Area.

An assessment of productivity impacts associated with the removal of 160 ha of marginal cropping land and removal of cattle grazing is provided in Section 5.0 of Appendix 11 of the EIS. This assessment concluded that this would have a negligible impact at a regional scale.

The Project is considering the merit of running a sheep grazing trial on the site, with consideration of feedback from the community. If this proceeds, a Sheep Grazing Vegetation Management Plan will be prepared in consultation with DPI Agriculture. The additional considerations requested by DPI Agriculture are noted including consideration of the current agricultural use and the proposed sheep grazing to determine changes in agricultural production. This requirement is included in **Appendix B**.

We recommend consulting with the Local Land Services (LSS) office over the development of the Operational Environmental Management Plan (OEMP) and the attention to the grazing and biosecurity content in this plan.

LSbp has undertaken consultation with the LSS office and will continue to do so as the project progresses.

This comment from DPI Agriculture is noted and the LSS office will be contacted in the design of the OEMP with regard to the grazing and biosecurity content. This requirement is included in **Appendix B** (revised mitigation measures).

In terms of groundcover management in relation to the OEMP we recommend that groundcover is maintained at a minimum of 70% to prevent soil erosion by the development of a groundcover management plan. This will include detail on final construction reinstatement of land and undertake appropriate vegetation establishment and management that achieves from current and potential impact of the proposal on the site as per Meat and Livestock guide https://www.mla.com.au/research-anddevelopment/Environment-sustainability/Sustainable-grazing-a-producerresource/climate-variability-using-water-wisely/maintain-ground-cover/ or the Soil Knowledge Network Inc guides Solar farms – NSW Soil Knowledge Network (nswskn.com) and https://www.nswskn.com/groundcover/

Groundcover is considered an important resource to manage across the development as a means to prevent soil erosion, increase biodiversity, encourage perennial grasses to increase soil stability alongside the panels, increase soil moisture and nutrient holding capacity, reducing soil compaction and improved soil biota to increase the rate of decomposition of organic matter.

The agricultural impact assessment acknowledges the role of resting the land which will play an important role in the improvement of soil health across the development footprint. A groundcover management plan will be developed to address this comment from DPI Agriculture to maintain a minimum of 70% groundcover to prevent soil erosion. **Appendix B** (revised mitigation measures) reflects the requirement for a ground cover management plan.

4.1.10 DPI Fisheries

Waterway crossings should be designed and constructed in accordance with the national guidelines entitled 'Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings' (Fairfull and Witheridge, 2003). *This document can be access via the website at this link: https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0004/633505/Whydo-fish-need-to-cross-the-road_booklet.pdf.*

This comment from DPI Fisheries is noted and has been incorporated into the development of the Project. Table 8.1 in the Water Resources Impact Assessment prepared to support the Project EIS (Umwelt, 2023b) directly addresses this requirement. The Project design has aimed to avoid works close to or within waterways. The EIS identifies that several waterway crossings will be required for site access, internal access roads and the electrical cabling layout.

The Amended Project results in a further reduction of impact on waterways including fewer waterway crossings. Further detail is provided in the amended WRIA and Aquatic Assessment appended to the Amendment Report.

Waterway crossings will be designed to minimise impacts on stream stability and fish passage and will be designed with reference to:

- Guidelines for Controlled Activities on Waterfront Land (DPE, 2018).
- Why Do Fish Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI, 2003).
- Fisheries NSW Policy and guidelines for fish habitat conservation and management, (NSW DPI, 2013).

Environmental safeguards (silt curtains, booms etc) are to be used during the works to ensure that there is no escape of turbid plumes into the adjacent aquatic environment;

The Water Resources Impact Assessment addresses the requirement from DPI Fisheries to safeguard adjacent aquatic environments and notes the development of a Construction Soil and Water Management Plan (CSWMP) prior to construction. The CSWMP will be prepared to outline measures to manage soil and water impacts associated with the construction and decommissioning works.

The CSWMP will provide:

- Measures to minimise/manage erosion and sediment transport both within the construction footprint and offsite including requirements for the preparation of erosion and sediment control plans (ESCP) for all progressive stages of construction. Management controls will be included to guide construction works occurring at the interface of Goulburn River National Park (during establishment of the perimeter road and assets within 20 m of the boundary). This will include vegetation removal methods, controls around excavation works, limitations on stockpiling of materials and heavy vehicle movements on the interface of the park. Works which may lead to increased mobility of sediments and contaminants on the interface of the national park, and waterways where surface water flow is directed on to the national park will be strictly controlled.
- Measures to manage waste including the classification and handling of spoil.
- Procedures to manage unexpected, contaminated finds.
- Measures to manage stockpiles including locations, separation of waste types, sediment controls and stabilisation.
- Measures to manage accidental spills including the requirement to maintain materials such as spill kits.
- Controls for receiving waterways which may include designation of 'no go' zones for construction plant and equipment.
- Creation of catch/diversion drains and sediment fences at the downstream boundary of construction activities where practicable to support containment of sediment-laden runoff.
- Erosion and sediment control measures will be implemented and maintained at all work sites in accordance with the principles and requirements in Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004) and Volume 2D (Landcom, 2008), commonly referred to as the "Blue Book".

DPI Fisheries (1800 043 536) and the Environment Protection Authority (131 555) is to be notified immediately if any fish kills occur in the vicinity of the works. In such cases, all works other than emergency response procedures are to cease until the issue is rectified and approval is given by DPI Fisheries and/or the Environment Protection authority for the works to proceed.

This comment is noted, and DPI will be contacted in the event of fish kills within the vicinity of the works. This requirement will be addressed via the OEMP and is included in **Appendix B**.

4.1.11 DPE Water

The proponent should confirm that works are setback from the mapped watercourses in accordance with the Guidelines for Controlled Activities on Waterfront Land – Riparian Corridors (DPE, 2022).

The Aquatic Assessment concluded that risks to aquatic biodiversity in the vicinity of the Project Area could be effectively managed through expansion of exclusion zones to exclude the majority of mapped hydro lines (including a large section of Redlynch Creek) and associated riparian vegetation. As such no riparian vegetation would be impacted by the Project. In order to address this submission, LSbp confirms that waterfront land will be electronically mapped and works will be setback in accordance with the Guidelines for Controlled Activities on Waterfront Land – Riparian Corridors (DPE 2022). Any waterfront land disturbed is to be revegetated following completion of works. These measures have been addressed in the Amended Aquatic Assessment appended to the Amendment Report and included in **Appendix B**.

Works within waterfront land must consider the Guidelines for Controlled Activities on Waterfront Land – Vegetation management Plans (DPE, 2022).

The Aquatic Assessment prepared as Appendix 8 of the Project EIS explores this consideration noting that within the Development Footprint, Redlynch Creek and the unnamed tributary of Rocky Creek have defined bed and banks and therefore have waterfront land associated with them. Impacts to waterfront land would occur through the construction of access roads and trenching to lay cables. Construction works will avoid waterfront land and where this is not possible (i.e., for access roads), the bed and banks of watercourses are to be stabilised with vegetation. These measures have been designed through consideration of the Guidelines for Controlled Activities on Waterfront Land – Vegetation management Plans (DPE, 2022).

The proponent prepares a Soil and Water Management Plan and an Erosion and Sediment Control Plan in accordance with industry standards including the guideline, Managing Urban Stormwater: Soils and Construction (Landcom, 2004).

Appendix 5 of the Project EIS confirms that a CSWMP will be prepared to outline measures to manage soil and water impacts associated with the construction works. This will also include an ESCP. In order to address this submission, LSbp confirms that these management plans will be developed in consultation with DPE Water and in accordance with industry standards including the guideline, Managing Urban Stormwater: Soils and Construction (Landcom, 2004). These measures have been included in **Appendix B**.

4.1.12 Crown Lands

The impact of the proposal is likely to render the Crown Roads unsuitable for public access as the public's access to the site will be restricted, and sections of Crown roads will be burdened by infrastructure.

The aim is for the Crown Road corridors to be closed and purchased as private land and incorporated into the development site to avoid the need for additional authorisations.

If part or all the Crown roads are not closed and purchased there is no alternative option other than authorisation under the Roads Act 1993 for works (s138) and a licence to occupy [s152A(2)(b)].

LSbp has continued to consult with Crown Lands and has submitted applications for the closure and purchase of the Crown Roads within the Project Area.

Travelling Stock Reserve 44841, exists along Wollara Road adjoining the proposal. The three access points required for the proposal are dependent on access through this TSR (Section 3.3.4 and Figure 3.1). Figures within the EIS indicate construction of access road, planting areas and compound areas encroaching on the TSR.

The Proponent should modify their proposal so that their use of TSR 44841 is limited to non-exclusive purposes that are consistent with the Local Lands Services Act, e.g., access and/or grazing, and obtain consent for these uses from the Hunter Local Lands Services (LLS). Crown Lands notes that the EIS does not provide any evidence of consultation with the LLS.

Enclosing the perimeter of the development footprint with security fencing is not consistent with the reserve purpose of 'travelling stock' nor with the publics use and enjoyment of crown reserve.

Following further consultation with Crown Lands and LLS, a minor realignment of the Project Boundary is proposed to avoid overlapping with the Traveling Stock Reserve (TSR) 44841. The western extent of the Development Footprint is now proposed to extend towards the east and will avoid TSR 44841.

The existing access road across TSR 44841 will continue to be utilised by the landholder and for the Project.

Further details regarding amendments to the Project including fencing and landscaping is provided in the Amendment Report (Umwelt, 2023b).

4.2 Council Submissions

4.2.1 Upper Hunter Shire Council

VPA Agreement

1. pay an annual monetary contribution towards a community enhancement fund and a road maintenance fund of:

(a) $346 (indexed to CPI) x the number of MW installed on the land as at the due date for payment; or

(b) $190,000 (indexed to CPI), whichever is the greater, and

2. seal and widen 4.7 km of unsealed road on Wollara Road up to the Goulburn River National Park boundary (valued at $4.4 million).

LSbp has continued to consult with UHSC regarding the proposed Voluntary Planning Agreement (VPA) including agreement of the above terms identified by UHSC. The terms of the VPA are finalised for exhibition, and LSbp understands it will be on public exhibition in early Q1 2024.

Safety concerns for Golden Highway / Ringwood Road intersection:

Safe intersection sight distance (SISD) of the Golden Highway/ Ringwood Road intersection. Council is concerned that the sight distances along the Golden Highway at the intersection are inadequate to enable vehicles associated with the project, particularly heavy vehicles, to safely negotiate the intersection. Therefore, it is recommended that further investigations be undertaken into upgrading the intersection to improve safety including reviewing speed limits, installing additional warning signs, physical alterations to the intersection (eg. provision of turning lanes), removing roadside vegetation, widening of roadside cuttings or relocating the intersection to improve sight distances.

Consider the crash data on this location of road within the SISD.

Traffic numbers, considering location of workforce accommodation.

- *The assumption that light vehicle and shuttle bus trips will be evenly distributed on the road network, with equal proportions travelling to and from the site from the north and south during construction peak hour is unrealistic for the purpose of assessing intersection performance. It is likely that the majority of vehicles will be travelling between the site and the larger centres of Merriwa and Mudgee.*
- *It is recommended that a revised traffic and transport impact assessment be submitted following the completion of a workforce and accommodation strategy.*

LSbp propose changes to the transport route and upgrades to the intersection of the Golden Highway and Ringwood Road as described in **Section 3.1**. The transport route changes and upgrades to the Ringwood Road / Golden Highway intersection have been designed in accordance with Austroads Safe Intersection Site Distance (SISD) standards. Further details regarding these changes are outlined in the Amendment Report (Umwelt, 2023b).

LSbp has negotiated an option for up to 300 (or more) personnel at the proposed Merriwa workforce accommodation camp. This has resulted in amendments to the trip distribution utilised in the TTIA. An updated TTIA including revised trip distribution is appended to the Amendment Report (Umwelt, 2023b).

Furthermore, LSbp has also prepared an AES. The AES identifies locations for workforce accommodation, providing clearer detail on likely traffic movements of the construction workforce. As outlined in Section 6.9.3 of the EIS, shuttle buses are proposed to be utilised for the majority of the workforce to reduce the number of cars on the road. Based on the proposed accommodation in Merriwa these shuttles will operate to/from the Merriwa accommodation and the Project.

The updated TTIA, and draft AES address the above in further detail and are appended to the Amendment Report (Umwelt, 2023b).

There is likely to be insufficient accommodation available to accommodate the project workforce. Whilst the EIS suggests that an Accommodation, Employment and Procurement Strategy would form part of pre-construction planning for the project, Council believes that a workforce and accommodation strategy should be prepared and submitted as part of the development application to ensure that the workforce can be accommodated and to enable the associated impacts to be assessed.

- *Consider cumulative demand for accommodation.*
- *Provide further info on how local workers (35% of construction workforce) will be sourced given the low unemployment rates and current labour shortages in the region.*
- *EIS and traffic and transport assessment to be updated once this strategy is developed.*

An AES was prepared and submitted as part of the Amendment Report (Umwelt, 2023b). The AES has considered cumulative demand for accommodation and has provided clarity in relation to how LSbp will source and prioritise local workforce.

- *There is a history of bushfires in this area and Council is concerned that the bushfire risk has not been adequately considered in the EIS. It is questionable whether the ten (10) metre Asset Protection Zone (APZ) around the perimeter of the development footprint is sufficient to limit the spread of bushfire and provide an adequate defendable space for firefighting. Furthermore, it is unclear if there is an adequate water supply available for bushfire protection as it is 'subject to availability'.*
- *Further details regarding vegetation management are required to ensure that bushfire hazards are minimised. In addition, consideration should be given to the provision of a bushfire shelter in the event that roads are cut-off during a bushfire and workers are unable to evacuate the site.*

LSbp notes the concerns regarding bushfire risk raised by UHSC. The EIS was prepared in accordance with the SEARs and included an assessment of potential hazards and risks including bushfire.

As noted in Section 6.11.3 of the EIS, bushfire risk has been assessed in accordance with 'Planning for Bush Fire Protection 2019' and with the development and implementation of the proposed management measures, including a 10 m APZ, it is considered that potential hazards associated with the Project can be appropriately managed. This aligns with expectations and requirements of RFS and FRNSW. For clarification, an APZ is proposed around the Development Footprint which itself is further set back from the Goulburn River National Park boundary and the Project Boundary, resulting in a defendable area in excess of 10 m at most locations.

Existing management/mitigation measures note that an appropriate dedicated water supply for bushfire protection will be provided in accordance with the requirements of the NSW Rural Fire Service. In order to address this submission, LSbp confirms that a dedicated water supply will be provided. Provision of supply via farm dams is subject to availability and where not available will be sourced from commercial suppliers and rainwater tanks. This aligns with expectations and requirements of RFS and FRNSW.

Table 6.32 of the EIS also identifies that LSbp will provide training and site tours for local Rural Fire Service, Volunteer Rescue Association, and Fire & Rescue members and employees to familiarise them with the access points and procedures and to also provide solar farm specific bushfire skills. Additionally, fulltime workers on site during operations are to live locally and be 'on-call' to respond to issues on the site.

Should the development application be approved, it is recommended that the developer be required to provide a bank guarantee to the consent authority in relation to decommissioning the solar farm and removal of all infrastructure. This would provide some level of security to ensure the site is not abandoned and left in a derelict state at the end of the asset's useful life.

LSbp is responsible for and committed to the decommissioning and rehabilitation of the Project in accordance with Appendix 21 of the EIS the Decommissioning and Rehabilitation Framework. It is understood that this will form a condition of consent for the Project.

4.2.2 Mid-Western Regional Council

The documentation is inaccurate and inconsistent. Furthermore, it fails to appropriately consider the cumulative impacts of surrounding renewable energy projects within the region. Limited community consultation and failure to consult with Mid-Western Regional Council (MWRC) demonstrates a lack of transparency and respect for the stakeholders affected by this project.

The EIS includes a Cumulative Impact Assessment in Appendix 22 which outlines the volume of projects surrounding the Project within the region and considers the cumulative impact implications for each one. Additionally, Appendix D of the Social Impact Assessment (SIA) considers the 'other major projects in the region', which outlines the projects surrounding, proximity, details, timing, potential overlap, and the social impact considerations for each one. Updated cumulative impacts have been assessed in the TTIA and AES, see Appendix D and Appendix F of the Amendment Report.

LSbp has undertaken consultation with MWRC, and as outlined in **Section 3.3** above, will continue to liaise with MWRC throughout ongoing project planning, construction, and operational phases. The cumulative impacts related to MWRC roads and infrastructure are avoided as a result of the transport route changes within the Amended Project. Further details are provided within the Amendment Report (Umwelt, 2023b)

Lack of mitigation measures for accommodation, workforce and procurement and community benefit sharing information being shared with Council.

Mid-Western Regional Council has not been consulted regarding this project, however the EIS proposes use of local accommodation and roads in the region.

Council requests the proponent provide details on its ongoing communications plan and identify mechanisms by which the community can provide feedback during construction and operations. This should also include the proponent's approach to dealing with complaints or compliance issues, how to increase the participation of the community, and how it plans to consult with Council.

9.4 Environment section on page 4 of submission - reiterates what has been mentioned above. Council requests consultations be initiated to ensure that the Council and the community have current and accurate information about the project, and to provide feedback on the proposed project, including traffic, construction and social impacts. As such, consultation should include the provided impact area, including Mudgee, Gulgong, Rylstone, where the proponent proposes to source and house workers.

As outlined in Section 3.3.1 in development of the AES, LSbp implemented a targeted and strategic consultation program among accommodation providers, local councils and community groups in the region, to discuss options for housing project workforce as well as opportunities to support local employment and procurement. This consultation included the following:

- Face to face solutions-focused workshop with UHSC, with the option for a follow up meeting to progress any actions from the workshop.
- Face to face meetings with housing and/or accommodation providers, employment services.
- Meeting with proximal local governments, MWRC and Muswellbrook Council.

LSbp will continue to consult and maintain an ongoing relationship of open communication with MWRC in regard to the Project. As an outcome of engagement with MWRC, the Project has been designed to avoid the use of any infrastructure and accommodation within the MWSC LGA.

The EIS notes that the latest available employment related census data (ABS Census 2016) shows 45.9% of employed residents in the Study Area were occupied in activities generally associated with the types of skills required for the construction of a solar farm (e.g., technicians and trades workers, machinery operators and drivers, and labourers). The Study Area's representation in these occupations is well above the State average of 27.8%, indicating a generally suitable occupational base for the proposed project is in the region. The Study Area's occupational and business structures indicate a good base exists to service the needs of the Project.

Council require more accurate data, as the ABS Census 2016 is not the most up-to-date information. Council is greatly concerned that use of such data and statements is incorrect and misleading.

Updated employment related census data is included within the Amendment Report (Umwelt, 2023b) to support the AES prepared as part of the Amendment Report. The need for up-to-date information regarding employment is recognised as essential in understanding the community context.

The EIS has proposed that accommodation be sourced from surrounding towns, including towns within the Mid-Western Region, Mudgee, Gulgong and Rylstone. Council is strongly concerned with this aspect of the project. There is currently a severe shortage of appropriate accommodation in the region for tourism, caused by the competing demands placed on accommodation availability by State Significant Developments (SSD). What the proponent fails to address is that there are multiple projects within and surrounding the Mid-Western Region looking to construct at the same or similar time.

The workforce and accommodation strategy should consider that Council strongly objects to the use of tourist and visitor accommodation for any construction workforce, and there is limited availability across all accommodation types in the Mid-Western region.

Social baseline within SIA includes towns within the Mid-Western Council, need to see the AES be created in consultation with Council.

6.13.2.3 Township Services on Page 4 of the submission -reiterates what has been said above. That data above is not current or valid. It does not consider SSD projects already approved and using such available accommodation.

The EIS notes that there will be an estimated 350 FTE workers during peak construction, expected to last approximately 27 months. Considering the current unemployment rate in the Mid-Western Local Government Area (LGA), of 1.7%. Mid-Western Council requests more detail on how the 35% (122 local workers) will be sourced.

Since submission of the EIS, LSbp have been approached by a private developer who is proposing to construct a 500-bed workforce accommodation camp on private land in Merriwa, NSW. It is noted that this workforce accommodation site will operate as a commercial business separate to the Goulburn River Solar Farm development and will accommodate workers across a range of projects and industries in the Upper Hunter. The development is subject to a Development Application with UHSC and is expected to be operating in time for the ramp up of the solar farm workforce.

LSbp has negotiated an option for up to 300 personnel to be accommodated at the proposed Merriwa workforce accommodation camp, with potential to increase the number of rooms if required. A number of feasible alternatives and complimentary options to the proposed workforce camp at Merriwa have also been identified within the AES. On this basis, none of the workforce is expected to be accommodated in tourist and visitor accommodation within the MWRC unless they already reside within the LGA.

As outlined in **Section 3.3.1** LSbp will continue to consult with accommodation providers, community groups and proximal local councils, including MWRC as a component of the AES. These discussions will include the accommodation of LSbp's workforce and opportunities to support local employment and procurement.

Council also requests detailed information on how health care challenges are being mitigated.

The AES includes consideration of medical service accessibility for the incoming workforce population. The closest medical service is the Merriwa Multi-Purpose Service, which has community health, an ambulance station, and a private medical practice. The other medical services located near-by the Project are in Muswellbrook, Scone, Denman and Coolah. Further information is provided in the AES appended to the Amendment Report (Umwelt,2023b).

Council would like to note that Mid-Western Regional waste facilities are NOT appropriate or capable to handle the disposal of landfill waste generated by the project. Council requests the proponent provide specific details about the expected waste to be generated during each phase and how it will be managed. Further, a waste management plan is to be developed in consultation with Council.

The concern that MWRC waste facilities are not appropriate to handle the Project related waste is noted and will be considered during the development of the Waste Management Plans for each phase of the Project. As identified within Section 6.14 of the EIS, a number of waste management facilities are located within proximity to the Project.

Additionally, as detailed in Appendix 5 of the EIS, LSbp is committed to addressing waste management through the Projects' life cycle including development of Waste Management Plans for each phase of the Project and maintaining partnerships with relevant recycling providers to ensure maximum diversion of waste from landfill during construction, operation and decommissioning phases.

To address this submission, LSbp confirms that these management plans will be developed in consultation with MWRC alongside other relevant LGAs. These measures have been included in **Appendix B**.

5.0 Response to Public Submissions

As outlined in **Section 2.0,** a total of 42 individual public objections and two (2) community stakeholder group objections were received relating to the EIS Project. A response to the key issues raised in these submissions is included in the following sections, grouped by theme as per the categorisation provided in **Section 2.2** using the categories recommended by the Guideline (DPE, 2022).

Several of the community submissions received were similar or had consistent themes. Where this is the case, the theme of the concern has been provided in the in-text boxes below with some examples of specific quotes from the submissions provided in normal type to assist the reader. A Submissions Register is provided in **Appendix A** to provide a cross reference to each submission received.

5.1 Public Submissions by Category

5.1.1 The Project

The project category, as per the Guidelines, relates to the broader components of the Project (e.g. the site, the project area, the physical layout and design, key uses and activities, timing).

A review of all submissions indicates that no issues were raised in response to the broader components of the Project. Issues raised in relation to specific components of the Project, and their potential for actual and/or perceived impacts on the environment are addressed in **Section 5.1.3** below.

5.1.2 Procedural Matters

5.1.2.1 EIS is not a viable assessment of impacts

Submissions raised the issue of the adequacy of an EIS, and the viability of assessments to effectively assess potential impacts to features of the environment.

> *EIS's are skewed to the proponent, therefore untrustworthy, because… EIS's are taken by the grantors of the project as an absolute consideration of all aspects of the project…" - SE-60027709*

The specialist studies undertaken as part of the EIS Project were prepared by suitably qualified and experienced experts to address the requirements of the SEARs and all relevant NSW Government guidelines and policies. A declaration of the quality of the EIS by a qualified and skilled Registered Environmental Assessment Practitioner (REAP) certified under an accredited REAP scheme (Planning Institute of Australia) was also included in the Executive Summary of the Project EIS.

All assessments have been reviewed by the relevant government agencies and any comments regarding their adequacy have been raised and addressed in **Section 4.0**.

5.1.2.2 Acceptable consultation has not been undertaken

Submissions raised the issue of inadequate consultation being undertaken to date by LSbp.

"Another issue I have with this submission is the community consultation by BP. From 1 meeting being held in our local hall in the middle of winter at night, where slides were shown on the top of an upturned table, to a second community meeting cut short due to the first meeting getting a bit fiery, to the occasional email and colour brochure when [we got the right one] their performance was mediocre at best." S-59927474SE-59975243

Stakeholder and community engagement was undertaken in accordance with the requirements of NSW Government guidelines and assessment standards including, but not limited to, the Undertaking Engagement Guidelines for State Significant Projects (DPIE, 2022) (Engagement Guideline), and the SIA Guideline for State Significant Projects (DPIE, 2023) (SIA Guideline), while also addressing the requirements of the SEARs.

LSbp (with support from Umwelt) undertook a program of community and stakeholder engagement designed to address the type and location of the Project. Specific activities (discussed in Section 5.0 of the EIS, summarised below) have included:

- Establishment of a Project website, community information line and Project email address, including a mechanism for stakeholders to provide feedback regarding the Project.
- Local media release distributed in October 2021 to target information provision for the broader community with local media advertisement published in November 2022.
- Distribution of three separate project information sheets during the development of the EIS and SIA process via mail drop and email distribution to provide updates on the Project to proximal residents and community members.
- Consultation with interested Aboriginal Parties in accordance with the applicable laws and government guidelines.
- Two structured online information sessions (October 2021) following the issuance of SEARs to provide Project information and preliminary results of technical studies, and an opportunity for members of the community to pose questions to the Project team and provide feedback.
- Informal drop-in session, project presentation/Q&A (July 2022) to provide feedback regarding the technical assessments of the Project, as well as articulate the proposed mitigation and enhancement measures under consideration to minimise negative and enhance positive impacts of the Project.
- Four in person meetings with community groups to provide feedback regarding the technical assessments of the Project and ask for suggestions for potential mitigation and enhancement measures to minimise negative and enhance positive impacts of the Project.
- Additional drop-in session on 6 December 2022 to provide feedback regarding various Project updates since last drop-in session and consultation opportunities.
- Provision of a newsletter in April 2023 to provide the community updates on the progression of the Project.
- LSbp market stall at the Merriwa Festival of the Fleeces over the June 2023 long weekend, immediately prior to the EIS going on exhibition.

A stakeholder identification process was also undertaken for the Project to support the planning and delivery of community and stakeholder consultation to inform the SIA and the EIS. Issues raised during the engagement process were recorded and have informed investigations undertaken as part of the EIS and the ongoing development of the Project.

Consultation with the community and stakeholders is ongoing, as outlined in **Section 3.3** above, and will continue prior to and during construction of the Project. Ongoing consultation activities aim to provide the community and stakeholders with awareness of construction processes and activities, updates on the proposed timing of construction and opportunities for feedback and input.

The Project website, email address and community information line will continue to be available prior to and during construction. Targeted consultation methods, such as newsletters, notifications, and face-to-face communications will also continue to occur.

5.1.3 Economic, Environmental and Social Impacts

5.1.3.1 Roads

Road-related issues were a key theme raised in numerous objecting submissions. The key road-related issues included:

- Perceived road use safety issues, including maintenance, increased risk of accidents, visibility and increased dust from vehicle movements.
- Consideration of road widening and sealing.
- Increases in traffic and roadkill.

Each issue is addressed in detail in the subsequent sections below.

As noted in **Section 3.2**, an updated TTIA is appended to the Amendment Report to assess amendments made in response to agency and public submissions. The updated TTIA has been prepared in accordance with the relevant NSW legislation, policies, and guidance documents.

Road Use Safety

It is noted that the safety of the road network is a key consideration for the public, and that LSbp are proposing to undertake significant upgrades and maintenance to improve visibility and general safety of the road network.

> *The existing gravel road is very narrow with some tight dangerous corners which need to be navigated cautiously. - SE-59347494*
>
> *I am usually driving in dangerous times such as early in the mornings and late at night, this road is already dangerous with narrow areas of the road, sharp bends and causeways which often become flooded. - SE-59342745*
>
> *The main access road to this project is ringwood/wollara road. This road is a typical country road, narrow in places and in poor condition. Many areas of this road need attention and specific areas of concern were highlighted to lsbp at community meetings. - SE-59975243*

In addition to road repairs and upgrades outlined in the EIS Project, LSbp has committed to upgrading additional sections of Wollara Road and Ringwood Road as well as the Golden Highway and Ringwood Road intersection to improve the safe movement of vehicles, as a component of the Amended Project.
The additional road upgrades proposed under the Amended Project include:

- Realignment, widening and sealing an additional 1.6 km section of Ringwood Road between Killoe Creek and Binks Road.
- Realignment, widening and sealing a 4.7 km unpaved section of Wollara Road between the Goulburn River National Park boundary and 1621 Wollara Road.
- The construction of a 325 m acceleration/merge lane to allow vehicles to safely turn left onto the Golden Highway from Ringwood Road (Lot 1 DP34496).
- Formalising the bus layover area at the Ringwood Road / Golden Highway intersection.

No upgrades are proposed in the portion of Wollara Road within the Goulburn River National Park, at the request of NPWS.

It is also reiterated as outlined in the EIS that, prior to the commencement of construction, a Construction Traffic Management Plan (CTMP) would be prepared in accordance with relevant guidelines and in consultation with TfNSW, UHSC, NPWS, Forestry Corporation of NSW and any other relevant stakeholders. The CTMP would outline how construction activities would avoid, mitigate and manage risks involving construction activities, users of the traffic and transport network and residents.

Typical measures to be provided in the TMP include:

- Driver Code of Conduct requirements for all heavy vehicle operators and construction workers.
- Traffic Guidance Schemes to alert road users to changed traffic conditions as a result of roadworks or increased traffic activity as a result of the Amended Project.
- Vehicle Movement Plans to indicate preferred travel paths for construction vehicles entering, leaving or crossing traffic streams, where required.
- Traffic Staging Plans, where required including drawings, that show how traffic will pass safely through or around road construction work sites during various work stages.
- Measures to ensure access to adjacent properties during road construction activities are maintained.
- Details of any proposed detours.
- Details of persons responsible for specific traffic management operations.

It is also expected that auditing of traffic control measures by suitably qualified persons will be undertaken following implementation to ensure traffic control measures are effective and are not compromising road safety.

Road Widening and Sealing

Objecting submissions raised concerns around the narrow sections of road along the proposed construction vehicle route.

"The existing dirt road MUST be sealed prior to any works commencing on the project. Reasons for this is… Safety for workers and resident whom will be directly impacted by the significant increase in traffic flow and heavy vehicle movements." - SE-59569209

…the risks and dangers of Bow Crossing & Killoe crossing (2 separate vehicle accidents into the river this year) and that Ringwood Road and Wollara Road are already in poor condition with increased erosion and corrugating being unacceptable and dangerous. The only option for "The Project" must be to redevelop and tar seal these crossings and roads. - SE-59340957

It is acknowledged that there are narrow sections along these roads, and in order to improve traffic safety, road upgrades were proposed as part of the EIS, including:

- Culvert upgrades along Ringwood Road at Bow River and Killoe Creek.
- Road repairs along Ringwood Road, including a 1.8 km section to be widened and resealed between Bow River and Killoe Creek.

The Amended Project includes additional road upgrades, including:

- Realignment, widening and sealing an additional 1.6 km section of Ringwood Road between Killoe Creek and Binks Road.
- Realignment, widening and sealing a 4.7 km unpaved section of Wollara Road between the Goulburn River National Park boundary and 1621 Wollara Road.
- The construction of a 325 m acceleration/merge lane to allow vehicles to safely turn left onto the Golden Highway from Ringwood Road (Lot 1 DP34496).

These upgrades will further improve road safety for existing road users as well as Project-related construction vehicles. Further consideration and assessment of the additional road upgrades proposed under the Amended Project has been undertaken within the amended TTIA.

Increases in Traffic and Fauna Vehicle Strike (i.e. Roadkill)

The issues of an increase in traffic and potential for fauna vehicle strike were raised through objecting community submissions.

"This entire road is already under stress due to increased traffic, this being an a arterial road to Bylong and the National Park and now with this "Project" the increase in heavy vehicle traffic poses a huge risk…" - SE-59340957

"Also due to a massive increase in traffic movements roadkill would increase dramatically…" - SE-59347494

The number of truck movements and size of vehicles will change during the labour-intensive construction period between months three (3) and 20 of the broader 27-month construction period. As discussed in Section 6.9.3.4 of the Project EIS, overall impacts on road network performance during construction are anticipated to be minor, with both the Golden Highway / Ringwood Road and Ringwood Road / Wollara Road intersections able to continue to operate with spare capacity, low average delays and minimal queues during the morning and evening peak periods.

It is noted that the proposed construction-related traffic increases are temporary in nature and will be substantially reduced during the operations and maintenance phase of the Project, with an anticipated generation of 10 two-way light vehicle trips per day (on average). Nevertheless, appropriate mitigation measures will be implemented under the CTMP to maintain the safe operation of the road network for all users.

Additional mitigation measures are proposed to manage fauna strike, as follows:

- Education and awareness raising via site inductions and toolbox talks.
- Speed limits would be enforced on roads through a Traffic Control Plan (TCP) within the Project Area during construction and operation, to reduce the risk of fauna strikes.
- Native fauna encountered along access tracks during construction and operation would be avoided and vehicles will not continue until the fauna have moved on.
- Fauna Strike Management Procedure to outline reporting and management should a fauna strike from a vehicle occur.

These measures would be included in the Biodiversity Management Plan, as described in Section 6.3.1.12 of the Project EIS. These measures have been included in **Appendix B**.

5.1.3.2 Change of Land Use

Submissions raised the issue of changing land use, in particular the reduction of agricultural land should the Project be approved.

> *'This solar factory is not needed and is destroying prime farmland and taking away food from the Australian community." SE-59977747*
>
> *Where is our food going to be grown when prime agricultural land has been covered with these so called green energy infrastructure. SE-60035981*

It is acknowledged in Section 6.6.4.1 of the Project EIS that the Project will impact agricultural productivity within the Project Area by removing approximately 160 ha of marginal cropping land from production and removing cattle grazing from the Project Area. These impacts will be reduced once the Project is operational, with the Development Footprint being able to support grazing activities (i.e. sheep grazing).

The remainder of the Project Area outside of the Development Footprint is proposed as a Biodiversity Stewardship site and will be actively managed under a Biodiversity Stewardship Agreement. An application for a Biodiversity Stewardship Agreement is subject to an alternative approval pathway outside of the SSD application process, however LSbp has pursued this option concurrently with the RtS and Amended Project with the intention of finalising prior to the commencement of construction of the Project.

Given the option to continue to support grazing as an agrisolar Project and the proposed biodiversity stewardship it is concluded that the proposed land use is consistent and/or similar with existing and surrounding land use.

Section 6.6.5 of the Project EIS assessed project and cumulative impacts in relation to land utilised for renewable energy projects compared with the land utilised for agricultural use within the Upper Hunter Region of NSW. The Development Footprint within the Project Area occupies agricultural land, accounting for less than 0.001% of the total amount of land associated with agricultural use (1,081,841 ha) within the Upper Hunter Region of NSW. Given these outcomes, the Project EIS concluded a negligible reduction in the overall agricultural productivity of the greater region.

When the Project is decommissioned, the Development Footprint will be remediated to enable agricultural production, including cattle grazing and fodder cropping, to resume. Commitments to decommissioning and rehabilitation of the Project site were included in the Project EIS, and are anticipated to form conditions of approval, helping ensure that appropriate remediation is undertaken.

The commitments made in the Project EIS, including the development and implementation of a Construction Environmental Management Plan (CEMP), which identifies Project-specific erosion and sediment control measures under an ESCP, as well as an OEMP including a Sheep Grazing Vegetation Management Plan (if a sheep grazing trial is to be undertaken), are also expected to form conditions in the development consent, and will help ensure the appropriate environmental management of the Project throughout the construction and operational phases to ensure impacts are mitigated.

5.1.3.3 Economic

Public submissions regarding the economic impact of the project included the Project not contributing to local jobs and therefore not benefiting locals and the concern that LSbp is a foreign owned company, resulting in high subsidies for tax payers which benefits other countries.

> *"Is the proponent company Australian? If not, is a foreign company highly subsidised by the taxpayer for the benefit of off shore entities." - SE-59997970*

The proposed road upgrades raised concerns regarding the potential for follow on increases in council rates for those who live along the road. While LSbp cannot comment on the council rates in the area, LSbp can clarify that the road upgrades will be paid for by LSbp, not UHSC, and the VPA includes ongoing financial contributions to UHSC to go towards road maintenance.

The Economic Impact Assessment prepared to support the Project EIS (refer to Appendix 19 of the Project EIS) outlined that the Project will require approximately $880 million in investment during the construction phase, of which approximately $130 million will be retained in the social locality and will support 350 Full Time Equivalent (FTE) positions, and 560 indirect FTE positions over the 27-month construction period. Once operational, 10 FTE direct jobs will be supported by the Project. (Ethos Urban, 2023).

As indicated in the SIA, despite the employment and training opportunities arising from the Project's development, the social locality may experience challenges aligning the appropriate skill sets, industries of employment and available workforce to suit the workforce needs for the Project if appropriate measures are not in place ahead of construction activities commencing.

The AES, which has been prepared in response to submissions a, includes commitments for LSbp to improve connections with local businesses, in an effort to increase the number of contracts and jobs for local people.

LSbp is an Australian registered company, with UK registered Shareholders in bp and Lightsource. LSbp's Australian entities have not and will not receive taxpayer subsidies to fund the Goulburn River Solar Farm Project. The investment will come from UK entities into the Australian projects. Profits from the Australian projects will be recycled into new developments in the Australian business and issued as dividends to main shareholders.

5.1.3.4 Biodiversity

A number of submissions were raised in relation to impacts to biodiversity, in particular impacts to habitat and select species.

> *"…potential loss or modification of terrestrial habitats due to vegetation clearing with potential for impacts to threatened species and ecological communities in the Project Area." - SE-59977760*
>
> *'What do you think you are Doing in Regent Honeyeater Habitat. It is Brink of Extinction. - SE-60038723*

Following consultation with NSW BCD during the RtS phase, and in response to agency and public submissions, areas of solar panels in the north-east of the Development Footprint are proposed to be relocated to previously unused areas within the Project Area to further avoid SAII to important habitat for the Regent Honeyeater. Other changes to the Development Footprint have also reduced impacts to Box Gum Woodland.

Additionally, and in consultation with BCD, LSbp has elected to undertake additional surveys outlined further in Part B of the Amendment Report, as well as to engage with a Regent Honeyeater expert, who has contributed species-specific expertise to the Solar Farm BDAR.

Updates to both the Solar Farm BDAR and Public Roads and Culverts Upgrades BDAR have been undertaken to document the results of the additional survey effort and reduction in Development Footprint, prepared to support the assessment of the Amended Project.

5.1.3.5 Project End of Life – Decommissioning and Rehabilitation

A number of submissions raised the issue of lack of commitment to decommissioning and site rehabilitation at Project end of life, the potential for Project infrastructure to be left on site following decommissioning, and the lack of recycling facilities required to adequately facilitate recycling of Project infrastructure.

> *"I note that this project, like most similar ones in recent years, allow the developers to close down or walk away or go broke without any commitment to restore the land to its original state." - SE-59975242*
>
> *These commercial solar projects are approved irregardless of any recycling knowledge of old solar panels? - SE-60038720*

It is reiterated from Section 3.6 of the Project EIS that decommissioning of the Project will be undertaken at the end of the useful life of the asset. During decommissioning, works would include:

- Removal of solar arrays, including the foundation posts, and sorting and packaging of all materials for removal from the site and recycling and/or reuse.
- Removal of all site amenities and equipment, and recycling and/or reuse of materials wherever practicable.

- Removal and recycling of posts and cabling and removal of security fencing including small concrete footings, unless otherwise useable for livestock operations.

Additionally, a Decommissioning and Rehabilitation Management Framework (DRMF) was developed for the Project (Appendix 21 of the Project EIS). This framework was developed to ensure appropriate environmental management is undertaken during the decommissioning and rehabilitation phase of the Project in accordance with legislative requirements, conditions of consent, stakeholder interest and industry best practice.

Section 3.1.1 and Section 5.3 of the DRMF note that LSbp has committed to solar panel recycling across all projects in the construction and operational phase, which will achieve a 94% recycling rate by weight for the panels. LSbp currently has a partnership with Lotus Energy to manage the recycling of solar panels, including if panels are damaged during construction and operations, and in the decommissioning stage. The recycling partnership with Lotus Energy and/or other providers will be maintained for the operational life of the Project and through decommissioning. This measure has been included in **Appendix B**.

It is also anticipated that the commitment to decommissioning of the Project in accordance with the relevant stage legislation would be included as a condition of the development approval, which ensures that decommissioning of the Project must be undertaken following the end of the useful life of the asset.

5.1.3.6 Hazards and Risk

Submissions raised the issue of hazards and risks from the Project, including the risk of fire and resultant toxic gas release emanating from the Project site in the event of fire.

> *"Solar Electricity Generating Works are an increased fire risk & toxic smoke hazard - which has not even been researched yet by NSW Fire & Rescue" - SE-60054457*
>
> *"Fire will be another major issue as the heat and glare could ignite a fire and while only small can spread fast especially in our dry months as seen with the devestation of recent bushfires." - SE-60018965*

It is understood that the potential for fire and resultant toxic gas release, in relation to transport, storage and use of hazardous materials poses a risk to the Project, as outlined in the PHA prepared to support the Project EIS.

A risk assessment was undertaken as a component of the PHA to support the Project EIS (refer to Section 6.11.2 and Appendix 17 of the Project EIS). The PHA considered the results of the consequence modelling and the estimated likelihood of a battery fire and/or thermal runaway scenario resulting in either a fire, explosion or toxic gas release. The results of the PHA indicated that the Project would comply with the relevant risk criteria for land use planning, provided adequate separation distances between on-site infrastructure and the site boundary/involved dwellings are maintained. Commitments to the maintenance of the noted separation distances, along with additional technical and non-technical risk mitigation and management measures were made in the Project EIS (refer to Appendix 5 of the Project EIS).

Additionally, Fire and Rescue NSW made a submission during exhibition of the Project (refer to **Section 4.1.6** above) noting that renewables facilities with large scale BESS pose problems for firefighting, and that special hazards exist that may require additional fire safety and management measures.

All Fire and Rescue NSW recommendations have been adopted by the Project, primarily centred on the development of additional detailed plans to be finalised in consultation with Fire and Rescue NSW, as summarised below:

- Preparation of a detailed FSS. The FSS is to be developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper (HIPAP) No.21 and is to meet the operational requirements of FRNSW. The FSS will:
    - consider the operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence.
    - consider worst-case fire scenarios including a full BESS unit fire and demonstrate no fire propagation within the facility.
    - be included as a condition of the development consent (upon Project approval).
- A comprehensive Emergency Plan is developed for the site in accordance with HIPAP No.1.2. The findings of the FSS should inform the development and content of the ERP.

The preparation of the additional detailed plans above has been included as updated mitigation measures in **Appendix B** of this report.

5.1.3.7 Visual

Submissions received included issues relating to potential visual and glare impacts resulting from the proposed Project.

> *'Having a solar farm near to National Parks and wilderness areas presents a blot on the visual impact of the area." - SE-60035728*

As noted in Section 6.7.5 and Appendix 12 of the Project EIS, the Project Area's isolated location (surrounded by Goulburn River National Park) partially screens it from view at neighbouring receivers. Modelling was used to visualise views from viewpoints at nearby residences and Wollara Road which indicated that the highest visual impact (moderate) would occur at Wollara Road. With the implementation of perimeter landscaping that would successfully screen views in three (3) – five (5) years, the impact would be reduced to very low as a residual rating. Remaining private viewpoints were rated as having low visual impact.

The Project would change the character of the landscape by introducing somewhat uncharacteristic dark, linear, built elements across cleared parts of the open, agricultural landscape. However, the Project is generally low in height, would not cause noticeable landform change, retains vegetation and additional native vegetation would be established alongside Wollara Road to reduce visibility and integrate the Project with the existing landscape.

The proposed landscaping was provided in a draft landscape plan prepared in conjunction with the Project EIS, which proposed perimeter planting along Wollara Road with the aim to establish a quick growing, dense screen to reduce public views of Project infrastructure from Wollara Road, as well as providing additional ecological benefits. Planting would be within the Project Area, located between Wollara Road and the Development Footprint's perimeter security fence, in three planting areas based on expected mature plant heights (to avoid casting shadows on the solar panels).

With respect to glare-related impacts, a comprehensive Glint and Glare Assessment was prepared to support the Project EIS (refer to Appendix 13 of the Project EIS), which determined that no "yellow glare" (defined as glare with the potential for temporary after-image) would be experienced at any dwellings. One (1) road receptor (Wollara Road) has been assessed as having a moderate glare rating (less than 30 hours per year), and approximately 11 hours per year of potential "yellow glare" for Wollara Road.

It is important to note that assessment is based on a worst-case scenario and does not take into account weather conditions, intervening elements such as vegetation and built structures. If intervening vegetation and built structures are taken into account, the potential experienced glare will likely be reduced. Moreover, additional screening vegetation along Wollara Road, as outlined in the draft landscape plan, is expected to fragment any potential glare impacts from the Project to Wollara Road.

5.1.3.8 Impacts to Waterways

Several submissions raised impacts on waterways as a key issue, including perceived issues regarding waterway and stream contamination and water supply issues.

> *The danger of solar panels catching fire and leaching toxic chemicals into the Goulburn River will potentially cause catastrophic harm to the local environment. 'SE-60035728*

It is noted in Section 6.10.3.2 of the Project EIS that there are several ephemeral and perennial streams traversing the Project Area, while design has sought to avoid works in or near these areas, several waterway crossings will be required for site access, internal roads and electrical cabling. Project crossings will be designed to minimise impacts on stream stability and fish passage with reference to relevant and current guidelines and standards.

Works on waterfront land are defined as works within 40 m of top of bank of a defined 3rd order stream, (i.e. the lower reaches of Redlynch Creek, Rocky Creek, Monaghans Creek and Road Repairs and Upgrades at Bow River and Killoe Creek). These will be managed through measures outlined in a CSWMP, which will be prepared prior to construction of the Project. It is also noted that no sensitive infrastructure will be placed within 20 m of any Strahler order 3 or above streams, a commitment made in the Project EIS.

It is anticipated that preparation of the CSWMP will be included as a condition of the development consent, ensuring that the management of waterways will be undertaken during construction of the Project.

Ongoing management of solar panels will also be undertaken during the operational phase of the Project, including regular maintenance to ensure any damaged panels are repaired and/or removed as soon as identified. This measure, as well as others, will be documented in an OEMP, which will be developed for the Project to address potentially adverse impacts on the receiving environment surface water quality during the operational phase. This will include the development and appropriate maintenance of suitable ground cover around solar panels, and grassed table drains near access tracks to minimise the potential for erosion and export of sediment.

It is anticipated that the preparation and implementation of the OEMP will be included as a condition of the development consent, ensuring the ongoing management of the Project during the operations phase.

As noted in Section 6.10.3.4 of the Project EIS, water supply sources would be determined prior to the commencement of construction, in consultation with suppliers and landholders, subject to availability.

A water sourcing strategy would also be developed to ensure there are no water supply impacts to adjacent landowners or other stakeholders. It is anticipated that the Project's proposed water use during construction and decommissioning would not have a negative impact on water supply to the Project Area and the region.

5.1.3.9 Noise Impacts

Noise-related issues were raised in a number of submissions, most notably in relation to increased traffic noise resulting from the construction of the Project.

> *"i am not at all for this solar farm…The noise from the farm and from the increase in traffic…" – SE-59917457*
>
> *"Also the noise is going to be shocking. We live in this tranquil area because of the peace and quite." - SE-59340474*

It is noted in Section 6.8.4.1 of the Project EIS that construction noise levels (i.e. noise levels associated with the construction of the solar farm and ancillary infrastructure) are predicted to comply with the daytime noise management levels at all sensitive receivers not involved with the Project.

Additionally, as outlined in Section 6.8.4.5 of the Project EIS, the construction traffic noise levels associated with the Project are predicted to comply with the criteria, and, in accordance with the NSW Road Noise Policy (RNP), the Project construction traffic noise is predicted to be acceptable and have minor impact.

The only noise management level (NML) exceedances identified were in relation to road upgrade construction activities, where receivers R11, R14 and R15 were predicted to experience noise levels above the NMLs. It is noted that the road upgrade works are in the interest of the local community, with road safety being frequently identified by the community as a key issue. Specifically, section 6.12.4 of the Project EIS noted:

Many of the residents alongside the road raised that road repairs that would occur as a result of the Project would improve personal use of the road and accessibility around the local area, which would lead to broader improvement to their way of life.

Potential noise impacts associated with the additional road upgrades proposed as part of the Amended Project have been assessed within the Amendment Report.

The anticipated duration for construction of the road upgrades is three (3) months, and as such, any exceedance will be temporary in nature and limited to standard daytime working hours. It is noted that exceedances are only anticipated when works are being undertaken adjacent to these receivers, which would not be the case across the entire three (3) month construction period. Additionally, an updated Construction Noise and Vibration Management Plan (CNVMP) will be prepared prior to the commencement of construction activities, which will assist in the management of temporary construction related NML exceedances associated with the proposed road upgrades.

5.1.3.10 Heritage Impacts

Submissions were raised in relation to impacts to historic heritage, particularly in relation to the remains of the O'Brien homestead (i.e., the Slab Hut) and potential impacts to the broader heritage significance of the Goulburn River National Park.

> *'I wish to comment on the original slab hut occupied by the Obrien family situated on Poggy Station the proposed Goulburn River solar farm. Elizabeth Obrien and her 15 month old son were murdered by Jimmy Governor a aboriginal bushranger on the run. I do not think any thought has been put into the heritage of this tragedy that occurred back in the early 1900s. - SE-59923482*

An exclusion zone has been established around the area of historical archaeological potential associated with the Slab Hut (as described in Section 6.5.4 of the Project EIS). No disturbance will occur to this area, avoiding impacts to the Slab Hut.

The exclusion zone surrounding the Slab Hut is a committed mitigation measure which will also be included in the Heritage Management Plan (HMP), to ensure its protection during construction and operation of the Project.

The heritage significance of the Goulburn River National Park is addressed in the EIS. As outlined in Section 6.5.4.1 of the EIS, due to the topography of the surrounding area, and distance between the Project Area and the Goulburn River National Park listed heritage item (being ~2.5 km west of the western extent of the Project Boundary), views to the Goulburn River National Park from surrounding viewpoints will be maintained and the character and setting of the heritage item will not be impacted. Additionally, no direct impacts to the Goulburn River National Park are proposed as part of the Project.

5.1.3.11 Social and Community Cohesion Disturbance

Community cohesion was a topic referred to throughout public submissions, including the potential change to character of the town, particularly referring to the incoming workforce. Some submissions raised concerns that the incoming workforce would be 'inappropriate', such as people from outside the region or backpackers, therefore not contributing to the local economy.

> *"I write to oppose the Goulburn River solar farm on the following basis… Only adds 10 jobs during it operating phase and will redirect scarce and important trades away from where the community needs them during construction phase…" - 'SE-60033967*
>
> *"…potential impacts for social amenity due to land use change, changes in the local population and pressure of local facilities and services and economic benefits associated with local employment and training for staff." - SE-59977760*

Large-scale transitions, the introduction of new projects in a social locality, changes to the built and natural environment, and the subsequent influx of new residents, can influence the levels of social cohesion within a community as well as alter a community's stability and character (NSW DPE, 2023).

These stresses can be seen as being typical at this stage of Project development, and in many cases, this stress can subside once decisions are made regarding the Project's next steps. As outlined in the SIA prepared to support the Project EIS, the community suggested that LSbp provide as many local jobs and contracts as possible for the local people and businesses.

LSbp will commit to ongoing consultation and collaboration with the local Merriwa community and will work towards as many local collaborations to minimise the community cohesion disturbance. Future engagement activities are a commitment of the Project and will be implemented by a dedicated LSbp resource.

Additionally, as part of the AES prepared as part of the Amended Project, LSbp implemented a targeted and strategic consultation program with accommodation providers, local councils and community groups in the region, to discuss options for housing project workforce as well as opportunities to support local employment and procurement. The outcome of this consultation is discussed further in the AES appended to the Amendment Report (Umwelt, 2023b).

5.1.3.12 Cumulative Impacts

The cumulative impact of multiple projects in the region was another common theme throughout the public submissions, and what this means for incoming workforces increasing the pressure on local services such as medical, accommodation and emergency services.

> *Cumulative impact is significant with these projects and poorly managed, neither fully divulged to the impacted populations nor recognised and understood for the potential social dislocation of communities. - SE-59973987*

In terms of medical services pressure, a public submission indicated that there was a lack of medical services available for the incoming workforce. The closest medical service is the Merriwa Multi-Purpose Service, which has community health, an ambulance station, and a private medical practice. The other medical services located in the vicinity of the Project are in Muswellbrook, Scone, Denman and Coolah. The AES, which supports the Amended Project, includes consideration of medical service accessibility.

The construction period will intensify pressures on accommodation and rental housing, especially in the peak period of construction. The strain on accommodation has been assessed throughout the AES. The AES identifies local opportunities for short-term accommodation to avoid and or minimise strain on the existing services. LSbp has negotiated an option for up to 300 personnel to be accommodated at the proposed Merriwa workforce accommodation camp, with potential to increase the number of rooms if required, which will substantially avoid placing increased pressure on existing accommodation providers.

Public submissions mentioned the increased strain on emergency services in the local area, in particular fire services, as there is a perception that increased infrastructure has the potential to exacerbate bushfires known to occur locally. With the already challenging task of recruiting volunteer and paid rural fire fighters and fire and rescue workers, the public submissions indicated their concern that these people would experience further strain due to the Project. As outlined in Appendix 16 of the Project EIS, LSbp has committed to continuing engagement with the local emergency services, and offering them opportunities to familiarise themselves with the Project site both prior to construction and once construction is complete.

5.1.3.13 Livelihoods

Livelihoods was a reoccurring theme found throughout public submission, including questioning around the sustainable procurement of solar panels and the topic of ‘slave labour’ to procure materials required to develop the Project.

"Does not provide reliable, despatchable power, uses Chinese slave labour…" - SE-60032984

"…Secondly I object strongly to these systems based upon the fact that they rely on mining by child slave labour in under-developed countries. Australia should NOT support such reprehensible actions…" - SE-60089459

LSbp is committed to creating an equitable business that creates a positive social impact for people, partners, and communities. LSbp respects human rights, acts ethically and with integrity in all business dealings and relationships. LSbp implements and enforces effective systems and controls that reduce the risks of modern slavery occurring in its business or supply chain. LSbp's broader social responsibility policies are available on the global website here: https://lightsourcebp.com/sustainability/social-responsibility/.

LSbp is committed to eliminating the risk to the extent possible of modern slavery occurring within its own business, in its supply chains or through any other business relationship. As part of its commitment to limiting the risk of modern slavery, LSbp will comply with all applicable Australian and International slavery legislation including the *Modern Slavery Act 2018* (Commonwealth) and any state-based legislation that may be applicable. LSbp's Modern Slavery Statement is available at: https://lightsourcebp.com/modern-slavery-and-human-trafficking-statement/. Additionally, LSbp are a signatory to the Clean Energy Council's Pledge Against Modern Slavery (Clean Energy Council, 2023).

5.1.4 Justification and Evaluation of the Project as a Whole

5.1.4.1 Risk of decision-making body not being held accountable

Trust in decision making bodies was a theme that emerged in a number of submissions make during public exhibition of the Project. This is generally beyond the scope of the Proponent and the DPE assessment team, although below is a general summary of accountability measures for government organisations in NSW.

Development applications (DA) for SSD in NSW are lodged with the Planning Secretary of the DPE. The Minister for Planning and Public Spaces is the consent authority for SSD projects. Accountability for government departments in NSW, including DPE, is primarily enforced through a combination of mechanisms and entities.

The Minister for Planning and Public Spaces is responsible for overseeing DPE. This minister is a member of the NSW government and is accountable to the Premier and the Parliament for the DPE's performance and actions. If the public are concerned that the conduct of government officials needs further investigation, they can submit a complaint to the independent ombudsman for NSW.

The NSW Ombudsman is an independent officer of the Parliament responsible for investigating and addressing complaints about government agencies and their actions. There are various other independent commissions and tribunals in NSW responsible for reviewing specific decisions and actions of government agencies, including those related to planning and environment. For instance, the Land and Environment Court of NSW has jurisdiction over a wide range of planning and environmental matters and can review decisions made by DPE.

Government departments in NSW are expected to engage with the public and stakeholders in a transparent manner. This includes providing access to information, seeking public input on policies and projects, and publishing reports and documents related to their activities. Decisions made with regard to SSD projects are designed to be a collaborative process that engages local communities and addresses concerns.

Overall, accountability of DPE in NSW (i.e., the decision-making body for most SSD projects) is a multifaceted process that involves oversight by elected officials, independent bodies, and public engagement to ensure that it fulfills its responsibilities in a transparent and accountable manner.

5.1.4.2 Not financially viable, low electrical output for the amount of land-use

The financial viability of the Project is a concern that has been shared by members of the community during the Projects exhibition period. Another factor highlighted through the submissions process is that the amount of energy generated during the Project is low compared to other uses of the land or alternative energy generation options.

With regard to the financial viability of the Project, its design has considered various factors, including environmental, long-term sustainability, and financial viability. LSbp are a for-profit organisation which, alongside sustainability objectives, aims to capture value for its partners throughout the lifecycle of each project. LSbp invests in Projects with a develop-own-operate model, aiming to build assets that offer long term financial viability. The Project will provide direct financial benefits to the regional and local community, including a capital investment of approximately $880 million, of which approximately $250 million will be retained in the region over the life of the Project (including construction and operational phases).

Energy efficiency versus land requirements was also a concern raised during the submissions process. The Project has aimed to optimise the land utilization through investment in advanced solar technology and Project design. The panels would be arranged in a series of rows positioned to maximise the solar resources available. The panels would move throughout the day from east to west, tracking the sun. The tracking system is estimated to have a tracking range of 120 degrees, or ≤ 60 degrees from the horizontal position.

Alternative technology was considered for the Project. A single axis tracking system was ultimately chosen for the Project as it allows for more efficient electricity generation than fixed tilt options, leading to more efficient land use. Energy density for the Project is calculated to be 5.4% more efficient than the 2019 benchmark for single axis tracking PV systems and 25% more efficient than PV technology benchmarks from 2016 (Bolinger M, 2022).

The Project is also exploring potential future sheep grazing on-site to address the regional need for agricultural and energy. This dual function would retain the agricultural characteristics of the rural landscape contributing to the Project utilisation of land and contributing to the financial viability of the Project overall.

Ultimately, the financial feasibility of the Project is a commercial matter, not an assessment matter for DPE to be considering regarding the Project's merit.

5.1.4.3 Does not provide reliable power

Doubts about the reliability of the electricity generated by the Project were raised throughout the submissions process by members of the public. Such comments noted that energy from renewable sources such as solar are restricted by their reliance on UV radiation to generate electricity and this caveat does not align with a need for a stable electricity grid.

One of the attributes of renewables is their intermittency of electricity generation depending on weather conditions. Solar energy, for instance, relies on sunlight, which can be intermittent, leading to concerns about consistent power generation.

It is important to note that in isolation, renewable energy is intermittent and does not provide round the clock electricity generation, however a diversified energy network incorporating solar, wind, BESS, pumped hydro and dispatchable loads can deliver reliability. Regional investments are being made in renewable energy to bolster the overall energy grid through diversification of energy sources. The Goulburn River Solar Farm represents one such investment in a growing portfolio of energy generation projects across the electricity grid. The Project will have a capacity to supply clean energy to power the equivalent of approximately 156,000 average NSW homes per annum.

Furthermore, incorporating advanced energy storage solutions into the NEM will play an important role in resolving issues related to energy stability. By implementing an array of energy storage solutions to grow and advance regional energy storage assets, the NEM will be supported by a robust and reliable energy grid in the future.

As part of this broader effort, the inclusion of either a 580 MWp DC or 450 MWp AC BESS (or combined BESS with capacity for 1,030 MWp) in this Project contributes to these efforts. Battery technology has seen significant technological improvements in recent years, offering a practical means of storing excess energy generated from renewable sources during periods of abundance and releasing it when demand is high. The integration of energy storage into the Project and the region offers more stable and consistent energy supply to the NEM.

5.1.4.4 Project does not align with community interests or relevant legislation

Members of the community have submitted comments that the Goulburn River Solar Farm does not align with community interests or government legislation. It's crucial to recognise that perspectives within communities can be diverse, and the goal of projects aimed at achieving positive social outcomes is to reduce harm within the community while advancing the strategic goals of both local and regional communities.

The Goulburn River Solar Farm has been developed in line with the Upper Hunter Local Environmental Plan, Upper Hunter Strategic Regional Land Use Plan, the Hunter Regional Plan 2036, the State Environmental Planning Policy (Planning Systems) 2021, *Environmental Planning and Assessment Act 1979* and Environmental Planning and Assessment Act Regulation 2021, as well as state and federal strategies and policies for renewable energy. Furthermore, LSbp has engaged in landholder and community engagement since 2021 to establish relationships and dialogue with impacted stakeholders. The stakeholder engagement process has afforded opportunities for LSbp to effectively assess and integrate social outcomes within the detailed Project planning, design, and assessment phases. For example, road upgrades along Ringwood Road and Wollara Road, which are a direct response to community feedback. Should the Project be approved, stakeholder engagement will be ongoing for the life of the Project.

LSbp has committed to a Community Benefit Sharing Strategy in the form of a VPA with Council. The VPA contains a Community Benefit Fund and a Road Improvement Fund (i.e., including upgrades to Wollara and Ringwood Roads). Furthermore, an AES has been developed with local stakeholders and councils to maximise local employment and sourcing from local communities such as training, up-skilling and capacity building support.

5.1.5 Issues Beyond the Scope of the Project

5.1.5.1 Impact on land value for proximal properties

As outlined in the 2022 NSW Large Scale Solar Guideline - Frequently Asked Questions issued by DPE there is no evidence to suggest that large scale solar developments affect the land value of neighbouring properties, and it is outside the scope of what the consent authority can consider in determining an SSD.

Furthermore, land (de)valuation is substantially site specific; therefore, it is difficult to provide a definite answer to the question of how the solar farm will impact the future land and house values of neighbours. The Project Area is relatively isolated and there are no direct residential neighbours, however several rural properties occur within a 10 km radius of the Project Area. The closest residents are within 3 km, however, are unable to see the Project. The results of the Visual Impact Assessment (Appendix 12 of the Project EIS) conclude that the Project will have little to no impact on the views of neighbouring properties, therefore not directly impacting the visual value of properties or houses.

5.1.5.2 Waste of taxpayers money (subsidies received by LSbp)

LSbp's Australian entities have not and will not receive taxpayer subsidies to fund the Project. Further assessment of this issue is considered beyond the scope of the Project and assessment of the Project as a whole.

5.1.5.3 Disbelief in renewable energy generation

Stakeholders expressed a lack of belief that renewable energy was a viable option for generating the electricity that is required to service the Australian population. The submissions process identified that the community are sceptical of the investment in the renewable industry due to a belief that it will not ensure reliability and security in the NEM.

The concerns regarding the viability of renewable energy stem from the significant obstacles faced by the energy industry during its shift from traditional energy sources like coal and gas to alternative sources of energy such as wind and solar. Renewable energy sources possess distinct physical characteristics compared to conventional sources, exhibit output variations depending on weather conditions and are often situated in remote parts of the electricity grid. However, as additional investments are made across NSW, the challenges related to remote power sources will gradually be surmounted. Moreover, by investing in a diverse range of renewable energy sources and energy storage solutions integrated into the NEM, the issues concerning energy stability will also be resolved. This Project responds to that investment in further sources of renewable energy that will contribute to the overall stability of the grid through the development of an AC or DC BESS.

In addition to renewable energy, various energy storage systems have been hailed as potential solutions to enhance the performance and resilience of the electricity network. An assortment of targeted energy storage systems will be necessary to foster the growth and advancement of domestic energy storage assets and infrastructure in the future. The BESS that will form a component of this Project represents a step toward a more stable and consistent energy supply to the NEM.

Community feedback during the submissions phase of the assessment process illustrated that there is a lack of confidence about the capability for renewable energy to achieve the energy security and capacity that is required by the NEM.

This issue is beyond the scope of LSbp and the assessment of the Project as a whole.

5.1.5.4 Project leads to higher power prices for NSW residents

Objecting submissions by members of the community noted concerns that the addition of renewable energy sources into the electricity grid will increase the cost of energy for homes throughout NSW. This concern is exacerbated by the increasing cost of living and rising electricity prices felt by many people across the state.

The AEMO establishes wholesale energy rates in 5-minute intervals. Power producers submit offers specifying the quantity of energy they are prepared to supply to the market and their desired prices. The spot price is then determined by the point where supply and demand intersect. Increasing the overall supply of electricity across the energy grid will contribute to lower prices for Australian consumers by improving the capacity and security of the electricity grid and placing downward pressure on electricity prices. The Project will have a capacity to supply clean energy to power the equivalent of approximately 156,000 NSW homes per annum (on average).

A recent report by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and AEMO, 'The GenCost 2021-22' report affirms that in Australia, wind and solar power stand as the most cost-effective options for both electricity generation and storage (CSIRO, 2022). Furthermore, the report predicts that as the current period of inflationary pressures subsides, the costs associated with wind, solar, and battery technologies will further decline.

This issue is considered beyond the scope of the Project and the assessment of the Project as a whole.

5.1.5.5 DPE have no mechanism to ensure all commitments and conditions are satisfactorily performed

The capacity of DPE to ensure that the commitments made to the community are met and enforced was noted by numerous members of the community during the submissions process.

The matter of government regulatory performance over solar developments across NSW is beyond the scope of LSbp. The DPE are the regulatory authority overseeing all SSD across NSW and have responsibilities to ensure that environmental and social conditions of projects across NSW are respected.

Upon the approval of any development, conditions of consent are published and administered to the proponent. These conditions are intended to address environmental, social, and other concerns raised during the assessment process. If approved, compliance with these conditions will be required throughout the construction and operation of the Project.

Throughout the construction and operation of the Project, numerous project management and reporting systems will be established to track and report on the Project's progress of compliance with the conditions established by DPE.

If compliance with all conditions of consent cannot be proven, DPE can address non-compliance through a number of regulatory actions including:

- issuing warnings and official cautions
- issuing orders or directions to prevent or remedy breaches
- accepting enforceable undertakings
- imposing penalties on applicants, such as fines
- prosecuting offences.

5.1.5.6 Government to legislate and enforce the rights and protection of wildlife, to protect from renewable projects

The local community are aware of and concerned for the protection of wildlife in light of regional developments that may encroach on potential habitat. The state and federal government protect the rights of wildlife through a series of legislation, agencies and policies.

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) stands as the primary environmental law of the Commonwealth Government, under the oversight of the Australian Government DCCEEW. Its fundamental purpose is safeguarding Australia's significant environmental treasures, referred to as Matters of National Environmental Significance. These encompass threatened flora and fauna species, fragile ecological communities in danger, migratory species, and various other matters deserving of protection.

The *Environmental Planning and Assessment Act 1979* (EP&A Act) stands as the principal planning law in NSW, facilitating the establishment of planning instruments that steer land utilisation. Moreover, it safeguards the environment, encompassing the preservation of indigenous flora and fauna. This encompasses threatened species, their populations, ecological communities and habitats with significant biodiversity, as listed in the NSW *Biodiversity Conservation Act 2016* and NSW *Fisheries Management Act 1994*.

Renewable energy projects such as the Goulburn River Solar Farm are subject to statutory provisions with respect to environmental assessment and planning approval at Federal, State and local levels. Section 4 of the EIS details which provisions apply to the Project and where in the EIS these provisions have been addressed.

5.1.5.7 Lack of trust in Government decision making

Trust in government organisations and the decision-making process was a theme throughout a number of comments made during the submissions process. This matter is beyond the scope of LSbp and the DPE Assessment Team.

The issue of trust in government decision-making is a broader issue identified by communities across NSW and is the responsibility of all government agencies and organisations. LSbp is primarily focused on assessing the environmental and social impact of the Project, ensuring compliance with regulations, and engaging with the community throughout this process. The process of assessing the environmental and social impact for this Project has been collaborative with the community and relevant agencies and has thoroughly assessed the impact of the Project on sensitive environmental receivers.

6.0 Updated Project Justification and Evaluation of Merits

This RtS Report has been prepared to address the issues raised throughout government and community submissions during public exhibition of the Project.

Several amendments have been made to the EIS Project in response to ongoing consultation with agencies, progression of detailed design and submissions received during the exhibition period, including:

- Transport route amendments including upgrades to the intersection of Golden Highway and Ringwood Road.
- Wollara Road and Ringwood Road upgrades.
- BESS design amendments.
- Minor modifications to the Development Footprint.
- Additional Transmission Tower.
- Additional assessment and revised approach for workforce accommodation, supported by an AES.

The Project is a direct response to the NSW and Commonwealth's Government's commitments to transition to renewable electricity generation in NSW. The NEM needs to rapidly transition to renewable energy to support the NSW Climate Change Policy Framework, as well as the Commonwealth Government's commitments under the Paris Agreement. At present, additional renewable energy capacity is being added to the NEM at a lower rate than what the AEMO has identified as required to achieve the transition to renewable energy (Parkinson, 2023), and the NSW government is looking to streamline renewable energy development approvals in the planning system to deliver the transition to renewables under the Energy Roadmap (NSW Government, 2023).

The Project will materially assist in addressing this shortfall by delivering renewable energy capacity to the NEM to help reduce the need to keep coal fired power stations like Eraring Power Station online beyond their current committed retirement date (AFR, 2023). The Project will also support the firming and storage of renewable energy in NSW through the development of a BESS within the Project Area.

The Project will also contribute significant capital investment within the Upper Hunter region, generate jobs during the construction and operational phases, provide indirect benefits to local services throughout the life of the Project (e.g. indirect employment creation in local and regional economies would include jobs supported through transportation, trade supplies, services, accommodation, catering, retail services, etc.), deliver additional income to host and other associated landowners, and provide benefits to the local community through the implementation of the proposed VPA with UHSC.

The Project represents an essential part of the energy transition with a fully optimised constructible design. The Project EIS confirms that, while there will be some unavoidable impacts, the extent of these impacts has been minimised through the design process to the extent practicable and appropriate management, mitigation and offset measures have been committed to address the residual impacts. On this basis, it is considered that the Project will result in a net benefit to the local and regional NSW community.

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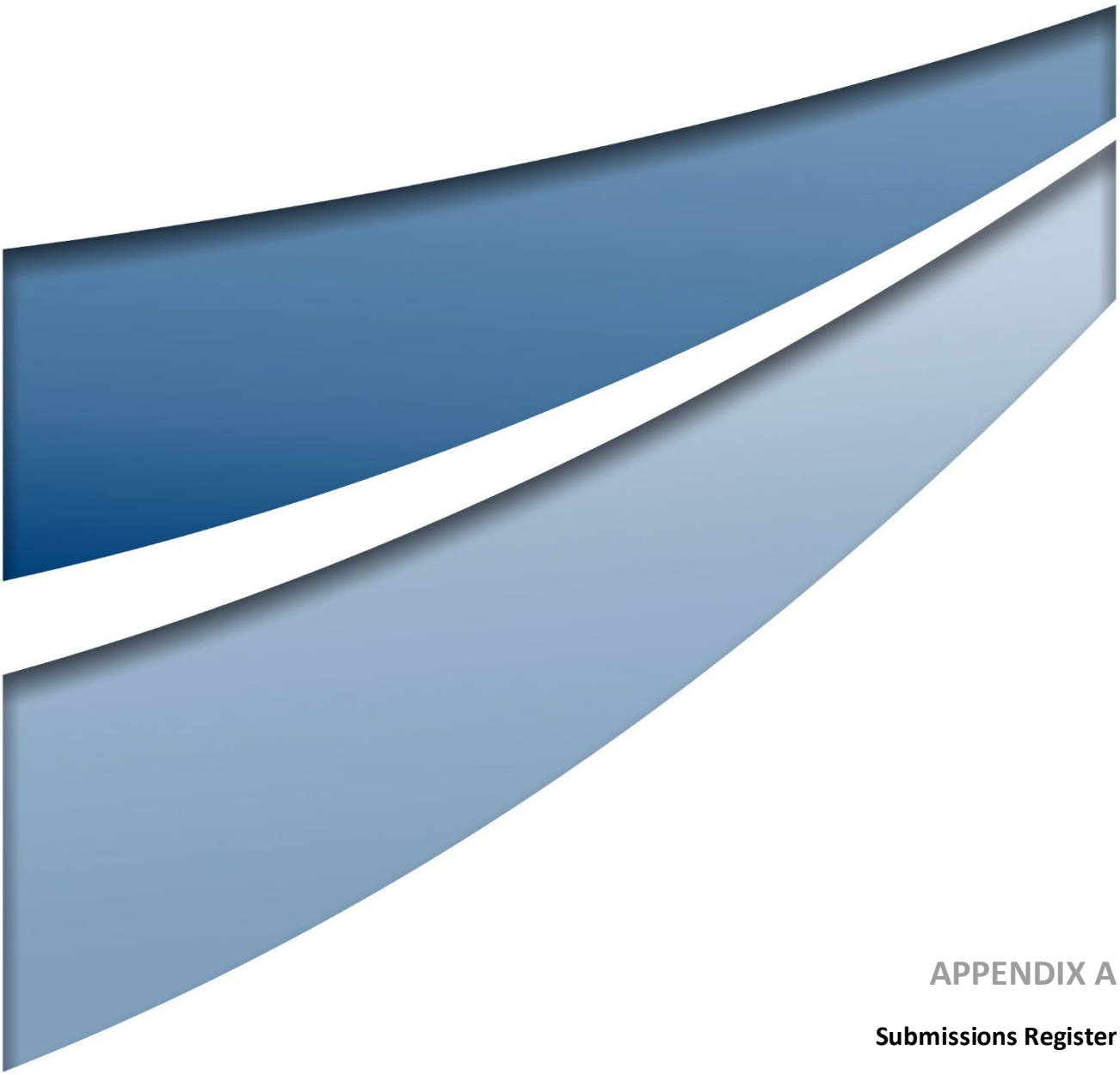


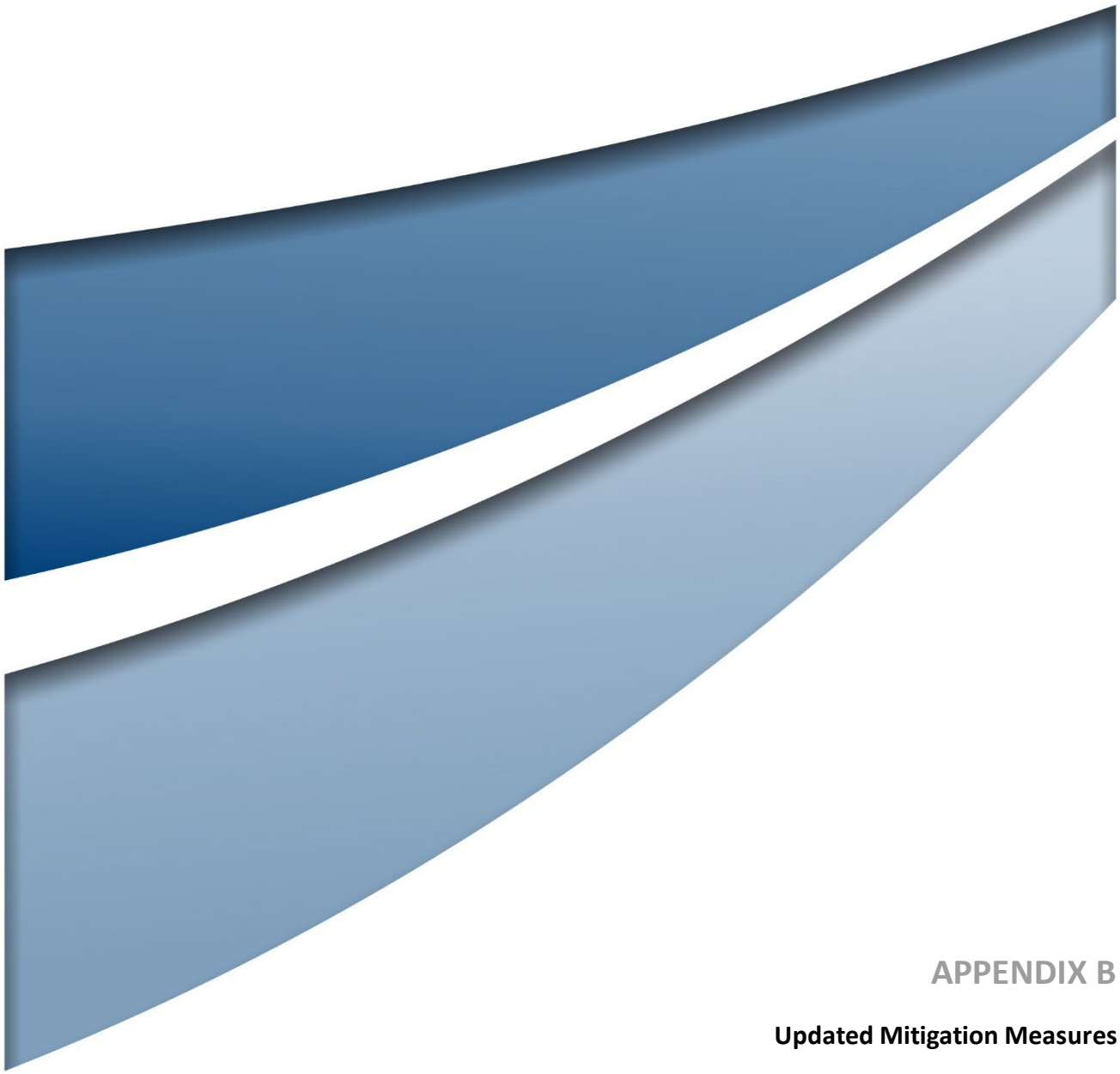
APPENDIX A

Submissions Register

Group	Name	Submitter ID	Section where issue is raised
Government	BCD	-	**Section 4.1.1**
	National Parks and Wildlife Service (NPWS)	-	**Section 4.1.2**
	Mining, Exploration & Geoscience Geological Survey of Sydney (MEG-GSNSW)	-	**Section 4.1.3**
	NSW Rural Fire Service	-	**Section 4.1.4**
	Heritage NSW	-	**Section 4.1.5**
	Fire & Rescue NSW	-	**Section 4.1.6**
	TfNSW	-	**Section 4.1.7**
	Forestry Corporation of NSW	-	**Section 4.1.8**
	Department of Primary Industries (DPI) – Agriculture	-	**Section 4.1.9**
	DPI – Fisheries	-	**Section 4.1.10**
	DPE – Water	-	**Section 4.1.11**
	DPE – Crown Lands	-	**Section 4.1.12**
	MWRC	-	**Section 4.2.2**
	UHSC	-	**Section 4.2.1**
Stakeholder groups	Save Our Surroundings (SOS)	S-59872466	**Section 5.1.3.1, 5.1.3.2, 5.1.3.3, 5.1.3.4, 5.1.3.8, 5.1.3.12**
	Hay Riverina State Group	S-60091209	**Section 5.1.3.4, 5.1.3.7, 5.1.4.3, 5.1.5.2, 5.1.5.4**,
Individuals	Withheld	S-60035976	**Section 5.1.3.4, 5.1.3.6, 5.1.3.13, 5.1.4.3, 5.1.4.2, 5.1.5.2, 5.1.5.3**,
	Dashiell Hendy	S-60035970	**Section 5.1.3.2, 5.1.3.5, 5.1.4.3, 5.1.4.2, 5.1.5.2, 5.1.5.4,**
	Bill Burdett	S-59975241	**Section 5.1.3.5, 5.1.5.3**
	Withheld	S-60035976	**Section 5.1.4.3, 5.1.5.3, 5.1.5.4**
	Neil Fisher	S-60032983	**Section 5.1.3.2, 5.1.3.5, 5.1.3.13, 5.1.5.2**
	Withheld	S-60035727	**Section 5.1.3.6, 5.1.3.7**
	Withheld	S-60040977	**Section 5.1.3.2, 5.1.3.4, 5.1.3.13, 5.1.4.1, 5.1.4.3, 5.1.5.3**
	Scott McCabe	S-59917456	**Section 5.1.3.1, 5.1.3.3, 5.1.3.4, 5.1.3.6, 5.1.3.7, 5.1.3.9**
	Withheld	S-60089462	**Section 5.1.3.4, 5.1.3.5, 5.1.3.6, 5.1.4.3, 5.1.5.2**
	Withheld	S-60035980	**Section 5.1.3.2, 5.1.3.4, 5.1.3.7, 5.1.5.2**
	Jamye Grossman	S-60089460	**Section 5.1.3.5**
	Withheld	S-60040977	**Section 5.1.3.2, 5.1.3.6, 5.1.3.9, 5.1.3.11, 5.1.3.13, 5.1.5.7**
	Withheld	S-59342744	**Section 5.1.3.1**
	Warwick Edden	S-59927474	**Section 5.1.2.2, 5.1.3.1, 5.1.3.2, 5.1.3.4, 5.1.3.5, 5.1.3.6, 5.1.3.9, 5.1.3.11, 5.1.4.1**

Group	Name	Submitter ID	Section where issue is raised
	Withheld	S-60012956	**Section 5.1.3.2, 5.1.3.4, 5.1.3.5, 5.1.3.13, 5.1.4.4, 5.1.5.3**
	Melissa Eftimovski	S-59340956	**Section 5.1.3.1, 5.1.3.7**
	Ian McDonald	S-59974462	**Section 5.1.3.13**
	Withheld	S-60054456	**Section 5.1.3.2, 5.1.3.4, 5.1.3.6, 5.1.3.7**
	John McGrath	S-60038719	**Section 5.1.3.5, 5.1.3.6, 5.1.4.3, 5.1.5.2**
	Withheld	S-60091206	**Section 5.1.3.2, 5.1.3.7, 5.1.4.3**
	Withheld	S-60084261	**Section 5.1.3.7, 5.1.5.3**
	Withheld	S-59973986	**Section 5.1.3.2, 5.1.3.4, 5.1.3.11, 5.1.3.12, 5.1.4.1, 5.1.4.2**
	Roger Stannard	S-60037467	**Section 5.1.3.4**
	Stan Moore	S-60051711	**Section 5.1.3.5**
	Roy Currie	S-60027708	**Section 5.1.2.1, 5.1.3.2, 5.1.3.3, 5.1.3.5, 5.1.3.13, 5.1.5.2**
	Peter Kaleta	S-60040973	**Section 5.1.3.5**
	Withheld	S-59997969	**Section 5.1.3.2, 5.1.3.3, 5.1.3.5, 5.1.3.13, 5.1.5.2**
	Amber Pedersen	S-60028456	**Section 5.1.3.2, 5.1.3.2, 5.1.3.3, 5.1.3.4, 5.1.3.5, 5.1.3.13, 5.1.5.2**
	Nat Barton	S-60010456	**Section 5.1.3.4**
	Withheld	S-59340473	**Section 5.1.3.1, 5.1.3.2, 5.1.3.3, 5.1.3.4, 5.1.3.7, 5.1.3.9**
	Withheld	S-60018964	**Section 5.1.3.1, 5.1.3.2, 5.1.3.4, 5.1.3.5, 5.1.3.6, 5.1.3.7, 5.1.3.11, 5.1.3.12**
	Withheld	S-59347493	**Section 4.1.5**
	Withheld	S-59347493	**Section 5.1.3.1, 5.1.3.2, 5.1.3.3, 5.1.3.4, 5.1.3.6, 5.1.3.7, 4.1.5, 5.1.3.11**
	Claudette Woodhouse	S-60051713	**Section5.1.3.2, 5.1.4.3**
	Withheld	S-60033966	**Section 5.1.3.2, 5.1.3.3, 5.1.3.4, 5.1.3.5, 5.1.3.7, 5.1.3.11, 5.1.3.12, 5.1.5.2**
	Withheld	S-59924712	**Section 5.1.3.1, 5.1.3.2, 5.1.3.5, 5.1.3.13, 5.1.5.4**
	Withheld	S-59347493	**Section 5.1.3.1**
	John McBratney	S-60089458	**Section 5.1.3.4, 5.1.3.5, 5.1.3.13, 5.1.4.3**
	Withheld	S-59924709	**Section 5.1.3.1, 5.1.3.2, 5.1.3.3, 5.1.3.6, 5.1.3.7, 5.1.3.8, 5.1.3.11, 5.1.3.12, 5.1.4.1, 5.1.4.1**
	Withheld	S-60040977	**Section 5.1.3.4, 5.1.3.13, 5.1.5.3**
	John Moore	S-60041207	**Section 5.1.3.1, 5.1.3.2, 5.1.3.4, 5.1.3.5, 5.1.3.6, 5.1.4.3, 5.1.5.3**
	Withheld	S-60051709	**Section 5.1.3.5, 5.1.4.1**
	Rafe Champion	S-60026957	**Section 5.1.3.1, 5.1.3.5, 5.1.4.3**

Group	Name	Submitter ID	Section where issue is raised
	Eunice Hickson	S-59918206	**Section 5.1.3.1, 5.1.3.3, 5.1.3.4, 5.1.3.6, 5.1.3.7, 5.1.3.9**
	Jacinta Evans	S-59977746	**Section 5.1.3.2**
	Kym Daniel	S-59977759	**Section 5.1.3.1, 5.1.3.2, 5.1.3.3, 5.1.3.4, 5.1.3.5, 5.1.3.7, 4.1.5, 5.1.3.11, 5.1.4.1, 5.1.4.1**
	Withheld	S-60038722	**Section 5.1.3.2, 5.1.3.4, 5.1.5.3, 5.1.5.6**



APPENDIX B

Updated Mitigation Measures

Appendix B – Mitigation and Management Measures

Lightsource bp (LSbp) will be responsible for implementing the management and mitigation measures identified in the EIS. The management and mitigation measures will be implemented through a Construction Environmental Management Plan (CEMP), Operational Environmental Management Plan (OEMP) and Decommissioning Environmental Management Plan (DEMP). These plans will be prepared sequentially, prior to each stage of the Project by LSbp and the relevant contractor, and in consultation with relevant Government Agencies.

Table B.1 provides a comprehensive list of the management and mitigation measures identified through the EIS applicable to the Project, mitigation and management measures added as a result of the RtS and outlined in the Amended Project and the relevant timing for implementation. Mitigation and Management measures added as a result of the RtS process are *italicised and rows shaded blue.*

Table B.1 Consolidated Management/Mitigation Measures (EIS Project and Amended Project)

Aspect	Management/Mitigation Measure	Timing
Terrestrial biodiversity	Maintain a wildlife corridor across the Project Area through retention of large areas of suitable habitat for the regent honey eater (*Anthochaera phrygia*) and White Box – Yellow Box – Blakely's Red Gum Grassy woodland and derived native grassland.	Life of Project (Construction, Operation and Decommissioning)
	Implement the following specific control measures to minimise the impacts of the Project on biodiversity: • workforce education and training • implementation of vegetation protection zones for areas to be retained • ecologist pre-clearance surveys and supervision of works • erosion and sedimentation control measures • weed management • fencing, access control and fauna exclusion measures.	Life of Project (Construction, Operation and Decommissioning)
	Develop a biodiversity offset strategy (BOS) in consultation with Biodiversity Conservation Division (BCD), DPE and DCCEEW based on the credits required to be retained to offset the impacts of the Project.	Pre-construction

Aspect	Management/Mitigation Measure	Timing
	The Biodiversity Management Plan will include implementation of measures to minimise fauna strike, as follows: • *Speed limits will be enforced on roads within the Project Area during construction and operation, to reduce the risk of fauna strikes.* • *Native fauna encountered along access tracks during construction and operation would be avoided and given an opportunity to move on.*	*Construction/Operation*
Aquatic biodiversity	During construction: • implementation of appropriate erosion and sediment controls • avoidance of waterfront land during construction works • provision of onsite spill kits for construction works within 100 metres of a watercourse • undertaking instream construction works (for access tracks) when watercourses are dry (where practicable) • design of any instream structures using relevant guidelines (to maintain fish passage and minimise impacts to natural flow regimes), particularly on watercourses mapped as Key Fish Habitat KFH • rehabilitation of disturbed bed and banks of watercourses mapped as KFH with stabilising vegetation • implementation of pre-clearance surveys carried out prior to construction, undertaken by a suitably qualified ecologist • implementation of an unexpected species finds protocol.	Construction
	During operation and decommissioning: • routine maintenance of vehicles (to reduce the risk of oil spills etc) • routine maintenance of culverts (to ensure they are clear of debris) • minimal use of herbicides to control exotic species (to reduce pollutants entering downstream watercourses) • re-establishment of native riparian vegetation endemic to the region and aquatic habitat features within and on the banks of any watercourses directly impacted.	Operation and Decommissioning

Aspect	Management/Mitigation Measure	Timing
Aboriginal cultural heritage	Following development consent, the proponent will develop an Aboriginal Cultural Heritage Management Plan (ACHMP) which is to be agreed to by the RAPs and DPE (with input from Heritage NSW). The ACHMP will include an unanticipated finds protocol, unanticipated skeletal remains protocol, protocols related to heritage inductions for work crews, and long-term management of any Aboriginal sites being impacted.	Pre-construction
	Eight Aboriginal sites within the Development Footprint will be salvaged by a surface collection of visible artefacts. The recommended methodology for the salvage will be set out in the ACHMP and will include the measures outlined in Section 9.2.1 of the ACHAR.	Pre-construction
	Four of the seven trees of community interest will be retained. The three trees of community of community interest located within the Development Footprint will be removed in accordance with a methodology set out in the ACHMP.	Life of Project (Construction, Operation and Decommissioning)
	The ruins of the O'Brien homestead slab hut will be avoided from all ground disturbing impacts by a 20 metre buffer.	Life of Project (Construction, Operation and Decommissioning)
	The two identified sites of cultural significance that lie outside the Project access route/Development Footprint will be retained. The sites will be included on all applicable construction plans and the locations made known to all work crews working in the vicinity of the site to ensure the sites are not inadvertently harmed.	Pre-construction
	A reassessment and detailed mapping of the AHIMS site #37-1-0053 will be conducted in accordance with the provisions outlined in the ACHMP.	*Pre-construction*
Historic heritage	Impacts to the areas of high historical archaeological potential should be avoided wherever possible. An exclusion zone of at least 20 m should be established around identified areas of high historical archaeological potential (e.g. slab hut).	Life of Project (Construction, Operation and Decommissioning)
	If impacts to areas of high historical archaeological potential cannot be avoided through design changes, further assessment and investigation would be required prior to the commencement of construction activities. This would include the preparation of an archaeological research design and test excavation methodology to confirm the extent of historical archaeological remains present, and the likely significance level of any historical archaeological remains on the site.	Pre-construction

Aspect	Management/Mitigation Measure	Timing
	All contractors and project team for the Project should be made aware of the archaeological potential and heritage sensitivity of the site, through a heritage-specific induction which outlines their requirements under the *Heritage Act 1977* and the Project Approvals.	Life of Project (Construction, Operation and Decommissioning)
	An unexpected heritage finds protocol should be implemented for the construction works in the unlikely event that historical archaeological remains should be encountered during construction works.	Construction
Land	A CEMP will be prepared by Lightsource bp that identifies erosion and sediment control measures prior to works commencing.	Pre-construction
	An ESCP will be developed as part of the CEMP, in accordance with the Managing Urban Stormwater: Soils and Construction Volume 1 (NSW DPIE, 2004) "The Blue Book". The ESCP will be implemented, and particular consideration of the dispersive soils identified within the Project Area will be considered.	Pre-construction
	Areas outside of the Developmental Footprint but within the Project Area may be established as a Biodiversity Stewardship Site. If determined to be compatible, cattle grazing will be facilitated throughout this area during operation.	Pre-construction
	If a sheep grazing trial is undertaken, the OEMP will incorporate a Sheep Grazing Vegetation Management Plan (SGVMP) that will outline measures for solar grazing in line with the Agrisolar Guide (2021) and other animal and welfare standards and guidelines. This will include measures to manage the stock appropriately, including a requirement to keep the stock in good health, ensuring frequent shearing (to keep wool growth low), ensure mustering is conducted in an agreed safe manner, and that any fatalities are managed. As a part of the OEMP a Wild Dog Management Plan will also be prepared for sheep grazing management.	Operation
	The OEMP will be developed in consultation with the host landholders and DPI Agriculture and will be implemented post construction.	Operation
	The Project Area will be rehabilitated to a condition as close as practicable to the condition that existed prior to construction of the Project and in consultation with the landowner. This will be achieved through the implementation of a Rehabilitation Management Plan as part of the OEMP for the Project.	Decommissioning

Aspect	Management/Mitigation Measure	Timing
	The OEMP will detail the management requirements, including: • inspection of all vehicles and machinery entering the Project Area, and cleaning if applicable to remove weeds including seeds • appropriate weed management practices to be adopted, including regular weed spraying • appropriate pest management practices to be adopted • limit vehicle access to the established internal road network.	Life of Project (Construction, Operation and Decommissioning)
	All areas disturbed by the Project during construction will be rehabilitated to maintain a groundcover (minimum of 70%) to prevent soil erosion following completion of construction and during operation.	*Operation*
	In the event that a sheep grazing trial is conducted, a Sheep Grazing Vegetation Management Plan will be prepared in consultation with DPI Agriculture.	*Operation*
	The local Land Services office will be contacted in the design of the OEMP with regard to the grazing and biosecurity content.	*Operation*
Visual	Retention of as much existing vegetation within the Project Area as possible.	Design
	Setback of the construction compound, vehicle parking and equipment storage areas from Wollara Road by a minimum of 50 m and partially screened from view (from Wollara Road) via existing and new vegetation screening.	Design
	Signage (if required) would be of sufficient size to contain only information sufficient for the basic facility and company identification, for safety, navigation, and delivery purposes.	Construction
	Where soil disturbance is required, wind erosion controls would be implemented including the use of water carts, covering of stockpiles and avoiding ground disturbance during windy conditions.	Construction
	Lighting would be installed in accordance with AS4228-1997 – Control of Obtrusive Effects of Outdoor Lighting and designed and installed to best practice principles identified within the Dark Sky Planning Guidelines.	Construction
	Where possible colour treat ancillary components of the Project.	Construction

Aspect	Management/Mitigation Measure	Timing
	Landscaping in accordance with the draft Landscape Plan (prepared as part of the VIA) to screen views of the Project Area. The plan illustrates proposed tree and shrub planting on-site, along the western perimeter of the Project Area to screen views from Wollara Road.	Construction
	Monitor visual impacts. If social issues experienced, discuss possible remedies.	Operation
Noise and vibration	All sensitive receivers likely to be affected should be notified at least 7 days prior to commencement of any works associated with the activity that may have an adverse noise or vibration impact. The notification should include: • details of the Project • the construction period and construction hours • contact information for Project management staff • complaint and incident reporting • how to obtain further information.	Construction
	All employees, contractors and subcontractors are to receive an environmental induction. The induction must include at a minimum, all applicable mitigation measures; hours of works; any limitations on high noise-generating activities; location of nearest sensitive receivers; designated parking areas; relevant approval conditions and incident procedures.	Construction
	Contractors should keep noise to a minimum, including limiting the use of loud stereos/radios, shouting on site and car door slams.	Construction
	Where practical, no dropping of materials from height or throwing of metal items.	Construction
	The noise levels of plant and equipment should have operating sound power levels consistent with those nominated in the NVIA.	Construction
	Noise emitting plant to be directed away from sensitive receivers and to be throttled down or shut down when not in use.	Construction
	Non-tonal reversing beepers could be fitted and used on construction vehicles and mobile plant used regularly on site and for any out of hours work.	Construction
	Limit the use of engine compression brakes.	Construction

Aspect	Management/Mitigation Measure	Timing
	In the unlikely event that any vibration-generating equipment would be used within the recommended safe working distances nominated in Table 6.11 of the EIS, the following is recommended: • An independent specific structural assessment is undertaken on the structure to ascertain the structural integrity and its ability to withstand vibration, and establishment of an appropriate vibration criterion. • A dilapidation survey is undertaken on the structure prior to works commencing, and regular inspection of the structure throughout the construction activities. • Site specific vibration minimum working distances are established for the nominated equipment on site. • Where appropriate, continuous vibration monitoring is conducted on the structure for the duration of the period of construction while vibration generating equipment is used. The vibration logger should be equipped with the facility to remotely alert the site to reduce or cease construction activities if vibration levels are approaching the criterion threshold.	Construction
	Prior to the commencement of construction, finalise and implement the mitigation measures/controls outlined in the Draft Construction Noise and Vibration Management Plan (DCNVMP), which has been prepared for the management of potential noise and vibration impacts associated with Ringwood Road upgrade works.	Construction
Traffic and Transport	Prior to the commencement of construction, a Construction Traffic Management Plan (CTMP) would be prepared in accordance with relevant guidelines and in consultation with TfNSW, Upper Hunter Shire Council, National Parks and Wildlife Service and any other relevant stakeholders. The CTMP would outline how construction activities would avoid, mitigate and manage risks involving construction activities, users of the traffic and transport network and residents.	Pre-construction
	The community would be notified in advance of proposed road and transport network changes through appropriate media and other forms of community liaison.	Construction
	Where relevant, Road Occupancy Licences (ROLs) and crane permits would be submitted and approved prior to the closure of any roads.	Construction

Aspect	Management/Mitigation Measure	Timing
	Construction workers would be encouraged to carpool or use the shuttle buses to travel to and from the construction site.	Construction
	Parking requirements for the Project during construction and operation would be provided on-site, and parking would not be provided on public roads adjacent to the Project Area.	Life of Project (Construction, Operation and Decommissioning)
	Additional warning signs are recommended along sections of Ringwood Road and Wollara Road where the road narrows and near the site access points.	Construction
	Swept paths of the proposed site access points with high resolution surveys/aerials would be developed as the project progresses to determine the most appropriate site access arrangements.	Construction
	A detailed Oversized Over Mass (OSOM) vehicle route assessment would be undertaken by the construction contractor and outlined in the Transport Management Plan. The Plan will detail OSOM route, duration, road closures, traffic closures, traffic detours, notifications and any required Traffic Guidance Schemes.	Pre-Construction
Water Resources	Solar panels will be designed to provide a minimum of 300 mm freeboard for the lowest edge above the maximum 1% AEP flood level.	Design
	Solar panel piles will be designed to withstand the 1% AEP flood velocities expected in the Project Area.	Design
	No sensitive infrastructure (e.g., substation, BESS, etc.) will be placed within 20 m of any Strahler 3 or above order streams.	Design
	All waterway crossings will be designed and constructed in compliance with DPI Water Guidelines.	Design and Construction
	Further flood investigations will be carried out where required during detailed design to confirm the flood immunity objectives and design criteria for the Project are met.	Design
	A Construction Soil and Water Management Plan (CSWMP) will be prepared to outline measures to manage soil and water impacts associated with the construction works.	Pre-construction
	Debris will be cleared from fencing following flood events.	Life of Project (Construction, Operation and Decommissioning)

Aspect	Management/Mitigation Measure	Timing
	An Operational Environmental Management Plan (OEMP) will be developed for the Project to address potentially adverse impacts on the receiving environment surface water quality during the operational phase. This will include the development and appropriate maintenance of suitable ground cover around solar panels, and grassed table drains near access tracks to minimise the potential for erosion and export of sediment. Additional measures for the treatment of stormwater quality are not considered necessary.	Operation
	Water sources would be confirmed during the detailed design phase and in consultation with suppliers and landholders and be subject to availability.	Design
	Post-construction, disturbed areas will be stabilised by the establishment and maintenance of a vegetated groundcover consisting of low-growing grasses.	Post-construction
	Road repairs and upgrades to Ringwood Road and culvert upgrades will include: • Appropriate scour protection will be designed for the road repairs and culvert upgrades. • Road and culvert upgrades will be designed to maximise afflux at an acceptable level. • Culverts will be designed to accommodate a 5% AEP event. • Culverts will be constructed at existing invert levels or similar to maintain low flow conveyance in channel.	Pre-construction
	Works will be setback from the mapped watercourses in accordance with the Guidelines for Controlled Activities on Waterfront Land – Riparian Corridors (DPE 2022).	*Construction/Operation*
	A Construction Soil and Water Management Plan and an Erosion and Sediment Control Plan will be developed in consultation with and in accordance with industry standards including the guideline, Managing Urban Stormwater: Soils and Construction (Landcom 2004).	*Pre-construction*
	In the event of fish kills within the vicinity of the Project, DPI and the Environment Protection Authority will be contacted. All works other than emergency response procedures will cease until the issue is rectified.	*Life of Project (Construction, Operation and Decommissioning)*

Aspect	Management/Mitigation Measure	Timing
Hazard, Risk and Bushfire Threat	Lightsource bp will implement a range of technical and non-technical risk mitigation and management measures including rigorous design standards and maintenance practices. Compliance with HIPAP 4 criteria is conditional on these technical and non-technical risk mitigation and management measures being implemented.	Design
	Electrical transformers to be designed, installed, operated and maintained in accordance with relevant Australian Standards.	Life of Project (Construction, Operation and Decommissioning)
	A Final Hazard Analysis, Fire Safety Study and Emergency Plan will be developed as the Project design progresses toward completion to ensure the final Project design adheres to the risk management measures outlined in the PHA and that the separation distances to the site boundary/involved dwellings are appropriate for the specific battery cell type (i.e. chemistry and capacity) to be used.	Pre-construction
	Asset protection zones will be implemented and maintained for the life of the Project.	Life of Project (Construction, Operation and Decommissioning)
	Roads and access points will be maintained throughout the Project life to allow for safe and accessible travel for emergencies (if required).	Life of Project (Construction, Operation and Decommissioning)
	An appropriate dedicated water supply for bushfire protection will be provided.	Life of Project (Construction, Operation and Decommissioning)
	All project infrastructure will be designed in accordance with relevant industry standards to manage any EMF risks.	Design
	All relevant procedures in relation to a high voltage installation will be adhered to throughout the life of the Project.	Life of Project (Construction, Operation and Decommissioning)
	Public access will be restricted throughout the life of the Project.	Life of Project (Construction, Operation and Decommissioning)
	The solar farm development footprint will be managed as an Asset Protection Zone in accordance with Appendix 4 of 'Planning for Bush Fire Protection 2019'.	*Construction/Operation*
	A dedicated water supply for bushfire protection will include a 10,000 litre water supply (tank) fitted with a 65mm storz fitting.	*Construction/Operation*

Aspect	Management/Mitigation Measure	Timing
	APZ's will be maintained around the perimeter of the solar farm and associated infrastructure. All APZ's / defendable spaces will be in the order of at least 10m.	*Construction/Operation*
	The FSS will be developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper (HIPAP) No.2 and will meet the operational requirements of FRNSW. *The FSS will consider:* • *The operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence.* • *A worst-case fire scenario including a full BESS unit fire. It will demonstrate no fire propagation within the facility.*	*Pre-construction*
	The FSS will consider fire propagation and a worst-case scenario will be considered within the FSS.	*Pre-construction*
	The Emergency Plan will be developed in accordance with the HIPAP No.1 and will be informed by the findings of the PHA.	*Pre-construction*
	An Emergency Services Information Package and an Emergency Responders Induction Package will be prepared for the site prior to construction. • *The Emergency Services Information Package (ESIP) will be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.* • *The Emergency Responders Induction Package is developed for the site in consultation with, and to the satisfaction of FRNSW, NSW RFS and NPWS. The package will inform first responders in accordance with agency specific Standard Operational Guidelines.*	*Pre-construction*
Social Amenity	A Community Engagement Strategy will be prepared for the Project to include consistent, transparent and proactive information provision and consultation with stakeholders throughout Project development.	Pre-construction
	A Community Benefit Sharing Strategy will be developed in consultation with local stakeholders to target investment to local needs and priorities and cognisant of activities/efforts of adjacent projects.	Pre-construction

Aspect	Management/Mitigation Measure	Timing
	Prior to commencement of construction, the draft Accommodation and Employment Strategy (AES) will be finalised. It has been developed in collaboration with local councils and stakeholders. The final AES will include targeted and proactive initiatives to maximise local employment and sourcing from local communities such as training, up-skilling and capacity building support, in collaboration and with local stakeholders and training providers.	Pre-construction
Economic	A Community Benefits Sharing Strategy will be developed and implemented for the Project including a VPA with UHSC.	Pre-construction
Waste Management	Lightsource bp will prepare a Waste Management Plan, which will include a detailed breakdown of the waste types and quantities in accordance with relevant legislation and guidelines. Waste will be reused and recycled in accordance with a waste management hierarchy. The waste management plan will include the following: • a summary of the waste types, classification and estimated annual quantities of wastes produced during the construction of the Project • measures to manage waste disposal in accordance with the principles of the waste hierarchy, with emphasis on reducing, reusing and recycling wastes prior to disposal • the procedure for assessing, classifying and storing waste in accordance with EPA guidelines • procedures for storage, transport and disposal of waste • monitoring, record keeping and reporting, including the use of waste tracking data to demonstrate the lawful disposal of contaminated products, waste or residues generated by the Project (if any).	Construction
	Management of wastes generated during the operational phase of the Project will occur through a Waste Management Plan as part of the OEMP.	Operation
	A Decommissioning and Rehabilitation Management Framework has been prepared for the Project to demonstrate a commitment to ensuring appropriate environmental management is undertaken during decommissioning and rehabilitation phase in accordance with legislative requirements, conditions of consent, stakeholder interest and industry best practice. The Framework will be updated throughout the life of the Project as appropriate.	Decommissioning

Aspect	Management/Mitigation Measure	Timing
	The Waste Management Plan will be developed in consultation with the Upper Hunter Shire Council and surrounding LGAs including Mid-Western Regional Council.	*Pre-construction*
	A 94% recycling rate by weight will be achieved for the panels during each stage of the Project.	*Life of Project (Construction, Operation and Decommissioning)*
Air Quality	As part of the CEMP, protocols to minimise air emissions during construction will include: • water suppression on all exposed areas, unsealed roads and stockpile area when required (i.e. if visible dust emissions are observed) • the location and scale of activities which generate dust emissions would be modified and limited during periods of dry and windy weather • engines to switch off when not in use for prolonged periods • development of a complaints procedure to identify and respond to complaints.	Construction
	Areas within the Project Area which have been temporarily disturbed by construction and operational activities will be rehabilitated.	Life of Project (Construction, Operation and Decommissioning)
	Once construction has been completed, ground cover will be established and maintained in accordance with the OEMP.	Operations

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