



lightsource bp

GOULBURN RIVER SOLAR FARM

Environmental Management Strategy – SSD33964533

FINAL

December 2024



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Environmental Management Strategy –
SSD33964533

FINAL

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

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Report No. 23815/R01
Date: December 2024



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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.

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Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
V1	Kelsy Sammons	28 October 2024	Luke Bettridge	28 October 2024
Final	Kelsy Sammons	19 December 2024	Jessica Henderson-Wilson	19 December 2024

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1.0 Introduction

Lightsource Development Services Australia Pty Ltd, a wholly owned subsidiary of Lightsource bp Renewable Energy Investments Limited (Lightsource bp) received Development Consent for the Goulburn River Solar Farm (SSD 33964533) in August 2024. The Development Consent was granted by a delegate of the Minister for Planning and Public Spaces under section 4.38 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Project is located approximately 28 kilometres (km) southwest of Merriwa in New South Wales (NSW). It is wholly within the Upper Hunter Local Government Area (LGA).

The Project Area comprises two freehold properties that span across multiple lots, covering an area of approximately 2,000 hectares (ha). The Development Footprint for the solar farm occupies 792.19 ha and road upgrades will cover approximately 8.1 km.

The Project involves the construction, operation and decommissioning of approximately 550-megawatt peak (MWp) of solar photovoltaic (PV) generation as well as a Battery Energy Storage System (BESS) with a maximum 1,030 MWp/2,060-megawatt hour (MWh) capacity.

The Project will include a substation and connection to an existing 500 kilovolt (kV) transmission line which passes through the Project Area. The Project will include road repairs and upgrades to Ringwood Road, Wollara Road, and the Golden Highway intersection. The Project also includes a temporary workforce accommodation camp, temporary construction facilities, operation and maintenance buildings, internal access roads, civil works, electrical infrastructure to connect the Project to the existing transmission line and a 30 metre (m) telecommunications tower.

Lightsource bp is a global leader in the development and management of solar energy projects. Its purpose is to deliver affordable and sustainable solar power for businesses and communities around the world. LSbp is active in 19 countries, across six continents, however, are continuing to rapidly expand globally. LSbp provides a full service to its customers, from initial site selection, financing and permitting through to construction, long-term operation, and decommissioning.

1.1 Purpose of this Environmental Management Strategy

This Environmental Management Strategy (EMS) has been prepared to comply with the relevant conditions within the Development Consent, as well as to meet other applicable statutory requirements and obligations during the construction, operation and decommissioning of the Project.

The purpose of this EMS is to:

- Outline the strategic environmental management framework for the construction, operation and decommissioning of the Project.
- Identify the statutory approvals that apply to the Project.
- Identify the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Project.

- Establish procedures to:
 - Inform the community and relevant Government agencies about the operation and environmental performance of the Project.
 - Manage and respond to complaints and resolve any disputes.
 - Respond to any non-compliances or emergencies.
- Outline the monitoring program for the Project, to ensure ongoing compliance with all relevant statutory approvals.

This EMS is an overarching document which encompasses several other plans and strategies as outlined in **Section 1.3.3**.

The Development Consent includes administrative and environmental conditions, as well as environmental management and reporting requirements, that necessitate the preparation of this EMS. This EMS has been prepared to meet the requirements of Condition C1 of the Development Consent. The authors of this EMS also acknowledge that other relevant administrative and environmental conditions, as well as environmental management and reporting requirements, apply to this EMS and have been addressed throughout this document.

A table showing where the relevant conditions of consent have been addressed in this document is included in **Table 1.1**.

A detailed analysis of all conditions of consent and their relevance to the EMS (and broader Lightsource bp Integrated Management System) is presented in **Appendix 2**. It identifies how these conditions have been addressed within the Integrated Management System for the Project and summarises the timing and accountabilities for implementation of these requirements.

Table 1.1 Relevant EMS Development Consent conditions

Condition	Relevant Section
Condition C1 Prior to commencing construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	This EMS.
a) provide the strategic framework for environmental management of the development;	Section 1.3
b) identify the statutory approvals that apply to the development;	Section 2.1
c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 4.0
d) describe the procedures that would be implemented to:	-
i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Section 6.0
ii) receive, handle, respond to, and record complaints;	Section 6.3.1
iii) resolve any disputes that may arise;	Section 6.3.1.1

Condition	Relevant Section
iv) respond to any non-compliance;	Section 10.1.2
v) respond to emergencies; and	Refer to Fire Management and Emergency Response Plan
e) include:	-
i) references to any strategies, plans and programs approved under the conditions of this consent; and	Section 1.3.3
ii) a clear plan depicting all the monitoring to be carried out in relation to the development.	Section 7.2
Following the Planning Secretary's approval, the Applicant must implement the Environmental Management Strategy.	Section 4.0

1.2 Overview of the Project

1.2.1 Project Setting

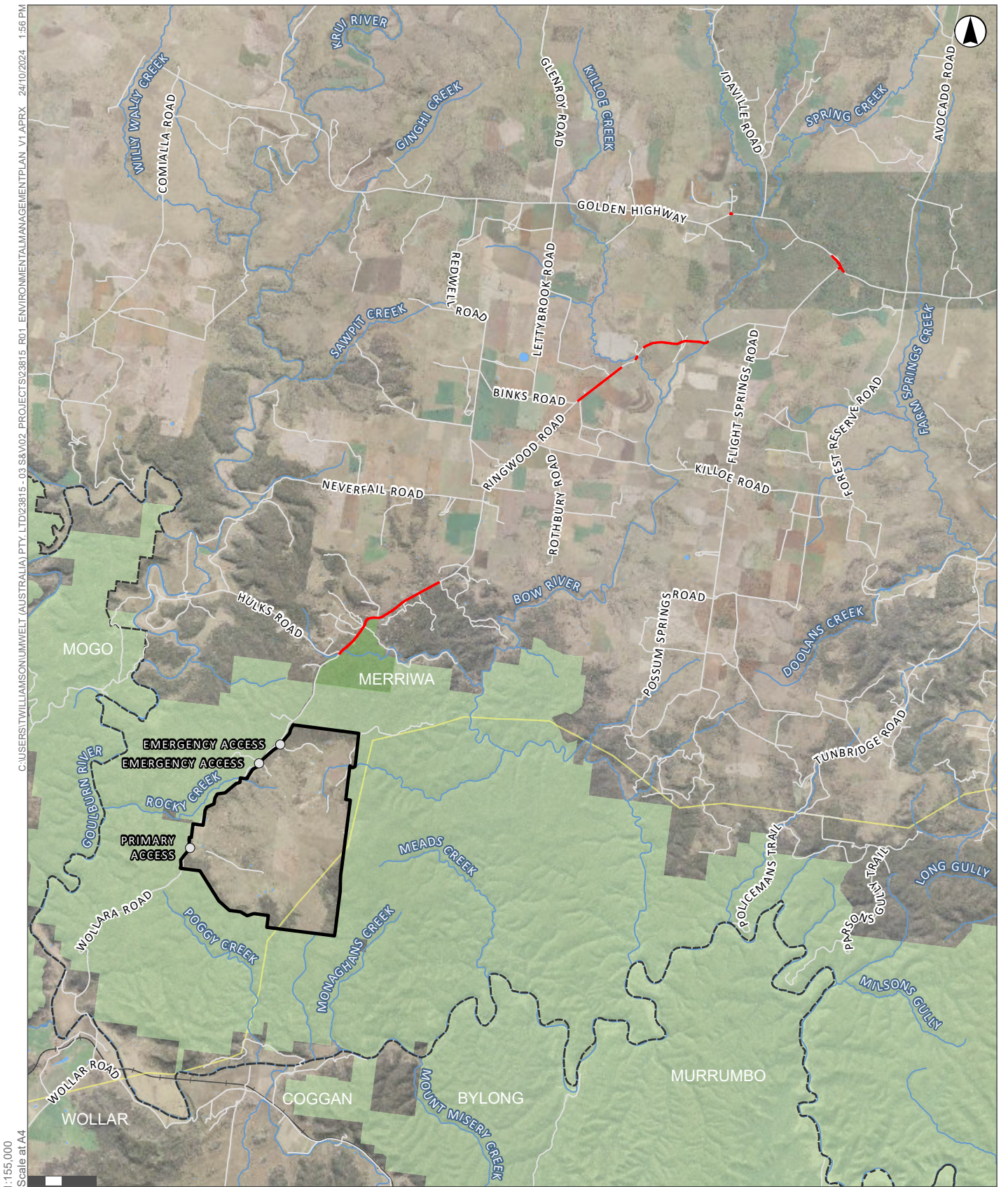
The Project is comprised of predominantly managed agricultural land, approximately 28 km southwest of the township of Merriwa (refer to **Figure 1.1**) and is surrounded by the Goulburn River National Park.

The Project Area is approximately 15 km from the Central West Orana Renewable Energy Zone (REZ) however it is not related to the REZ, nor is it dependent on the REZ. The REZ location was selected because of the benefits of relatively low transmission build costs due to its proximity to the existing transmission network structures. This Project Area benefits from utilising the existing 500 kV transmission line crossing the south-east portion of the site, allowing connection to the national electricity grid and eliminating the need for the Project to construct a transmission line to connect to the grid.

The Project Area is zoned RU1 Primary Production and is generally flat, with some minor undulation in the landscape which has been disturbed by historical agricultural activity.

1.2.2 Land Ownership

The Project Area is considered as the total area of the Project, including the development boundary. It comprises approximately 792.19 ha of freehold land and Crown land contained within the development boundary. The main Project Area is located on freehold land, which is owned by Lightsource bp, while parts of Wollara Road which provides access to the site, are located on Crown land (refer to **Figure 1.2**).

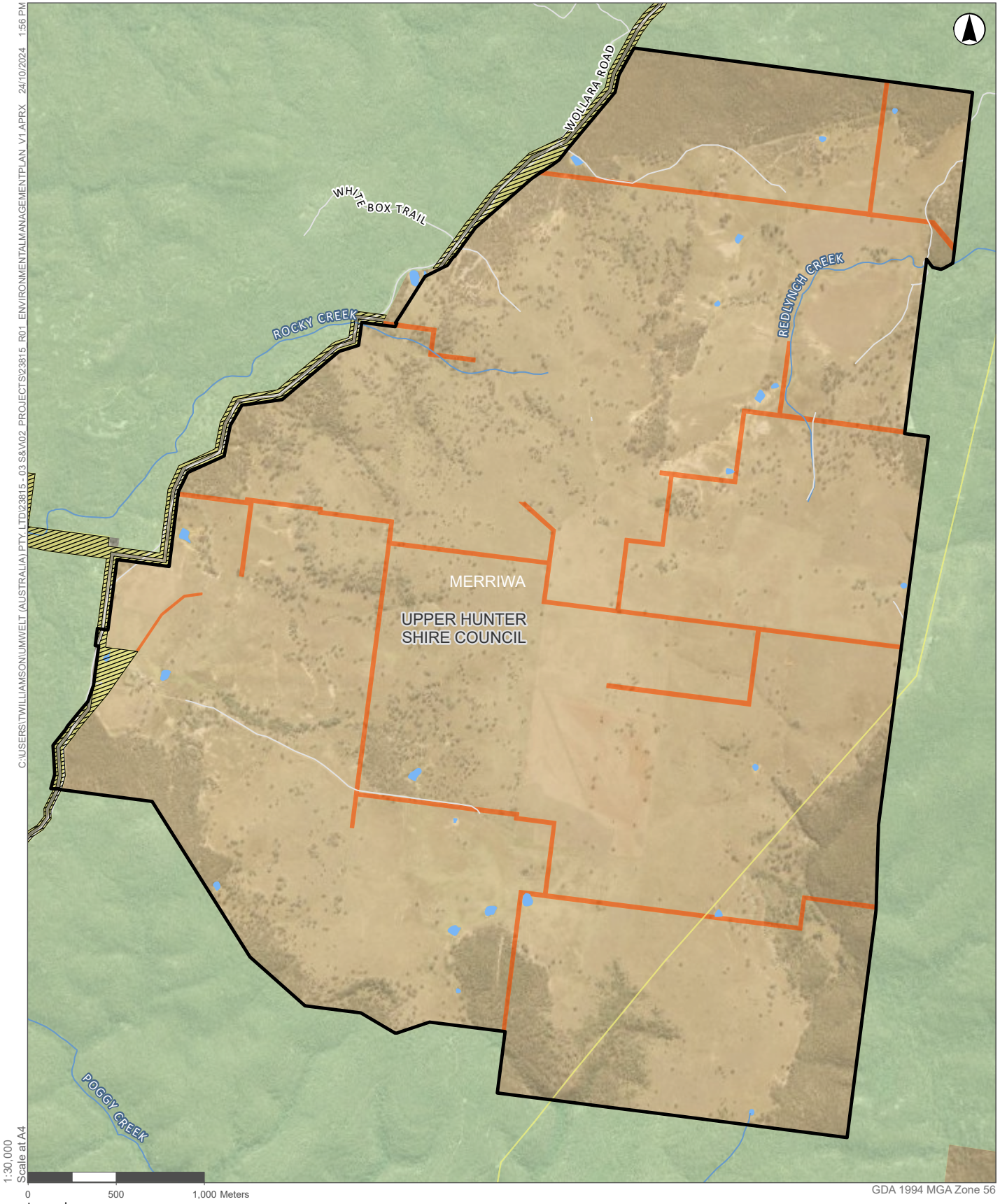


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GDA 1994 MGA Zone 56

- Legend**
- Access Points
 - Electricity Transmission Line
 - Watercourse
 - Roads and Tracks
 - Railway
 - - - Local Government Boundary
 - ▭ Road Upgrades Area
 - ▭ Project Area
 - ▭ NSW National Parks
 - ▭ NSW State Forests
 - ▭ Waterbodies

FIGURE 1.1
Location and Regional Locality



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GDA 1994 MGA Zone 56

- Legend**
- | | |
|-------------------------------|------------------------------|
| Electricity Transmission Line | Land Control |
| Watercourse | Freehold |
| Roads and Tracks | Crown Parcel |
| Local Government Boundary | Crown Road |
| Project Area - Solar Farm | Travelling Stock Route (TSR) |
| NSW National Parks | |
| Waterbodies | |

FIGURE 1.2

Land Ownership for Solar Farm

1.2.3 Project Area and Development Footprint

The Project Area of the solar farm covers approximately 2,000 ha with a Development Footprint of approximately 792.19 ha, as shown in **Figure 1.3**. The remainder of the Project Area will be protected and managed as a Biodiversity Stewardship Site (BSS). The Project Area is comprised of five key components, including:

- Solar farm footprint.
- Public roads and culverts.
- Substation.
- BESS.
- Temporary Workers Accommodation Facility.

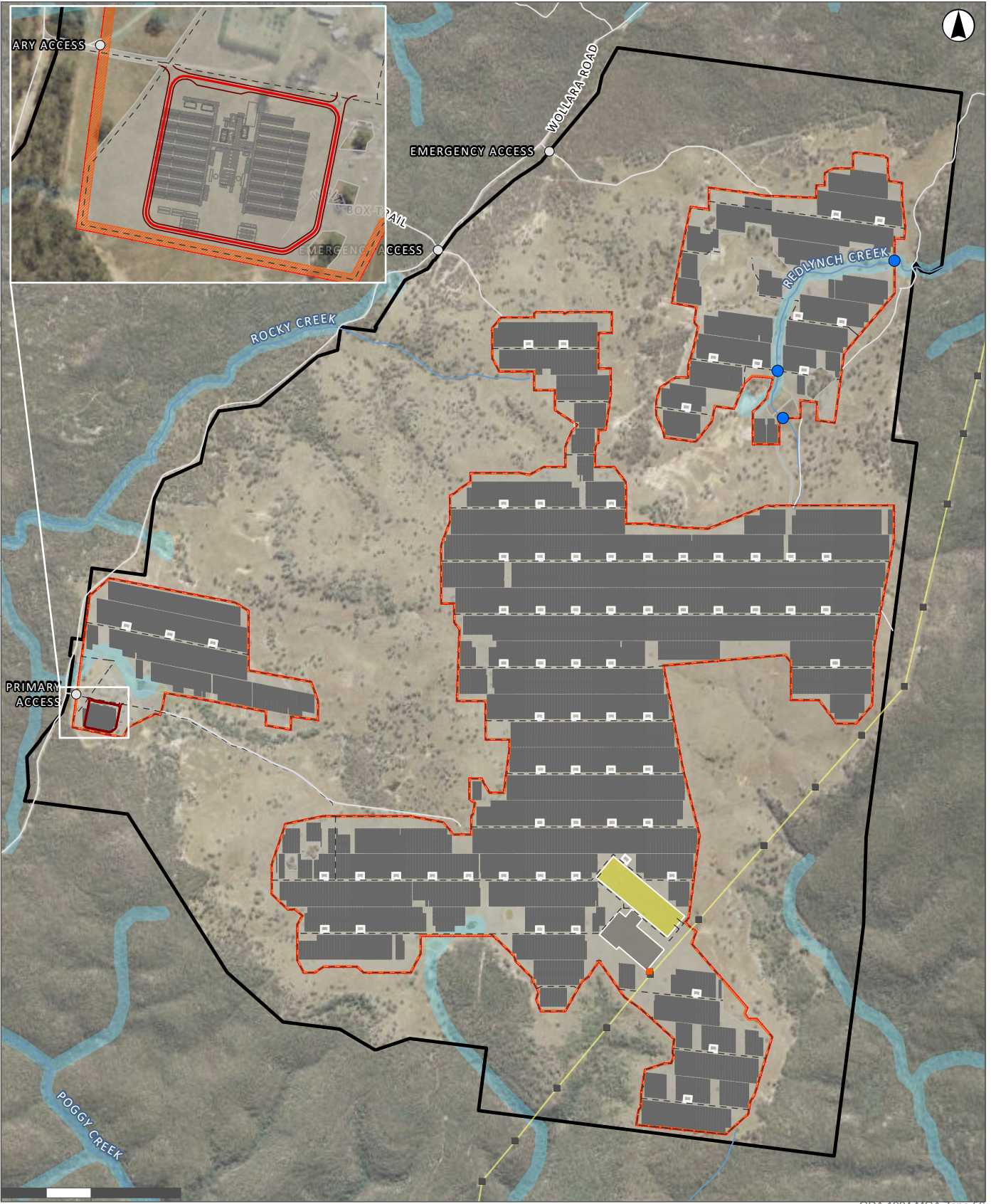
Access to the Development Footprint will be off Wollara Road via the existing driveway towards the southern end of the property's western boundary. Two secondary access points, also off Wollara Road, will be available towards the north of the property's western boundary for emergency use. Emergency services and National Parks and Wildlife Service (NPWS) access will be maintained through the Project Area, to be used for emergencies only or on request (refer to **Figure 1.3**).

The solar arrays associated infrastructure and temporary workers accommodation facility would be entirely contained within the Development Footprint. The Project also includes road repairs which are located outside of the Project Area (across approximately 8.1 km of existing road). These encompass parts of Ringwood Road (including culverts at two waterway crossings), Wollara Road, the intersection of Barnett Street and Golden Highway, and the intersection of Golden Highway and Ringwood Road. Works on the two culverts and the intersection are required to support Project construction traffic, whilst other road improvements are in response to feedback and represent part of a community benefit offered by the Project. All road upgrades will improve safety outcomes for both the Project and the broader community.

The works on Wollara Road, Ringwood Road and Barnett Street are contained to the road reserve and landowners' consent from Upper Hunter Shire Council has been obtained. The upgrades to the intersection of the Golden Highway and Ringwood Road require works which will be largely contained within the road reserve but will encroach into the cadastral boundary of Lot 1 DP34496 (outside of the existing fence-line). The formalisation of the bus stop on Ringwood Road at the intersection with Golden Highway will be contained within Lot 7303 DP 1146691.

The Project Area and Development Footprint is shown below in **Figure 1.3**, **Figure 1.4**, **Figure 1.5** and **Figure 1.6**.

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|---|--|--|
| <ul style="list-style-type: none"> ■ Existing Tower ■ New Tower ○ Access Points ● Indicative Location of Water Crossings ● *up to a maximum of 3 waterway crossings for access tracks — Electricity Transmission Line - - Indicative Access Tracks — TWA Facility Layout — Proposed Accommodation Camp Roads — Roads and Tracks | <ul style="list-style-type: none"> — Watercourse ■ Project Area ■ Indicative TWA Facility ■ Solar Panels ■ Fire Break ■ Battery Energy Storage System ■ Inverter ■ Substation ■ Development Footprint (Amended Project) | <ul style="list-style-type: none"> ■ Key Fish Habitat |
|---|--|--|

FIGURE 1.3
Development Footprint - Solar Farm

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



- Legend**
- Watercourse
 - Road
 - Property Boundaries
 - Development Footprint
 - Waterbodies

FIGURE 1.4
Development Footprint - Road Upgrades
(Golden Highway Intersection)



GDA 1994 MGA Zone 56

- Legend**
- Culvert Upgrade or Installation
 - Water Crossing
 - Watercourse
 - Road
 - Property Boundaries
 - Development Footprint
 - Key Fish Habitat
 - Waterbodies

FIGURE 1.5
Development Footprint - Road Upgrades
(Bow River to Binks Road)

1:15,000
 Scale at A4
 0 0.1 0.2 Kilometres
 CLIENT: WILLIAMS CONSULTANTS (AUSTRALIA) PTY LTD (2014) 03 8340 0000 PROJECT: 2014_BULBUL DEVELOPMENT FOOTPRINT OVERVIEW REPORT



1:22,500
Scale at A4
0 0.1 0.2 Kilometres

- Legend**
- Watercourse
 - Road
 - Property Boundaries
 - Development Footprint
 - Waterbodies
 - Key Fish Habitat

GDA 1994 MGA Zone 56

FIGURE 1.6
Development Footprint - Road Upgrades
(Wollara Road)

1.2.4 Components and Features

The Project includes the construction, operation, maintenance, and decommissioning of a PV solar farm with a capacity of approximately 550 MWp, which will supply electricity to the national electricity grid.

The key components of the Project are shown in **Figure 1.3** and include:

- Approximately one million bifacial solar PV modules.
- A centralised BESS with an approximate 450 MWp and 900 MWh capacity with the option of a decentralised BESS with an approximate 580 MWp and 1,160 MWh capacity.
- On-site 500 kV switchyard and substation, with underground electrical conduits and cabling.
- On-site power line connection via underground electrical conduits and cabling.
- Telecommunication tower.
- An additional transmission tower within the existing easement of the 500 kV transmission line adjacent to the BESS/substation.
- Road upgrades required on Ringwood Road, Wollara Road and the intersection of Ringwood Road and the Golden Highway.
- Perimeter security fencing, CCTV and security lighting.
- Office amenities, parking and storage facilities.
- Laydown areas suitable for storing plant and equipment, solar panels, cable drums and areas to support waste management activities.
- A temporary helipad for emergency response purposes during construction.
- On-site Temporary Workers Accommodation Facility within the Development Footprint.

The Project is expected to operate for 40 years or more. After the initial 40-year operating period, the solar farm would either be decommissioned, removing all above ground infrastructure, and returning the site to its existing land capability, or repurposed with new PV equipment subject to technical feasibility and planning consents.

1.2.5 Project Phase Activities

1.2.5.1 Early Works – Pre-construction

The early works phase of the Project includes preparatory works which must occur prior to the commencement of main construction activities.

To comply with the conditions of the Development Consent, these early works are limited to:

- Road upgrades required under Condition B7 of the Development Consent.
- Building/road dilapidation surveys.

- Installation of fencing.
- Artefact survey and/or salvage.
- Overhead line safety marking.
- Geotechnical drilling.
- Surveying.

Early works are currently scheduled to start Q1 in 2025, and the construction period for these early works will be approximately three months. As per Condition B17 of the Development Consent, construction hours will generally be limited to Monday to Friday 7.00 am to 6.00 pm and Saturday 8.00 am to 1.00 pm, with no works on Sundays or Public Holidays. Some works outside these hours may occur as permitted by B18 of the Development Consent. Any variations to these hours will be in accordance with Condition B19.

A key activity within the early works will be the road upgrades required on Ringwood Road, Wollara Road, the intersection of Barnett Street and the Golden Highway, and the intersection of Ringwood Road and the Golden Highway. These works will consist of realignment, widening and sealing of sections of road and upgrades to culverts at existing road crossings of Bow River and Killoe Creek.

With early works focusing on the road upgrades to the Golden Highway and Barnett Street intersections, as required under Condition B7 of the Development Consent; some residual approved early work construction activities may occur during the main works period described below.

In accordance with Condition B15 and B16 of the EPBC Approval, Lightsource bp must notify the Australian Government Department of Climate Change, Energy, the Environment and Water (AG DCCEEW) electronically of the date of commencement of the Action, within five business days following commencement of the Action. Lightsource bp must not commence the Action later than five years after the date of the EPBC approval decision.

1.2.5.2 Main Works – Construction Activities

Main works are currently scheduled to start Q1 in 2025, and the main works construction period will last up to approximately 25 months, including a peak period of approximately eight months. The main works construction hours will be consistent with the hours specified in **Section 1.2.5.1** above. Some works outside these hours may, consistent with early works, occur as permitted by Condition B18. The Project will have a construction workforce of approximately 350 workers during the peak period.

Construction activities will include:

- Site establishment and enabling works including fencing, ground preparation, construction of the internal access tracks, preliminary civil works and drainage works.
- Construction of the temporary workforce accommodation camp.
- Installation of steel posts and framing system to support the solar panels.
- Installation of PV panels.
- Installation of permanent fencing and security.

- Preparation of foundations for the permanent buildings, BESS and on-site substation.
- Installation of underground cabling (trenching and installation of power conversion stations).
- Construction of site operations and maintenance facility.
- Establishment of the BESS.
- Construction of the onsite substation and associated grid connection infrastructure.
- Removal of temporary construction facilities.
- Rehabilitation of disturbed areas.

During the peak period, the Project is expected to generate up to 130 two-way construction traffic movements, including 55 heavy vehicle movements, 15 shuttle bus movements (associated with worker transport) and 60 light vehicle movements.

1.2.5.3 Operation

The expected operational life of the Project is approximately 40 years, however infrastructure upgrades throughout the Project lifecycle may extend its operational life. The key activities that would be undertaken during operation include:

- Visual inspections, maintenance, and cleaning of solar panels and the substation.
- Vegetation management including:
 - potential for grazing of sheep
 - mechanical vegetation maintenance
 - maintaining groundcover vegetation
 - maintenance of landscaping, including the vegetation buffer.
- Site security and operational response.
- Replacement of equipment and infrastructure.
- Pest plant and animal control.
- Livestock operations (i.e., if sheep are grazed onsite).

During the operational phase of the Project, it is anticipated that a workforce of up to ten full time equivalent FTE personnel would be required, and traffic movements would be restricted to light vehicles for routine operations and maintenance.

1.2.5.4 Decommissioning

At the end of the Project's operational life, unless the Planning Secretary agrees otherwise, the solar farm infrastructure will be decommissioned and removed. This will include removal of solar panels and foundation posts, the substation, and associated connections and underground cabling, the operations and maintenance facility, carpark and fencing.

Disturbed areas will be rehabilitated to ensure the Development Footprint is safe, stable, and non-polluting. The Development Footprint will be rehabilitated in accordance with the rehabilitation objectives as defined in Condition B41 of the Development Consent.

1.3 Strategic Environmental Management Framework

The strategic environmental management framework for the Project is shown conceptually in **Figure 1.7** and described in the sections below.



Figure 1.7 Strategic Environmental Management Framework for Goulburn River Solar Farm

1.3.1 Aims and Objectives of Strategic and Integrated Environmental Management

The overall intent of this framework is to achieve the specific environmental performance criteria established under the Development Consent, and other environmental performance measures implemented by Lightsource bp for its employees, contractors and visitors.

In achieving this, and as such complying with Condition C1 of the Development Consent, Lightsource bp will ensure all reasonable and feasible measures are implemented to prevent and/or minimise any material harm to the environment that may result from the construction, operation, upgrading or decommissioning of the Project.

1.3.2 Lightsource bp Integrated Management System

Lightsource bp has a robust Integrated Management System, covering all Health, Safety, Environment and Quality (HSEQ) aspects of its operations. Under the Integrated Management System, Lightsource bp commits to:

- Provide a safe and healthy working environment for all personnel, including employees, contractors and visitors, where hazards and risks associated with its operations are identified and risk management measures are implemented.
- Identify and comply with all applicable legislative requirements and maintain systems to meet these requirements in the countries the company operates.
- Maintain a consistent and documented Integrated Management System.
- Monitor the effectiveness of the Integrated Management System through periodic reviews, audits, customer feedback and other means as appropriate.
- Ensure that incidents and nonconformities are investigated, and corrective actions implemented to prevent reoccurrence.

- Take account of external bodies and local community issues related to its business activities.
- Take account of the implications of the HSEQ aspects of investment decisions.
- Protect the environment in all aspects of its business and operations, to prevent any adverse environmental effects.
- Minimise the environmental impact, for the life cycle of all plant, equipment and other physical assets under its control.
- Carefully select and use materials and resources to reduce waste to a minimum with a focus on striving to prevent pollution.
- Continually promote a Health and Safety awareness culture and environmental sustainability throughout the organisation.
- Plan and conduct its activities responsibly and in a manner that will assure the protection and safety of its staff, contractors, visitors, members of the public and the environment.
- Ensure Lightsource bp senior management always lead by example in HSEQ related issues.
- Actively promote the involvement of staff in all HSEQ related matters.
- Establish HSEQ targets, monitor key indicators and review and evaluate performance against these targets to drive continuous improvement.
- Provide awareness, training, supervision and HSEQ expertise to maintain the integrated management system and to achieve the HSEQ targets.
- The Lightsource executive team and the respective Team Leaders are responsible for the implementation of this policy across the organisation.
- Lightsource bp's Integrated Management System is certified under ISO 14001:2015 - Environmental Management Systems - Requirements with Guidance for Use.

1.3.3 Goulburn River Solar Farm Integrated Management System

Lightsource bp will develop a project-specific Integrated Management System for the Goulburn River Solar Farm, which will include the implementation of this EMS, and a comprehensive suite of management plans and strategies prepared in accordance with the conditions of the Development Consent.

These management plans and strategies comprise:

- Traffic Management Plan (TMP)
- Biodiversity Management Plan (BMP)
- Heritage Management Plan (HMP)
- Fire Management and Emergency Response Plan (FMERP) (to be updated with a Fire Safety Study prior to BESS construction)

- Soil and Water Management Plan (SWMP)
- Accommodation Camp Management Plan (ACMP)
- Accommodation and Employment Strategy (AES).

The EMS and other management plans and strategies listed above will be prepared in consultation with relevant Government agencies, and to the satisfaction of the Planning Secretary, in accordance with the conditions of the Development Consent. These plans will apply to the construction, operation and decommissioning of the Project.

Targeted consultation for the EMS was not required under the Development Consent. The EMS was however submitted to the Department of Planning, Housing and Infrastructure (DPHI) for review during its preparation. The review correspondence, and where that feedback has been addressed is documented in **Appendix 1** of this EMS.

1.3.3.1 Construction and Operational Environmental Management Plan

The Construction Environmental Management Plan (CEMP) and Operational Environmental Management Plan (OEMP) will outline and describe how Lightsource bp will comply with the Development Consent approval, state and federal legislation, the Project EIS, Amendment Report and all associated licences, permits and approvals. Additionally, it will outline how Lightsource bp will minimise the environmental risks and achieve environmental outcomes associated with the Project by providing a structured approach to ensure appropriate mitigations measures and controls are implemented.

The CEMP will be prepared and implemented by the Construction Contractor for the construction phase and first two years of operations and the OEMP will be prepared and implemented by the Operations and Management (O&M) Contractor, commencing in the third year of operations, until the conclusion of operations.

As a minimum, in addition to the environmental aspects outlined in the Development Consent the CEMP and OEMP will also address the following environmental aspects:

- Spill and contamination response
- Air Quality (Dust)
- Waste Management
- Noise
- Visual Amenity
- Lighting.

The CEMP and OEMP (including any incorporated sub-plans) will be prepared in accordance with this EMS.

Neither the CEMP and OEMP require the Planning Secretary's approval and will be subject to Lightsource bp's internal review and approval processes.

Section 4.0 sets out the roles, responsibilities and accountabilities of key personnel for the implementation of the Integrated Management System and compliance with relevant statutory requirements, including the conditions of consent.

1.4 Environmental Targets and Objectives

Table 1.2 below sets out the key environmental targets and objectives for the construction and operation of the Project.

Table 1.2 Environmental Objectives and Targets for Project

Objective	Targets	Measure
Construction and operation of the Project in accordance with SSD-33964533 and all other relevant statutory requirements	<p>Compliance with the conditions of the Development Consent.</p> <p>Compliance with this EMS and other management plans and strategies required under SSD-33964533 (see Section 1.3.3 above).</p> <p>Compliance with relevant requirements of Section 138 Approval under the <i>NSW Roads Act 1993</i> (see Section 2.1).</p>	Independent Environmental Audits (see Section 11.2).
Implementation of the Integrated Management System	Prevention and/or minimisation of any material harm to the environment resulting from the construction, operation, upgrading or decommissioning of the Project.	Implementation of all reasonable and feasible measures. Environmental Monitoring and Reporting Program (Section 7.2)
	Compliance with this EMS, other management plans and strategies, and the CEMP and OEMP.	Lightsource bp internal audits and/or management review processes.
Community engagement	<p>Keep community stakeholders informed about the Project (see Section 6.1).</p> <p>Provide communications channels for community feedback, record and respond to complaints in a timely manner and implement the dispute resolution process outlined in Section 6.3.1.1.</p>	Review of complaints and feedback register (see Section 6.0).
Continuous improvement	<p>Develop lessons learned programs in response to any reportable incidents or non-compliances.</p> <p>Review and refine employee and contractor training programs over the life of the Project.</p>	Lightsource bp internal audits and/or management review processes, including internal review of this EMS.
Decommissioning and rehabilitation of the Project Area in accordance with SSD-33964533	<p>Compliance with rehabilitation objectives in Condition B41 of the Development Consent.</p> <p>Compliance with this EMS and other relevant management plans and strategies identified in Section 1.2.5 above, which will be updated prior to decommissioning.</p>	Lightsource bp internal audits and/or management review processes and compliance with any requirements issued by the Planning Secretary under Condition A4 of the Development Consent.

2.0 Statutory Context

This section provides an overview of the statutory context for the Project for both Commonwealth and State legislation relevant to the Project.

2.1 Overview of Relevant Legislation

Table 2.1 below identifies the statutory approvals that apply to the Project under relevant Commonwealth and NSW legislation.

Section 4.0 outlines the respective responsibilities and accountabilities of Lightsource bp, its Construction Contractor and O&M Contractor for compliance with relevant Commonwealth and NSW legislation.

There are no additional approvals, permits or licenses applicable under the relevant legislation, beyond the requirements presented within the Development Consent, unless noted in **Table 2.1** below.

Table 2.1 Statutory Approvals that Apply to the Project

Jurisdiction	Relevant Legislation	Legislation Obligation	Relevance to Project
Commonwealth	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	Provides a framework to manage impacts on matters of national environmental significance, including: <ul style="list-style-type: none"> • World heritage properties • National heritage places • Ramsar wetlands • Nationally threatened species and communities • Migratory species protected under international agreements • The Commonwealth marine environment • Nuclear actions. 	On 2 February 2022, the Project (2021/9102) was determined to be a Controlled Action requiring approval under the EPBC Act from the Australian Government (AG) Minister for the Environment due to its potential impact on listed threatened species and ecological communities. The assessment path for the Project is under the bilateral agreement between the AG\ and NSW Government. The AG of Climate Change, Energy, the Environment and Water (DCCEE) issued its assessment requirements as part of the SEARs for the Project. Federal approval was received on 7 October 2024 (EPBC 2021/9102).
State (NSW)	<i>Fisheries Management Act 1994</i> (FM Act)	Provides a framework to conserve, develop and share the fishery resources of the State for the benefit of present and future generations. Sets out the requirements for obtaining a permit under Part 7 of the Act, which is required for: <ul style="list-style-type: none"> • Activities involving dredging and reclamation work. • Activities temporarily or permanently obstructing fish passage. • Using explosives and other dangerous substances. • Harming marine vegetation. 	Separate permits under the FM Act are not required to carry out the Project. Consistent with commitments in the Environmental Impact Statement (EIS), the design and construction of watercourse crossings will have regard to the following documents: Why do fish need to cross the road? Fish Passage Requirements for Waterway Crossings (Fairfull & Witheridge, 2003). Policy and Guidelines for Fish Friendly Waterway Crossings (NSW DPI, 2003).
State (NSW)	<i>Heritage Act 1977</i> (Heritage Act)	Provides a framework for the protection and conservation of items of State or Local Heritage significance. Sets out the requirements for obtaining an excavation permit for any proposed disturbance or excavation of land with potential to interact with a heritage item.	By operation of section 4.41(1)(c) of the EP&A Act, no approvals under Part 4 or excavation permits under section 139 of the Heritage Act are required for the carrying out of the Project. Potential impacts on items of local heritage significance will be managed in accordance with the HMP. The notification procedures in the HMP will be implemented in respect of any archaeological relics that may be discovered or located within the Project Area.

Jurisdiction	Relevant Legislation	Legislation Obligation	Relevance to Project
State (NSW)	<i>National Parks and Wildlife Act 1974</i> (NP&W Act)	<p>Provides a framework for the establishment, preservation and management of national parks, reserves and natural historic sites. It also provides a framework for protecting Aboriginal objects and places.</p> <p>Sets out the requirements for obtaining an Aboriginal heritage impact permit for proposed works that could potentially harm an Aboriginal object or declared Aboriginal place.</p>	<p>By operation of section 4.41(1)(d) of the EP&A Act, an Aboriginal heritage impact permit (AHIP) is not required under section 90 of the NP&W Act for the carrying out of the Project.</p> <p>Consistent with Condition B24 of the Development Consent, Lightsource bp will ensure that the Project does not cause any direct or indirect impacts on the Aboriginal heritage items identified in the HMP or located outside the approved Development Footprint. Impacts to Aboriginal heritage items within the Development Footprint will be managed in accordance with the HMP.</p>
State (NSW)	<i>Protection of the Environment Operations Act 1997</i> (POEO Act)	<p>Provides a framework for the management of air, noise, water and waste pollution.</p> <p>Sets out the requirements for obtaining an Environment Protection License for scheduled development work and the carrying out of scheduled activities.</p>	<p>The Project is not a scheduled activity under Schedule 1 of the POEO Act. Therefore, an Environment Protection License is not required to carry out the Project. However, duties and obligations under Chapter 5 of the POEO Act regarding the management of pollution and notification of pollution incidents will apply to the Project (see Section 10.2).</p>
State (NSW)	<i>Roads Act 1993</i> (Roads Act)	<p>Provides controls for the classification of roads and the declaration of public authorities for both classified and unclassified roads. This Act regulates the carrying out of various activities in, on and over public roads.</p>	<p>An approval is required under section 138 of the Road Act prior to the commencement of the road upgrades required under Condition B7 of the Development Consent. The relevant roads authority for works on Golden Highway is Transport for NSW (TfNSW) and the relevant roads authority for works on Ringwood Road and Wollara Road is Upper Hunter Shire Council. The Construction Contractor will obtain any necessary approvals under the Roads Act as part of the detailed design of the road upgrades.</p>
State (NSW)	<i>Water Management Act 2000</i> (WM Act)	<p>Provides a framework for sustainable and integrated management of NSW water resources for the benefit of both present and future generations.</p> <p>Sets out requirements for controlled activities, including activities that are carried out on waterfront land.</p>	<p>By operation of section 4.41(1)(g) of the EP&A Act, a controlled activity approval is not required for works on waterfront land (such as the construction of creek crossings) under section 91 of the WM Act.</p> <p>However, Lightsource will ensure that all works are undertaken in accordance with <i>Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018)</i>, unless DPE Water agrees otherwise.</p> <p>Lightsource bp and/or the Construction Contractor will obtain all necessary water licenses for the carrying out of the Project, consistent with the requirements of the WM Act and/or <i>Water Act 1912</i> (as relevant).</p>

3.0 Risk Management

Lightsource bp will adopt a risk-based approach to the environmental management of the Project. This risk-based approach will include consideration of statutory and legal risks as well as the concerns of the community and other key stakeholders.

3.1 Purpose, Objectives and Implementation

Risk assessments will be undertaken at various stages of the Project's construction, operation and decommissioning. A risk assessment will be undertaken prior to the commencement of construction to identify and evaluate environmental risks and develop practical construction management measures to address these risks. The same risk assessment framework will then be applied on an as needed basis for the duration of the construction phase, and during the operational and decommissioning phases, in instances where:

- A new activity is undertaken, or the nature of an activity materially changes, or
- A new environmental risk is identified.

The purpose of these risk assessments is to:

- Identify activities, events or outcomes with the potential to adversely affect the natural/built environments and human health.
- Identify the likelihood and consequences of potential environmental or health impacts and assign a risk rating.
- Consider whether the risk can be appropriately managed using environmental protection measures.
- Evaluate the residual risk of that activity, with implementation of the proposed environmental protection measures.

Risk assessments will be documented within the Lightsource bp Integrated Management System and in applicable Safe Work Method Statements/Job Safety Analysis for specific construction and operational (and future decommissioning) activities.

4.0 EMS Implementation

As the Applicant and owner of the Project, Lightsource bp will implement the EMS as required by the Development Consent. Lightsource bp must ensure the Project is designed, constructed and operated in compliance with the Development Consent. However, actions to achieve compliance will be undertaken by the:

- Construction Contractor and sub-contractors during construction, and
- O&M Contractor and sub-contractors during operation.

Section 4.1 and **Section 4.2** outline the division of responsibilities between Lightsource bp and its contractors, as well as the roles, responsibilities and accountabilities of key personnel for the implementation of the EMS.

4.1 Construction

Under the terms of the Construction Contract, the Construction Contractor has control and is responsible for the management of the Project Area during construction and initial operations. Relevant aspects of the Construction Contract are summarised below:

- The Construction Contractor is required to perform the works in accordance with all relevant laws and government approvals (including the Development Consent).
- The division of responsibilities for compliance with the conditions of the Development Consent are set out in the Construction Contract and reflected in **Table 4.1** below and **Appendix 2**. The Construction Contractor is responsible for compliance with all conditions of the Development Consent unless the Construction Contract expressly provides otherwise.
- The Construction Contractor must implement all management plans and strategies required under the Development Consent.
- The Construction Contractor is responsible for the care and management of the Project Area and must control site access (including the installation of temporary fencing and security systems as required, and security staff and services as deemed necessary).
- The Construction Contractor is required to provide all necessary construction equipment and must ensure that all equipment complies with all relevant laws and is otherwise fit for purpose.
- The Construction Contractor is required to manage the planning, scheduling, design and construction process for the construction and initial operations phase of the Project.

Table 4.1 below sets out key accountabilities of personnel during this phase of the Project.

Table 4.1 Key Accountabilities for EMS Implementation: Construction

Role	Responsibilities	Accountabilities
<p>Lightsource bp Project Team</p> <p>The Project Team will comprise the following personnel (as a minimum):</p> <ul style="list-style-type: none"> • Lightsource bp Project Manager • Lightsource bp Site Manager • Lightsource bp HS&E Advisor. 	<ul style="list-style-type: none"> • Prepare and submit the EMS and other management plans and strategies required under the Development Consent to the Department for approval. • Ensure compliance with the Development Consent as set out in the Construction Contract (refer to Appendix 2). • Engage suitably qualified personnel to manage each phase of the Project. • Maintain website and communication channels including email, postal address and phone line. • Notify the Department of commencement of construction. • Notify the Department of an incident or non-compliance. Arrange and participate in Independent Environmental Audits. • Review internal environmental and independent audit reports and ensure environmental performance is maintained. Where necessary (refer to Section 9.0), revise the EMS and other management plans and strategies and submit (as required) for approval to the Department. 	<p>As the Applicant, Lightsource bp is accountable for ensuring compliance with the Development Consent (consistent with the Construction Contract). This includes preparation of management plans and strategies, maintaining access to information and communication channels, providing notifications to the Department and the review of internal environmental audits to ensure environmental performance.</p>
<p>Construction Contractor Project Manager</p>	<ul style="list-style-type: none"> • Ensure compliance with Development Consent. • Engage suitably qualified personnel to manage each phase of the Project. • Ensure compliance with environmental management system and associated plans. • Liaise with Council regarding road dilapidation surveys and repairs. • Ensure environmental monitoring is undertaken. • Ensure appropriate approvals and permits are obtained. • Engage suitably qualified subcontractors are engaged to work on the Project. • Review any plans/strategies or programs required by a Development Consent and notify Lightsource bp of any required changes. • Notify Lightsource bp Project Manager prior to and on commencement of construction and operation. • Immediately notify Lightsource bp Project Manager of any non-compliances or incidents. • Participate in Independent Environmental Audits and implement recommendations. • Where necessary (refer to Section 9.0), revise the EMS and other management plans and strategies and submit (for approval to Lightsource bp). 	<p>The Construction Contractor Project Manager is responsible for providing general support to the site manager and HSE management.</p>

Role	Responsibilities	Accountabilities
Construction Contractor Site Manager	<ul style="list-style-type: none"> • Maintain a working knowledge of the environmental management system and environmental management plans. • Coordinate Construction Contractor incident response, including ensuring incident investigation is undertaken and corrective actions carried out. • Ensure relevant training and qualifications are completed by personnel. • Maintain training records for site personnel. • Maintain visitor register. • Facilitate pre-start meetings. • Participate in Independent Environmental Audit and implement recommendations. 	<p>The Construction Contractor Site Manager is responsible for the general supervision and day-to-day coordination of works on site.</p> <p>The Construction Contractor Site Manager is responsible for ensuring all works and workers comply with all management plans and strategies.</p>
Health, Safety and Environment (HSE) Coordinator	<ul style="list-style-type: none"> • Maintain a working knowledge of the environmental management system, environmental management plans, and be aware of all environmental legislative requirements. • Maintain working knowledge of environmental risks and impacts of the Project and measures required to be put in place. • Undertake a HSE Risk Assessment for the Project. • Carry out site inspections and environmental monitoring. • Ensure relevant training and qualifications are completed by personnel. • Maintain records of compliance with the Development Consent and management plans. • Provide accurate and transparent information while ensuring the integrity of the independent environmental audit process • Maintain Complaints Register and respond to complaints or nominate a delegate to respond. • Monitor the Complaints Register weekly to identify any trends in complaints. • Investigate incidents and identify preventative actions. • Prepare incident report and implement corrective actions. • Manage toolbox talks. • Review environmental management plans as required. • Participate in Independent Environmental Audits and implement recommendations. 	<p>The HSE Coordinator is responsible for overseeing the HSE management of the Project.</p>

Role	Responsibilities	Accountabilities
All Construction contractors and sub-contractors	<ul style="list-style-type: none"> • Undertake works in compliance with the EMS, other management plans and strategies, and the CEMP. • Complete required training and attend toolbox talks where relevant. • Notify Construction Contractor Site Manager of any non-compliance or incidents. 	All personnel are responsible for undertaking activities in accordance with the environmental management plans.

4.1.1 Waste Management

The management of waste streams will be guided by the principles of the waste hierarchy, where emphasis is placed upon reducing, reusing, and recycling prior to disposal of wastes. Appropriate and best-practice waste management will be implemented as part of the Project in accordance with the following legislation and guidelines:

- *DPE Large Scale Solar Energy Guideline 2022*
- *NSW Protection of the Environment Operations Act 1997 (POEO Act)*
- *NSW Protection of the Environment Operations (Waste) Regulation 2014*
- *NSW Waste Avoidance and Resource Recovery Act 2001 (WARR Act)*
- *Commonwealth Recycling and Waste Reduction Act 2020.*

Further details regarding waste management will be included in the CEMP.

4.1.2 Visual Amenity

Visual impacts will be managed in accordance with Condition B22 of the Development Consent, the EIS (Umwelt 2023) and the Landscape Character and Visual Impact Assessment (Envisage 2023).

4.2 Operation

As with the construction phase, the division of responsibilities between Lightsource bp and the O&M Contractor will be set out in the O&M Contract. Key responsibilities and accountabilities are reflected in **Table 4.2.** below and in **Appendix 1.**

Table 4.2 Roles and Responsibilities for EMS Implementation: Operation

Role	Responsibilities
Lightsource bp Development Principal	<ul style="list-style-type: none"> • Ensure compliance with the Development Consent as set out in the O&M Contract (reflected in Appendix 2). • Maintain website and communication channels including email, postal address and phoneline. • Notify the Department of commencement of operations, upgrading and decommissioning. • Notify the Department of an incident or non-compliance. • Ensure environmental monitoring is undertaken. • Arrange and participate in Independent Environmental Audits. • Review internal and independent environmental audit reports and implement any require actions. • Where necessary (refer to Section 9.0), revise the EMS and other management plans and strategies and submit (as required) for approval to the Department. • Identify if a modification to the Development Consent is required.

Role	Responsibilities
O&M Site Manager	<ul style="list-style-type: none"> • Ensure compliance with the Integrated Management System. • Ensure the EMS and other management plans and strategies identified in Section 1.3.3 of this document are implemented. • Review and update the EMS and other management plans and strategies as required (see Section 9.0). • Ensure relevant training and qualifications are completed by personnel. • Maintain training records for site personnel. Carry out site inspections and environmental monitoring. • Maintain complaints register and respond to complaints. • Provide accurate and transparent information while ensuring the integrity of the independent environmental audit process • Manage incident response. • Investigate incidents and identify preventative actions. • Notify Lightsource bp of incidents and non-compliances. • Participate in Independent Environmental Audit and implement recommendations.
O&M Contractors	<ul style="list-style-type: none"> • Operating in compliance with the EMS and other management plans and strategies identified in Section 1.3.3 of this document and the conditions of the Development Consent. • Notify O&M Site Manager of any non-compliance or incidents.

Consistent with Condition C2 of the Development Consent, Lightsource bp will review and update the EMS prior to carrying out any decommissioning works under the Development Consent (see **Section 8.0**). Specific roles, responsibilities and accountabilities for EMS implementation during upgrading and/or decommissioning works will be identified as part of this review process.

5.0 Training, Awareness and Competencies

This section provides an overview of HSEQ training, awareness and competencies for personnel involved in the carrying out of the Project. The Integrated Management System will be implemented through environmental inductions, toolbox talks and awareness training as outlined in **Section 5.1** to **Section 5.4** below.

During construction, HSEQ training will be managed by the Construction Contractor (primarily the HSE Coordinator and Construction Contractor Site Manager). During operations, HSEQ training will be managed by the O&M Contractor (primarily the O&M Site Manager).

Further details regarding key roles, responsibilities and accountabilities are provided in **Section 4.0**.

5.1 HSEQ Induction

All personnel (Lightsource employees, contractors and sub-contractors) engaged to carry out the Project will complete an online HSEQ induction prior to commencing work on-site. This induction will include an overview of:

- The Goulburn River Solar Farm Integrated Management System.
- Statutory obligations and regulatory requirements, including compliance obligations under the Development Consent and requirements of due diligence and care.
- Key roles, responsibilities and accountabilities (see **Section 4.0**).
- Identification of key environmental risks, constraints and hazards and management controls identified under the Development Consent and the various management plans and strategies identified in **Section 1.3.3**).
- Emergency procedures as set out in the FM&ERP.
- Incident reporting procedures (see **Section 10.0**).
- Any short-term visitors (e.g., making deliveries to site) will be required to be accompanied by inducted personnel.

5.2 Pre-Start Meetings

During construction, the Construction Contractor Site Manager will lead daily pre-start meetings to discuss key HSEQ issues and risks. All on-site personnel will be required to attend pre-start meetings.

5.3 Toolbox Talks

Toolbox talks will be used to raise awareness and educate personnel on HSEQ-related matters.

All toolbox talks will include discussion regarding environmental issues and risks (e.g., vegetation clearance protocols, the management of unexpected heritage items, erosion and sedimentation control and noise and dust management). Toolbox talks will be led by the HSE Coordinator during construction and the O&M Site Manager during operation.

5.4 Environmental Awareness Training

Targeted environmental awareness training will be provided to all employees, contractors and sub-contractors. Environmental awareness training may be delivered by external providers or by the HSE Coordinator or O&M Site Manager.

The Construction Contractor Site Manager and O&M Site Manager will be responsible for maintaining training records during construction and operations, respectively, and for ensuring that workers complete the necessary environmental awareness training.

6.0 Communication

An overview of the communication commitments is outlined below with further detail provided in the community engagement strategy prepared for the Project.

6.1 Access to Information

Lightsource bp has established a website for the Project in accordance with Condition C19 of the Development Consent. This website will be maintained over the life of the Project and will be the principal source of information for the community. A link to the Project website is provided below:

<https://lightsourcebp.com/au/project/goulburn-river-solar/>

Lightsource bp will publish each plan required by the Development Consent (refer to **Section 1.3.3**) on the website and submit all plans required by these conditions electronically to the Department within 15 business days of the date the plan is approved by the Planning Secretary as required by Condition C19 of the Development Consent.

Documents published on the Project website will include, but not be limited to:

- Information about the Project, including a Final Layout Plan.
- The Environmental Impact Statement for Goulburn River Solar Farm dated May 2023.
- Response to Submissions Report dated December 2023.
- Amendment Reports dated January 2024 and May 2024, and the additional information dated 5 April 2024, 17 June 2024 and 27 June 2024.
- Statutory approval documentation (Development Consent and EPBC Approval).
- Management plans, strategies and programs that are required under the conditions of the Development Consent.
- Monitoring results of the Project, which have been reported in accordance with the various plans and programs approved under the conditions of the Development Consent (**Section 7.2**).
- Complaints register, to be updated on a monthly basis.
- Reviews to be completed annually providing an overview of the Projects progress and compliance.
- Any independent environmental audit and Lightsource bp's response to the recommendations in any audit.
- Any matter required by the NSW Planning Secretary.

6.2 Government Agency Stakeholders

The Lightsource bp Project team will be the primary point of contact with Government agencies regarding compliance and environmental management issues.

As outlined in **Section 4.0**, Lightsource bp will be responsible for:

- Notifying the Department of the commencement of construction and operations
- Notifying the Department and other relevant agencies of an incident or non-compliance.
- Seeking the Planning Secretary's approval of management plans and strategies required under the Development Consent, the appointment of independent auditors and the submission of Independent Environmental Audit Reports and Responses.

6.3 Community Stakeholders

Lightsource bp has established three main communication channels for community members to obtain information and provide feedback regarding the Project:

- the Project website <https://lightsourcebp.com/au/project/goulburn-river-solar/>
- a Project email address (Goulburnriversolar@lightsourcebp.com)
- a 24-hour phone line (1300 873 575).

The Project website will include project status updates, a community feedback form and feedback register, and information about construction employment opportunities.

6.3.1 Complaints Procedure

Community members may submit complaints regarding the Project via the feedback form on the Project website, or via the email address or phone line specified above. Additionally, during construction, the Construction Contractor Site Manager may receive complaints directly. The Construction Contractor Site Manager's contact details will be provided to the owners of nearby non-associated receivers (refer to **Figure 1.2**).

During construction, complaints will be managed by the Construction Contractor (primarily the HSE Coordinator). During operations, complaints will be managed by the O&M Contractor (primarily the O&M Site Manager).

All complaints will be acknowledged (either by phone or email) within three (3) business days. A written response will be provided for all complaints made in relation to the Project. This response will summarise the outcomes of any investigation undertaken and a proposed action plan for addressing the concerns raised in the complaint.

Timeframes for responding to complaints will depend upon the nature and risk level of the issue raised.

All complaints will be collated and recorded in the feedback register published on the Project website, and de-identified to ensure confidentiality. The Construction Contractor or O&M Contractor (as relevant) will provide a collated register of complaints to the Lightsource bp Project Team on an as required basis.

6.3.1.1 Dispute Resolution

When a complaint cannot be resolved, and a dispute has arisen:

- An investigation will be initiated by Lightsource bp, with input from relevant parties as required, to clarify the dispute and actions taken to date.
- An investigation will be undertaken to assess the nature of the dispute and possible resolution with the aim of reaching mutual agreement between parties. Indicative timeframes for responding to complaints are as follows:
 - Minor matters or matters not requiring detailed investigation will aim to be responded to within five (5) business days.
 - Matters requiring a detailed investigation triggering a dispute will aim to be responded to within ten (10) business days.
- If necessary, an appropriately qualified and experienced independent person or third party, (e.g. a technical or subject matter expert) may be asked to provide advice on the investigation and/or facilitate mediation to reach a resolution.
- If agreement cannot be achieved, either party may refer the dispute to the NSW Planning Secretary for resolution in accordance with the Development Consent.

7.0 Site Inspections and Performance

This section outlines the environmental site inspections, monitoring and reporting for the Project. A consolidated set of environmental management and/or mitigation measures (from all other plans required in accordance with the Development Consent) is provided in **Appendix 3** of this EMS.

7.1 Environmental Site Inspections

Environmental site inspections of the Project Area will be undertaken on at least a weekly basis during construction and monthly during operations. Environmental Inspections will also be undertaken pre and post expected rainfall events during construction (>20 mm of rainfall expected or recorded onsite within a 24-hour period). Rainfall events will be informed by the forecast broadcasted by the Bureau of Metrology (or equivalent) and the onsite rainfall gauge. These inspections will be undertaken by the:

- HSE Coordinator (or delegate) during construction.
- O&M Site Manager (or delegate) during operations.

Following the site inspection, the HSE Coordinator or O&M Site Manager (as relevant) will complete a site inspection report identifying any actual or potential non-compliances, risks or deficiencies and establishing an action plan (including timeframes) for addressing these matters, having regard to the level of risk.

A detailed site inspection form and procedure will be documented in the CEMP and OEMP.

7.2 Environmental Monitoring and Reporting

Table 7.1 provides a consolidated summary of the Environmental Monitoring and Reporting Program for the Project. Further detail regarding monitoring and reporting is provided in the relevant plans and strategies identified in **Section 1.3.3** and the consolidated measures documented in **Appendix 3**. Environmental compliance reports will be published on the Project website (see **Section 6.1**).

This section does not address incident reporting or independent audits requirements, which are discussed separately in **Sections 10.1** and **Section 11.1**, respectively.

Table 7.1 Environmental Monitoring and Reporting Program (Construction and Operation)

Aspect	Relevant Condition	Specific Condition Description	Timing/Frequency	Relevant Plan/Strategy	Relevant Standards/Guidelines	Responsibility for Implementation	Reporting
Traffic and Transport	Condition B10 (d)	Monitor the compliance of vehicles using the access route described in conditions B3, B4 and B5.	Footage will be reviewed weekly during months one (1) and two (2) of construction, then monthly thereafter or in response to a complaint until construction is complete.	TMP	To be undertaken in accordance with protocols outlined in the TMP.	Construction Contractor HSE Coordinator (construction) O&M Site Manager (operations)	Refer to Section 5.6 and Appendix G of the TMP
Traffic and Transport	Condition B10(e)(iii)	Monitoring the bi-directional traffic volumes on the Golden Highway at the Ringwood Road intersection.	Traffic volumes on the Golden Highway at its intersection with Ringwood Road will be monitored in the form of tube counts or other approved method at the start of construction and then at six-monthly intervals until construction is complete.	TMP	To be undertaken in accordance with protocols outlined in the TMP.	Construction Contractor HSE Coordinator (construction) O&M Site Manager (operations)	Refer to Section 3.6.5 and Table 5.1 of the TMP
Biodiversity	Condition B16(c)	Include a program to monitor and report on the effectiveness of mitigation measures.	Pre-clearance protocols: Before and after clearing activities during construction.	See Section 6.0 of the BMP	To be undertaken in accordance with protocols outlined in the BMP.	Construction Contractor HSE Coordinator	Refer to Table 8.1 in the BMP
			Exclusion fencing and signage: Prior to construction, during construction and operation.				
			Weed hygiene protocol: Monthly until construction is complete.				
			Pest monitoring: routine inspections, during construction (fortnightly) and operation (6 monthly).				
			Rehabilitation monitoring: Annually for a period of at least 3 years,				

Aspect	Relevant Condition	Specific Condition Description	Timing/Frequency	Relevant Plan/Strategy	Relevant Standards/Guidelines	Responsibility for Implementation	Reporting
			<p>following commencement of rehabilitation works.</p> <p>Bank stability monitoring: Weekly inspections throughout construction and monthly during operation, as required.</p>				
Heritage	Condition B26(b)(iv)	Recording and salvage collection of the heritage items located within the approved development footprint, as identified in Table 2 of Appendix 6.	Baseline (pre-construction including salvage activities) and post activity (following construction) checks.	HMP	To be undertaken in accordance with protocols outlined in the HMP	Construction Contractor HSE Coordinator (construction) O&M Site Manager (operations)	Refer to Section 6.2.3.6 of the HMP
Heritage	Condition B26(b)(v)	Further recording and investigation of the grinding groove site 'Killoe Creek GG1' (AHIMS site #37- 1-1033).	Further recording and investigation of 37-1-1033 (Killoe Creek (GG1)) will take place prior to construction activities relating to the Killoe Creek culvert upgrade.	HMP	To be undertaken in accordance with protocols outlined in the HMP.	Construction Contractor HSE Coordinator (construction) O&M Site Manager (operations)	Refer to Section 6.2.3.2 of the HMP
Heritage	Condition B26(c)	Include a program to monitor and report on the effectiveness of these measures and any heritage impacts of the Project.	Baseline (pre-construction) and post activity (following construction) checks.	HMP	To be undertaken in accordance with protocols outlined in the HMP.	Construction Contractor HSE Coordinator (construction) O&M Site Manager (operations)	Refer to Section 7 of the HMP

Aspect	Relevant Condition	Specific Condition Description	Timing/Frequency	Relevant Plan/Strategy	Relevant Standards/Guidelines	Responsibility for Implementation	Reporting
Soil and Water	Condition B30(c)	Include a program to monitor and report on the effectiveness of these measures.	Erosion and sediment control inspections: Weekly during construction and monthly during operation. Inspections will also be undertaken prior to and post rainfall events >20mm (24hr period)	SWMP	To be undertaken in accordance with protocols outlined in the SWMP.	Construction Contractor HSE Coordinator (construction) O&M Site Manager (operations)	Refer to Section 9.0 and 10.0 of the SWMP
			Visual monitoring of local water quality: quarterly during construction and after rainfall events of greater than 20 mm in a 24-hour period.				
Accommodation and Employment	Condition B40(d)	Include a program to monitor and review the effectiveness of the strategy over the life of the development, including regular monitoring and review during construction.	(To be updated following the approval of the AES)	AES	N/A – monitoring and reporting methodology outlined in AES.	Lightsource bp	Refer to 4.2.4 of the AES

Notes: Monitoring and management of waste, visual amenity, dust, noise and visual aspects are outlined in the CEMP and OEMP prepared for the Project.

8.0 Decommissioning and Rehabilitation

Decommissioning and rehabilitation requirements are set out in Condition B41 of the Development Consent. This condition provides that within 18 months of the cessation of operations, unless the Planning Secretary agrees otherwise, Lightsource bp must rehabilitate the site to the satisfaction of the Planning Secretary. This rehabilitation must comply with the objectives in **Table 8.1** below.

Table 8.1 Rehabilitation Objectives

Feature	Objective
Site	Safe, stable and non-polluting. Minimise the visual impact of any above ground ancillary infrastructure agreed to be retained for an alternative use.
Solar farm infrastructure	To be decommissioned and removed unless the Planning Secretary agrees otherwise.
Land use	Restore land capability to pre-existing use (at least Class 4 Land Capability).
Community	Ensure public safety at all times.

Consistent with the requirements of the Development Consent, Lightsource bp will:

- Review and update this EMS and other relevant management plans required by the Development Consent to the satisfaction of the Planning Secretary, prior to upgrading or decommissioning activities.
- Rehabilitate disturbed areas to comply with the objectives outlined in **Table 8.1** within 18 months of the cessation of operations, unless otherwise agreed by the Planning Secretary.
- Comply with any requirements of the Planning Secretary issued under Condition A4 of the Development Consent, for example, requirements arising from any report, review or audit commissioned by the Department relating to rehabilitation.

9.0 Document Review and Control

Consistent with Condition C2 of the Development Consent, Lightsource bp will:

- Update the strategies, plans or programs required under the Development Consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site.
- Review and if necessary, revise the strategies, plans or programs required under the Development Consent to the satisfaction of the Planning Secretary within one month of:
 - the submission of an incident report under Condition C11 of Schedule 2 (see **Section 10.1**)
 - the submission of an audit report under Condition C15 of Schedule 2 (see **Section 11.1**), or
 - any modification to the conditions of the Development Consent.

Additionally, Condition C3 provides that Lightsource bp may, at any time, submit a revised management plan including the EMS to the Planning Secretary for approval.

The EMS will be periodically reviewed by the Lightsource bp Project Team and O&M Site Manager during construction and operation, respectively (see **Section 4.0**). The EMS will also be reviewed and updated following the approval of the staging request.

If revisions to the EMS are required, for example, to facilitate continuous improvement, to respond to legislative changes or address an actual or potential non-compliance, the Lightsource bp Project Team will be responsible for revising the EMS and submitting the updated EMS to the Planning Secretary for approval.

Following approval by the Planning Secretary, the revised EMS will be implemented and be published on the Project website (see **Section 6.1**).

10.0 Incident Reporting

This section describes the incident reporting procedures for the Project, having regard to the requirements of the Development Consent and the POEO Act.

10.1 Notification Procedures under Development Consent

10.1.1 Incident Notification

Incident notification requirements are set out in Condition C11 of the Development Consent. Under the consent, an ‘incident’ will be defined as a set of circumstances that causes or threatens to cause material harm to the environment, and ‘material harm’ is harm that:

“involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or

results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.”

Lightsource bp will notify the Department in writing via the Major Projects website immediately after becoming aware of any incident. The notification will identify the Project (Goulburn River Solar Farm, SSD 33964533) and set out the location and nature of the incident.

Within seven days of becoming aware of the incident, Lightsource bp will provide a detailed written notification via the Major Project website. This notification will:

- Identify the Project and application number (Goulburn River Solar Farm, SSD 33964533).
- Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident).
- Identify how the incident was detected.
- Identify when Lightsource bp became aware of the incident.
- Identify any actual or potential non-compliance with conditions of consent.
- Describe what immediate steps were taken in relation to the incident.
- Identify further action(s) that will be taken in relation to the incident.
- Identify a project contact for further communication regarding the incident.

Within 30 days of the date on which the incident occurred, or as otherwise agreed by the Planning Secretary, Lightsource bp will provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident including the following information, as well as any further reports which may be requested by the Planning Secretary:

- A summary of the incident.
- Outcomes of an incident investigation, including identification of the cause of the incident.
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence.
- Details of any communication with other stakeholders regarding the incident.

10.1.2 Non-Compliance Notification

Non-compliance notification requirements are set out in Conditions C12–C13 of the Development Consent. Under the Development Consent, a non-compliance is defined as an ‘occurrence, set of circumstances or development that is a breach of this consent but is not an incident’.

Lightsource bp will notify the Department in writing via the Major Projects website within seven days after becoming aware of any non-compliance. Any non-compliance notification will identify the Project and the application number (Goulburn River Solar Farm, SSD 33964533), set out the condition of consent that the Project is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known). The notification will also identify what actions have been taken, or will be undertaken, to address the non-compliance.

Consistent with Condition C14, a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

10.2 Incident Reporting Procedures under POEO Act

Lightsource bp will notify the Environment Protection Authority (EPA) immediately after becoming aware of any pollution incident which causes or threatens to cause material harm to the environment in accordance with the requirements of Part 5.7 of the POEO Act. The meaning of ‘material harm’ is set out in section 147 of the POEO Act and is consistent with the definition under the Development Consent (see **Section 10.1** above).

An incident notification will be provided via the EPA Environment Line (Phone: 131 555) and to each ‘relevant authority’ as set out in section 148 (8) of the POEO Act. This includes:

- Upper Hunter Shire Council (Phone: 02 6540 1100)
- the NSW Ministry of Health (Phone: 02 9391 9000)
- Safe Work NSW (Phone: 13 10 50)
- Fire and Rescue NSW (Phone: 000).

Each incident notification will include, as a minimum, the requirements set out in section 150 of the POEO Act, including:

- The time, date, nature, duration and location of the incident.
- The location of the place where pollution is occurring or is likely to occur.

- The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known.
- The circumstances in which the incident occurred (including the cause of the incident, if known).
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known.
- Any other information prescribed by the regulations.

11.0 Monitoring and Evaluation

11.1 Internal Review and Improvement

Lightsource bp will implement internal review processes to facilitate continuous improvement in environmental management over the life of the Project. This will include (but not be limited to):

- Monthly project review meetings attended by Lightsource bp, the Construction Contractor and any other key stakeholders (as relevant) to discuss the progress of the Project and review key environmental risks and issues.
- Reviewing, and where required, updating the EMS and other management plans and strategies to improve environmental performance.
- Developing and implementing lessons learned training programs in response to any reportable incidents or non-compliances.
- Reviewing and refining employee and contractor training programs over the life of the Project.

11.2 Independent Environmental Audits

In accordance with Conditions C15–C18 of the Development Consent, Lightsource bp will commission Independent Environmental Audits of the Project:

- Within 12 weeks of the commencement of and during the construction phase of a project.
- Within six months of commencement of operations.
- At intervals no greater than three years from the initial operational audit.

Lightsource bp will seek the Planning Secretary's endorsement of the proposed independent auditor(s) prior to commencing each Independent Environmental Audit.

Independent Environmental Audits will be conducted and carried out in accordance with the *Independent Audit Post Approval Requirements (2020)*. Consistent with these requirements, Lightsource bp will:

- Review and respond to each Independent Audit Report prepared under condition C15 of the Development Consent, or where notice is given by the Planning Secretary.
- Submit the response to the Planning Secretary.
- Make each Independent Audit Report, and Lightsource bp's subsequent response, publicly available within 60 days of submission to the Planning Secretary (unless otherwise agreed by the Planning Secretary).

It should be noted that notwithstanding the requirements of the Independent Audit Post Approval Requirements (2020), the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.

11.3 Corrective and Preventive Action

Incidents and non-compliances will be managed and reported through the procedures outlined in **Section 10.0**. Roles, responsibilities and accountabilities for responding to incidents and non-compliances are detailed in **Section 4.0**.

Additionally, the Construction Contractor and O&M Contractor will proactively identify and manage environmental risks and take preventative action to address potential non-compliances through the environmental site inspection process (see **Section 7.1**) and internal review and improvement processes (see **Section 11.1**).

11.4 Requirements of the Planning Secretary

Consistent with the requirements of Condition A4, Lightsource bp will comply with any requirement/s of the Planning Secretary arising from the Department's assessment of:

- Any strategies, plans or correspondence that are submitted in accordance with the Development Consent.
- Any reports, reviews or audits commissioned by the Department regarding compliance with the Development Consent.
- The implementation of any actions or measures contained in these documents.

12.0 References

Austrroads, 2021. Guide to Road Design.

Department of Climate Change, Energy, the Environment and Water, 2014. *Environmental Management Plans Guidelines*.

Goulburn River Solar Farm – Accommodation and Employment Strategy, prepared by Umwelt (Australia) Pty Limited on behalf of Lightsource bp Renewable Energy Investments Limited, dated May 2024.

Goulburn River Solar Farm – Biodiversity Management Plan, prepared by Umwelt (Australia) Pty Limited on behalf of Lightsource bp Renewable Energy Investments Limited, dated November 2024.

Goulburn River Solar Farm – Emergency Plan, prepared by Riskcon Engineering Pty Ltd Partnership for Umwelt (Australia) Pty Limited on behalf of Lightsource bp Renewable Energy Investments Limited, dated December 2024.

Goulburn River Solar Farm – Heritage Management Plan, prepared by OzArk Environment and Heritage Partnership for Umwelt (Australia) Pty Limited on behalf of Lightsource bp Renewable Energy Investments Limited, dated November 2024.

Goulburn River Solar Farm – Landscape Character and Visual Impact Assessment, prepared by Envisage Partnership for Umwelt (Australia) Pty Limited on behalf of Lightsource bp Renewable Energy Investments Limited, dated April 2023.

Goulburn River Solar Farm – Soil and Water Management Plan, prepared by Umwelt (Australia) Pty Limited on behalf of Lightsource bp Renewable Energy Investments Limited, dated November 2024.

Goulburn River Solar Farm –Traffic Management Plan prepared by Turnbull Engineering Partnership for Umwelt (Australia) Pty Limited on behalf of Lightsource bp Renewable Energy Investments Limited, dated November 2024.

NSW Department of Planning and Environment, 2020. *Independent Audit Post Approval Requirements*

NSW Department of Planning and Environment, 2022. *Large Scale Solar Energy Guideline*. New South Wales Government.

NSW Department of Planning, Industry and Environment, 2020. *Post Approval Guidance Environmental Management Plan Guideline*

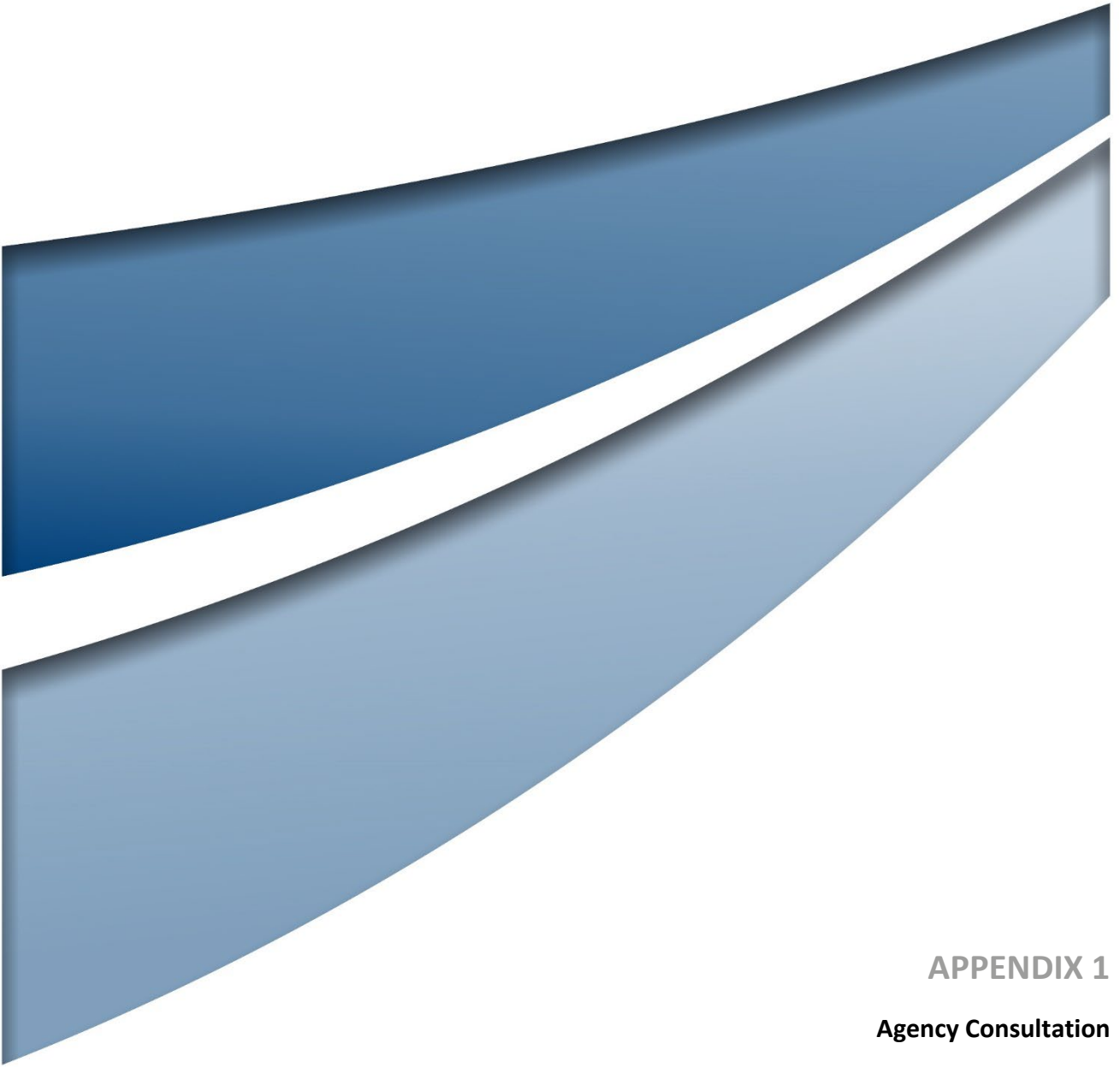
Protection of the Environment Operations Act 1997. New South Wales. Accessed [28 October 2024]. <<https://legislation.nsw.gov.au/view/html/inforce/current/act-1997-156>>

Protection of the Environment Operations (Waste) Regulation 2014. New South Wales Government. Accessed [28 October 2024]. <<https://legislation.nsw.gov.au/view/html/inforce/current/sl-2014-0814>>

Recycling and Waste Reduction Act 2020. Australian Government. Accessed [28 October 2024]. <<https://www.legislation.gov.au/Details/C2020A00119>>

Waste Avoidance and Resource Recovery Act 2001. New South Wales Government. Accessed [28 October 2024]. <<https://legislation.nsw.gov.au/view/html/inforce/current/act-2001-058>>

Umwelt, 2023. Environmental Impact Statement (EIS) for Goulburn River Solar Farm, dated May 2023.



APPENDIX 1
Agency Consultation

The EMS was submitted to the Department for review on 13 December 2024 and correspondence received. The Department correspondence, and where this feedback has been addressed in this EMS, is documented in the table below.

Post Approval Review – SSD 33964533



Documents: Goulburn River Solar Farm – Environmental Management Strategy (EMS)
 Revision: Final version dated 13 December 2024
 Reviewed: Katie Weekes on 18 December 2024

<i>Schedule, Condition</i>	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
Schedule 2, Condition A4 – Terms of Consent	-	-	-	-
The Applicant must comply with any requirement/s of the Planning Secretary arising from the Department's assessment of: (a) any strategies, plans or correspondence that are submitted in accordance with this consent; (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; and (c) the implementation of any actions or measures contained in these documents.	Yes	Section 11.4 'Requirements of the Planning Secretary.'	-	-
Schedule 2, Condition B26 – Heritage Management Plan	-	-	-	-
(a) be prepared in consultation with local Aboriginal stakeholders, and reviewed by Heritage NSW;	No	To be completed as part of HMP. Conditional approval for this stage.	Conditional approval for this stage.	Noted
(b) include a description of the measures that would be implemented for:	-	-	-	-
(vi) a contingency plan and reporting procedure if:	Yes	Appendix 4 contains the 'Unexpected Finds Procedure'.	-	-

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Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
<ul style="list-style-type: none"> • heritage items outside the approved development footprint are damaged; • previously unidentified heritage items are found; or • skeletal material is discovered; 	Partial	Appendix 4, Unexpected Find Procedures. Section 1 'Identification of Previously Unknown Historical Heritage Sites'. Does this section apply only to historical heritage? Section 2.2.1, Section 2.3.1 and Section 2.4. What type of temporary fencing or caution tape? This should include colour of any flagging tape to ensure that there is no confusion. Section 2.4, point 'd.' Will the site location also be identified with GPS coordinates and where will this be kept. Section 3.0. Who is responsible for doing the site card?	Provide details on the adjacent comments.	Lightsource bp has revised Appendix 4, the Unexpected Finds Procedure, for clarity, specifically outlining the procedures for handling historical and Aboriginal finds. Additionally, details regarding the type and colour of flagging tape for construction fencing have been included. Section 2.4 has been updated to specify that locations will be identified using GPS coordinates and recorded on project plans and operational maps. In Section 3.0, the responsibility for completing the site cards has been assigned to the Contractor Archaeologist.
Schedule 2, Condition C1 - Environmental Management Strategy	-	-	-	-
Prior to commencing construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	-	-	-	-
(a) provide the strategic framework for environmental management of the development;	Yes	Section 1.3 'Strategic Environmental Management Framework.'	-	-

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Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
(b) identify the statutory approvals that apply to the development;	Yes	Section 2.1 and Table 2.1 'Statutory Approvals that Apply to the Project.'	-	-
(c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Yes	Section 4.0 'EMS Implementation.'	-	-
(d) describe the procedures that would be implemented to:	-	-	-	-
(i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Yes	Section 6.0 'Access to Information.'	-	-
(ii) receive, handle, respond to, and record complaints;	Yes	Section 6.3.1 'Complaints Procedure.'	Note: Ensure complaints register is de-identified before publishing.	Lightsource bp has revised Section 6.3.1 to include note.
(iii) resolve any disputes that may arise;	Yes	Section 6.3.1.1 'Dispute Resolution.'	-	-
(iv) respond to any non-compliance;	Yes	Section 10.1.2 'Non-Compliance Notification.'	-	-
(v) respond to emergencies; and	Yes	Table 1.1 and Section 1.3.3 refer to the Fire Management and Emergency Plan.	-	-
(e) include:	-	-	-	-
(i) references to any strategies, plans and programs approved under the conditions of this consent; and	Yes	Section 1.3.3 Goulburn River Solar Farm Integrated Management System.'	-	-

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<p>(ii) a clear plan depicting all the monitoring to be carried out in relation to the development.</p>	<p>Partial</p>	<p>Section 7.2 ‘Environmental Monitoring and Reporting’ Table 7.1 – General: <ul style="list-style-type: none"> - must specify which stage it is related to. - There has been mention of waste, visual amenity, noise, dust, lighting and rehabilitation in this table. Table 7.1 - Biodiversity: <ul style="list-style-type: none"> - The monitoring program must cover all monitoring required under the BMP. This must include bank stability. - Will fencing and signage be monitored at any other stage during the construction? - Section 6.0 of what document? Table 7.1 – Soil and Water: <ul style="list-style-type: none"> - Monitoring program timed for weekly but fortnightly mentioned earlier. - How will before forecast rain or following rain events be monitored. </p>	<p>Address adjacent comments. These are also included at the end of this table in general comments. See marked up pdf for further information.</p>	<p>Lightsource bp has revised Table 7.1 in Section 7.2 to specify the applicable project stages. Rehabilitation and bank stability monitoring is now included in the table.</p> <p>Monitoring and management measures for dust, noise, and lighting are referenced in the CEMP and OEMP, as they are not required by the development consent and thus have been excluded in Table 7.1. However, a footnote has been added to provide clarity to provide reference that these measures are included in the CEMP and OEMP for the Project.</p> <p>Lightsource bp has also updated the Table 7.1 to reflect all monitoring requirements outlined in the BMP.</p>
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 Reviewed: Katie Weekes on 18 December 2024

Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
				<p>Lightsource bp will also like to clarify that fencing will be monitored during the pre-construction, construction, and operational phases.</p> <p>Lightsource bp have added a reference to the BMP where Section 6.0 has been mentioned which was previously missing.</p> <p>Additionally, Table 7.1 has been revised to clarify the frequency of environmental site inspections. Section 7.1 has also been updated to provide clarity on how rainfall will be monitored before and following rainfall events.</p>
Following the Planning Secretary’s approval, the Applicant must implement the Environmental Management Strategy.	Yes	Section 4.0 ‘EMS implementation’	-	-
Schedule 2, Condition C2 - Revision of Strategies, Plans and Programs	-	-	-	-

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Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
The Applicant must: (a) update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and (b) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 1 month of the: (i) submission of an incident report under condition C11 of Schedule 2; (ii) submission of an audit report under condition C15 of Schedule 2; or (iii) any modification to the conditions of this consent.	Partial	Section 9.0 'Document Review and Control'. Will not must.	Minor admin edit required. Change 'must' to 'will' in the first sentence of Section 9.0.	Lightsource bp has revised the first sentence by replacing "must" with "will."
Schedule 2, Condition C3 - Updating and Staging of Strategies, Plans or Programs	-	-	-	-
With the approval of the Planning Secretary, the development may be staged and the Applicant may: (a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program); (b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and (c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).	Partial	Section 9.0 'Document Review and Control.' Note that the EMS will need to be updated following approval of the staging request that has been submitted.	Update the EMS following approval of the staging request.	Lightsource bp has revised Section 9.0 to state that the EMS will be updated once the staging request is approved.
Schedule 2, Condition C4	-	-	-	-
If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.	NA	Appendix A	-	-
Schedule 2, Condition C5	-	-	-	-
If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.	Yes	Appendix A	-	-
Schedule 2, Condition C6	-	-	-	-
If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.	NA	-	-	-
Schedule 2, Condition C11 - Incident Notification	-	-	-	-

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Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 7.	Yes	Section 10.1.1 'Incident Notification'	-	-
Schedule 2, Condition C12 - Non-Compliance Notification	-	-	-	-
The Department must be notified via the Major Projects website portal within 7 days after the Applicant becomes aware of any non-compliance.	Yes	Section 10.1.2 'Non-Compliance Notification'	-	-
Schedule 2, Condition C13	-	-	-	-
A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the noncompliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Yes	Section 10.1.2 'Non-Compliance Notification'	-	-
Schedule 2, Condition C14	-	-	-	-
A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Yes	Section 10.1.2 'Non-Compliance Notification'	-	-
Schedule 2, Condition C15 – Independent Environmental Audit	-	-	-	-
Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020).	Partial	Section 11.2 'Independent Environmental Audits.' Table 4.1, key accountabilities. No mention of IEA for Lightsource bp roles. Will not must in Section 11.2.	Table 4.1, clarify if Lightsource bp are involved in the IEA process. Minor admin edit required. Change 'must' to 'will' in the Section 11.2.	Lightsource bp has revised Section 11.2 to ensure that responsibilities during an independent environmental audit are reflected in Table 4.1. Additionally, the wording in Section 11.2 has been changed from "must" to "will."
Schedule 2, Condition C16	-	-	-	-

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 Revision: Final version dated 13 December 2024
 Reviewed: Katie Weekes on 18 December 2024

Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), the Applicant must: (a) review and respond to each Independent Audit Report prepared under condition C15 of this consent, or where notice is given by the Planning Secretary; (b) submit the response to the Planning Secretary; and (c) make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary. unless otherwise agreed by the Planning Secretary.	Yes	Section 11.2 'Independent Environmental Audits.'	-	-
Schedule 2, Condition C17	-	-	-	-
Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements (2020) unless otherwise agreed by the Planning Secretary.	Yes	Section 11.2 'Independent Environmental Audits' references this condition.	-	-
Schedule 2, Condition C18	-	-	-	-
Notwithstanding the requirements of the Independent Audit Post Approval Requirements (2020), the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.	-	-	Should be noted.	Lightsource bp has revised Section 11.2 to align with the requirements outlined by the Department.
Schedule 2, Condition C19 – Access to Information	-	-	-	-

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 Reviewed: Katie Weekes on 18 December 2024

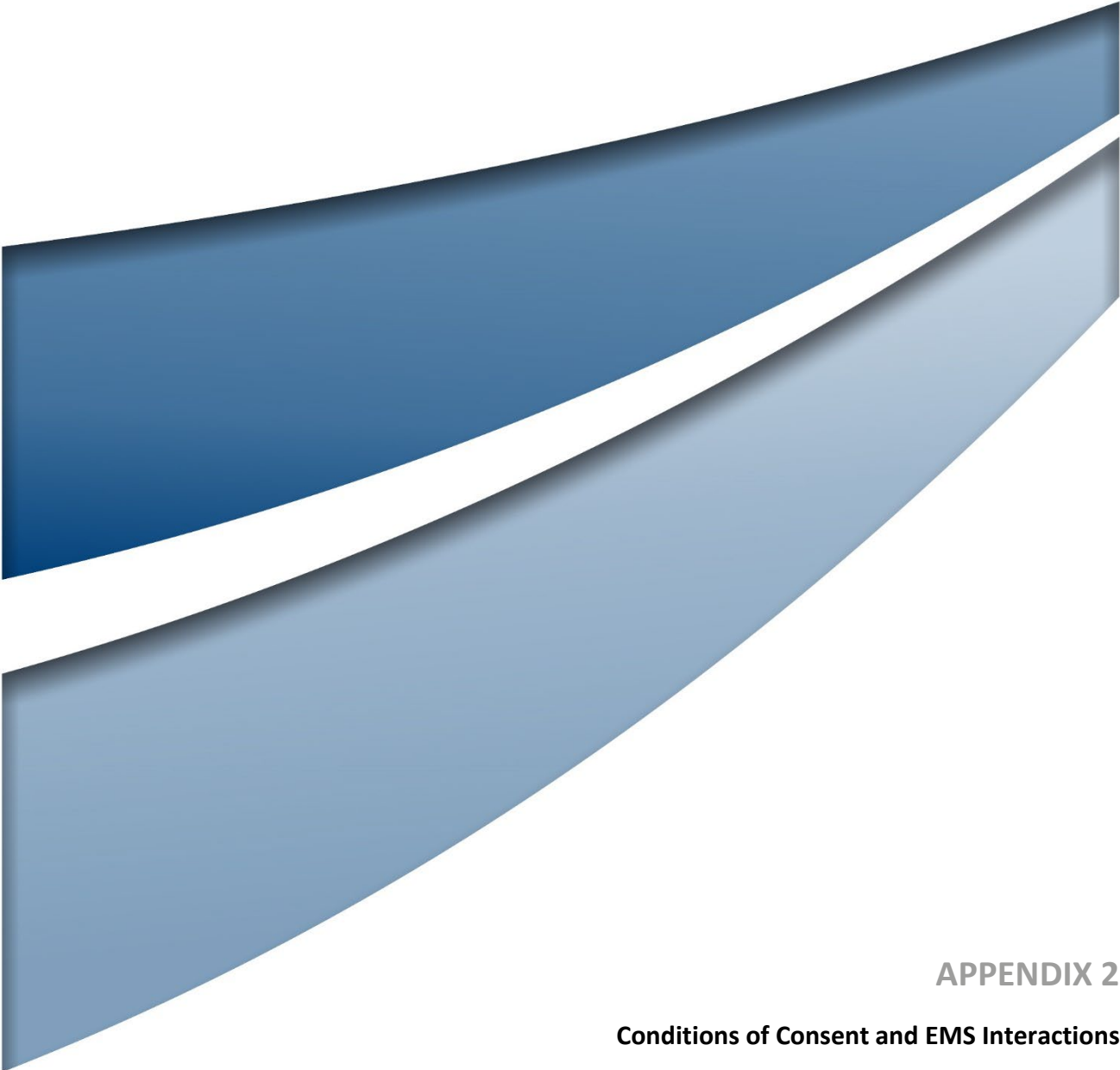
Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
The Applicant must: (a) make the following information publicly available on its website as relevant to the stage of the development: (i) the EIS; (ii) the final layout plans for the development; (iii) current statutory approvals for the development; (iv) approved strategies, plans or programs required under the conditions of this consent (other than the Fire Safety Study and Emergency Plan); (v) the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged; (vi) how complaints about the development can be made; (vii) a complaints register; (viii) compliance reports; (ix) any independent environmental audit, and the Applicant's response to the recommendations in any audit; and (x) any other matter required by the Planning Secretary; and (b) keep this information up to date.	Partial	Section 6.1 'Access to Information.' Compliance reports (viii) are not mentioned. How will the project report on compliance? What does SCWF (second last dot point) stand for?	Amend Section 6.1 to include compliance reports. Provide details on how the project will report publicly on compliance.	In response to the Department's comment, Lightsource bp has revised Section 6.1 to include the preparation of an annual review, providing clarity on how the Project will report compliance.
General Comments / Consultation			Action Required	Company Response
Section 4.1.1 – Waste Management - will waste management be addressed in more detail in the CEMP? -			See comment	Waste Management will be addressed with further detail in the CEMP.
Section 4.1.2 – Visual Amenity makes no reference to Condition B22 of the consent.			See comment	Lightsource bp has revised Section 4.1.2 to include reference to Condition B22.

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 Reviewed: Katie Weekes on 18 December 2024

Schedule, Condition	Sufficient (Yes/No/ Partial)	Document reference and comment	Action Required	Company Response
Section 4.1 - Where will noise, lighting, and dust be addressed?			See comment	Environmental aspects including noise, lighting and dust is not required to be include as outlined in the development consent. Environmental aspects will be addressed in the Projects CEMP and OEMP.
Section 7.1 -- Environmental Site Inspections. <ul style="list-style-type: none"> - Will there be site inspections prior to forecast rainfall to make sure appropriate measures are in place? - Confirm the frequency of site inspections, particularly against the BMP. The EMS states fortnightly, however the BMP may be weekly? 			See comments	Section 7.2 has been updated to reflect pre-rainfall inspection, with frequency of site inspections confirmed and aligned with respective management plans.
Table 7.1 – Environmental monitoring and reporting. <ul style="list-style-type: none"> - Heading, clarify if this table relates to construction, operation and decommissioning. - Biodiversity, confirm this covers all the monitoring required under the BMP. What about bank stability? Will fencing and signage be monitored at any other stage during construction? Section 6 of the EMS? See marked up pdf for clarity on these comments. - Soil and Water, Weekly here, but fortnightly mentioned earlier. Also, what about before forecast rain or following rain events as detailed above. 10 mm or 20 mm (above). - Accommodation and Employment. To be updated following approval of the AES. - No mention of waste, visual amenity, noise, dust, lighting and rehabilitation in this table. 			See comments	See Response above for details.



APPENDIX 2

Conditions of Consent and EMS Interactions

Conditions of Consent: Interactions with this EMS

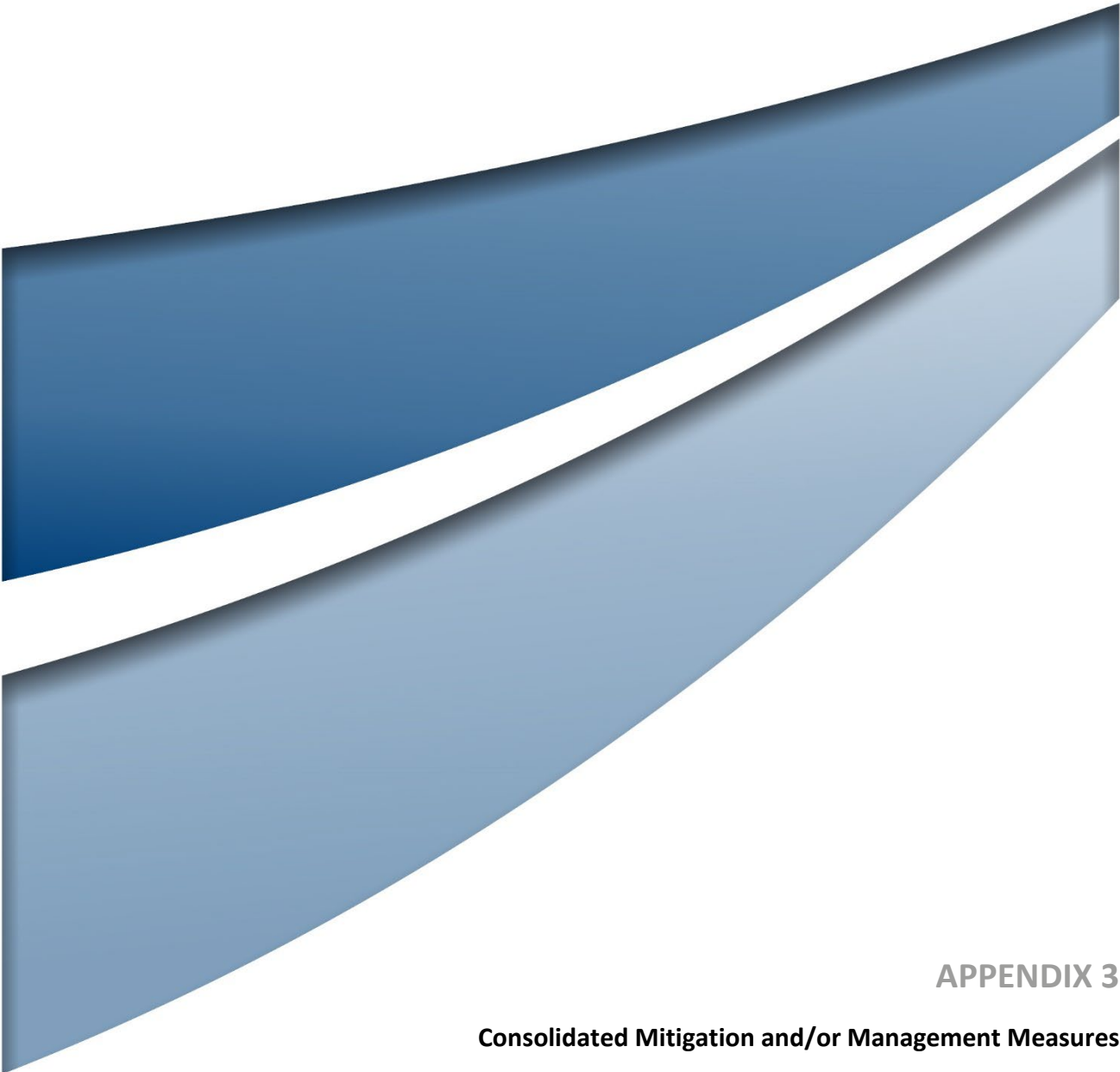
Condition of Approval	Requirements	Section Addressed
Schedule 2, Condition A2	In meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction, commissioning, operation, upgrading, rehabilitation or decommissioning of the development.	Section 1.3.1
Schedule 2, Condition A12	The Applicant must ensure that all plant and equipment used on site, or in connection with the development, is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Section 1.2.4
Schedule 2, Condition A14	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Section 4.0
Schedule 2, Condition A15	Where conditions of this consent require consultation with an identified party, the Applicant must: (a) consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and (b) provide details of the consultation undertaken including: (i) the outcome of that consultation, matters resolved and unresolved; and (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	Appendix 1
Schedule 2, Condition B9	The Applicant must ensure: (a) the internal roads are constructed as all-weather roads; (b) there is sufficient parking on site for all vehicles, and no parking occurs on the public road network in the vicinity of the site; (c) the capacity of the existing roadside drainage network is not reduced; (d) all vehicles are loaded and unloaded on site and enter and leave the site in a forward direction; and (e) development-related vehicles leaving the site are in a clean condition to minimise dirt being tracked onto the sealed public road network.	Appendix 3

Condition of Approval	Requirements	Section Addressed
Schedule 2, Condition B20	<p>The Applicant must:</p> <p>(a) minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the <i>Interim Construction Noise Guideline</i> (DECC, 2009) or its latest version; and</p> <p>(b) ensure that the noise generated by the operation of the development during the night does not exceed 35 dB(A) $L_{Aeq, 15min}$ to be determined in accordance with the procedures in the <i>NSW Noise Policy for Industry</i> (EPA, 2017) at any non-associated residence.</p>	CEMP
Schedule 2, Condition B21	The Applicant must minimise the dust generated by the development.	Appendix 3
Schedule 2, Condition B22	<p>The Applicant must:</p> <p>(a) minimise the off-site visual impacts of the development, including the potential for any glare or reflection;</p> <p>(b) ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape; and (c) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.</p>	Section 4.1.2
Schedule 2, Condition B23	<p>The Applicant must:</p> <p>(a) minimise the off-site lighting impacts of the development; and</p> <p>(b) ensure that any external lighting associated with the development:</p> <ul style="list-style-type: none"> (i) is installed as low intensity lighting (except where required for safety or emergency purposes); (ii) does not shine above the horizontal; (iii) complies with the good lighting design principles outlined in the <i>Dark Sky Planning Guideline (2023)</i>; and (iv) complies with <i>Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting</i>, or the latest version. 	CEMP OEMP Appendix 3
Schedule 2, Condition B37	<p>The Applicant must:</p> <p>(a) minimise the waste generated by the development;</p> <p>(b) classify all waste generated on site in accordance with the EPA’s Waste Classification Guidelines 2014 (or its latest version);</p> <p>(c) store and handle all waste on site in accordance with its classification;</p> <p>(d) not receive or dispose of any waste on site; and</p> <p>(e) remove all waste from the site as soon as practicable, and ensure it is reused, recycled or sent to an appropriately licensed waste facility for disposal (including consultation with Council for use of Council facilities).</p>	Section 4.1.1

Condition of Approval	Requirements	Section Addressed
Schedule 2, Condition C2	<p>The Applicant must:</p> <p>(a) update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and</p> <p>(b) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 1 month of the:</p> <ul style="list-style-type: none"> (i) submission of an incident report under condition C11 of Schedule 2; (ii) submission of an audit report under condition C15 of Schedule 2; or (iii) any modification to the conditions of this consent. 	Section 9.0
Schedule 2, Condition C3	<p>With the approval of the Planning Secretary, the development may be staged, and the Applicant may:</p> <p>(a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);</p> <p>(b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and</p> <p>(c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).</p>	Section 9.0
Schedule 2, Condition C4	<p>If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent</p>	N/A
Schedule 2, Condition C5	<p>If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.</p>	Section 9.0
Schedule 2, Condition C6	<p>If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.</p>	N/A

Condition of Approval	Requirements	Section Addressed
Schedule 2, Condition C7	<p>Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant must notify the Department in writing via the Major Projects website portal of the date of commencement, or cessation, of the relevant phase.</p> <p>If any of these phases of the development are to be staged, then the Applicant must notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.</p>	Section 6.0
Schedule 2, Condition C11	<p>The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 7.</p>	Section 10.1.1
Schedule 2, Condition C12	<p>The Department must be notified via the Major Projects website portal within 7 days after the Applicant becomes aware of any non-compliance.</p>	Section 10.1.2
Schedule 2, Condition C13	<p>A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.</p>	Section 10.1.2
Schedule 2, Condition C14	<p>A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</p>	Section 10.1.2
Schedule 2, Condition C15	<p>Independent Audits of the development must be conducted and carried out in accordance with the <i>Independent Audit Post Approval Requirements (2020)</i>.</p>	Section 11.2
Schedule 2, Condition C16	<p>In accordance with the specific requirements in the <i>Independent Audit Post Approval Requirements (2020)</i>, the Applicant must:</p> <ul style="list-style-type: none"> (a) review and respond to each Independent Audit Report prepared under condition C15 of this consent, or where notice is given by the Planning Secretary; (b) submit the response to the Planning Secretary; and (c) make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary. unless otherwise agreed by the Planning Secretary. 	Section 11.2
Schedule 2, Condition C17	<p>Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the <i>Independent Audit Post Approval Requirements (2020)</i> unless otherwise agreed by the Planning Secretary.</p>	Section 11.2

Condition of Approval	Requirements	Section Addressed
Schedule 2, Condition C18	Notwithstanding the requirements of the <i>Independent Audit Post Approval Requirements (2020)</i> , the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.	Section 11.2
Schedule 2, Condition C19	<p>The Applicant must:</p> <p>(a) make the following information publicly available on its website as relevant to the stage of the development:</p> <ul style="list-style-type: none"> (i) the EIS; (ii) the final layout plans for the development; (iii) current statutory approvals for the development; (iv) approved strategies, plans or programs required under the conditions of this consent (other than the Fire Safety Study and Emergency Plan); (v) the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged; (vi) how complaints about the development can be made; (vii) complaints register; (viii) compliance reports; (ix) any independent environmental audit, and the Applicant's response to the recommendations in any audit; and (x) any other matter required by the Planning Secretary; and <p>(b) keep this information up to date.</p>	Section 6.1



APPENDIX 3

Consolidated Mitigation and/or Management Measures

The table below consolidates all mitigation and/or management measures presented within the plan and strategies prepared in accordance with the Development Consent. It provides commitments regarding applicable development phases, responsibilities, timing and records. Further details regarding each measure is provided within the relevant section of each applicable plan or strategy. From left to right, the columns of this table describe:

- The 'Source': where the measure has been recommended for the Project.
- The 'ID': a unique identifier for each measure, as identified within the plan or strategy.
- The 'Aspect': a high-level summary of what matter is being mitigated.
- The 'Mitigation / Management Measure': describes the actions that will be undertaken to reduce the impacts of the Project, including a summary of any proposed techniques that will be used to implement the mitigation.
- The 'Development Phase': identifies what part of the development phase the measure will apply. A measure can apply to multiple development phases.
- The 'Responsible Party': identifies which group is responsible for implementing the applicable measure. The 'Personnel Responsible' column identifies the individual from the 'Responsible Party' who is to implement the mitigation. Numbers 1–7 have been used to represent which individual is responsible, as follows:
 1. Lightsource bp Development Principal.
 2. Construction Contractor Site Manager.
 3. Health, Safety and Environment (HSE) Coordinator.
 4. Contract ecologist.
 5. Heritage Specialist.
 6. All Employees and Contractors.
 7. Operations and Maintenance (O&M), Site Manager.

Note: for some mitigation measures, there is more than one 'Responsible Party' and 'Personnel Responsible'.

The 'Timing/Frequency': describes when a measure is to be implemented, or how frequently it is to be implemented.

- The 'Implementation Action': provides a high-level statement that show how the mitigation/proposed techniques for each measure are practically being done within the Project Area. These procedures are described within the relevant section of each applicable plan or strategy.
- The 'Compliance Record': identifies the record that will be used to maintain compliance with the applicable measure.

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
Environmental Management Strategy														
Amendment Report (Umwelt 2023b)	EMS 01	Visual	Subsequent to Project approval, refine the landscape plan to encompass the Amended Project. The aim of the detailed landscape plan is to establish a quick growing, dense screen to reduce public views of the solar panels from Wollara Road, as well as providing additional ecological benefits.	✓	✓	✓	—	✓	✓	—	1&2	Prior to construction	Section 1.3.3.1 of this EMS CEMP and OEMP	CEMP and OEMP
Amendment Report (Umwelt 2023b)	EMS 02	Visual	The detailed landscape plan is to be prepared prior to landscape implementation and, be guided by ongoing consultation with NP&WS and TfNSW (particularly regarding plant species, spacing, and whether soil improvement is required and road safety measures/tree clearance zones and TfNSW relevant policy).	✓	✓	—	—	✓	✓	—	—	Prior to construction	Section 1.3.3.1 of this EMS CEMP and OEMP	CEMP and OEMP
Amendment Report (Umwelt 2023b)	EMS 03	Visual	Progressively stabilise surfaces as construction is completed.	✓	✓	✓	✓	—	✓	—	2&3	Construction	Section 1.3.3.1 of this EMS CEMP and OEMP	CEMP and OEMP
Amendment Report (Umwelt 2023b)	EMS 04	Visual	Monitor road upgrades to ensure the stabilisation of verges.	✓	✓	✓	—	—	✓	✓	2, 3 & 7	Construction	The TMP CEMP and OEMP	TMP CEMP and OEMP
Amendment Report (Umwelt 2023b)	EMS 05	Visual	Implement correctional measures if erosion occurs or dust is an issue.	✓	✓	✓	✓	—	✓	✓	2, 3 & 7	Construction, Operation and Decommissioning	CEMP and OEMP	CEMP and OEMP
Amendment Report (Umwelt 2023b)	EMS 06	Visual	Include retention of trees where possible within/near the road upgrade construction zone.	✓	✓	—	—	—	✓	—	2 & 3	Construction	The BMP CEMP	The BMP CEMP
Amendment Report (Umwelt 2023b)	EMS 07	Visual	Include protection of trees within/near the road upgrade construction zone. Monitor disturbed trees that have been heavily impacted within their root zone for stability and longevity.	✓	✓	—	—	—	✓	—	2 & 3	Construction	The BMP CEMP	The BMP CEMP
Amendment Report (Umwelt 2023b)	EMS 08	Social Amenity	Measures to enhance positive social outcomes and mitigate negative social outcomes for the Project include:	✓	✓	—	—	✓	—	—	1	Construction	Accommodation Camp Management Plan	Accommodation Camp Management Plan

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor			
			<ul style="list-style-type: none"> Limiting the number of existing short- term accommodation beds accessed to no more than 14 existing short term accommodation beds across the study area on any given night. This is designed to avoid ‘crowding out’ effects on other accommodation users. This figure could be reassessed if substantial reductions in local occupancy rates are identified and recorded in the social locality. Limit the use of existing rental accommodation as a housing source for the Amended Project by ensuring sufficient access to custom- built temporary workforce accommodation. Work with the local accommodation providers to provide advanced notice of accommodation requirements and anticipate timing of key tourism events. Consider partnering with or funding existing local accommodation providers to expand their accommodation capacity. Establish, review, and maintain a Lightsource Goods and Services Register database and make this available to head contractors to support local procurement. Utilise Project newsletters, website, and media releases at key milestones throughout the Project development, construction and operation timeline to promote information on how local suppliers may become involved in the Project. Promote and fund Apprenticeships and Traineeships as a key employment strategy and work with regional employment agencies, Training Services NSW, education providers and Group Training Organisations to develop strategies to enable apprentices to access experience across different infrastructure projects. 										

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
			<ul style="list-style-type: none"> There are sufficient opportunities to house the anticipated construction and operational workforces, employ local workers, and procure local goods and services while also maximising social benefits to communities and reducing potential negative impacts. Proactive management and monitoring of outcomes will be achieved through post- approval management strategies and mechanisms. 											
Amendment Report (Umwelt 2023b)	EMS 09	Waste Management	The Waste Management Plan will be developed in consultation with the Upper Hunter Shire Council and surrounding LGAs including Mid-Western Regional Council.	—	—	—	—	✓	—	—	1	Prior to construction	Waste Management Plan	Waste Management Plan
Amendment Report (Umwelt 2023b)	EMS 10	Waste Management	A 94% recycling rate by weight will be achieved for the panels during each stage of the Project.	—	✓	✓	✓	✓	✓	✓	1, 2, 3 & 7	Construction, Operation and Decommissioning	Waste Management Plan CEMP OEMP	Waste Management Plan CEMP OEMP
Amendment Report TWA (Umwelt 2024)	EMS 11	Social Amenity	Where possible, Lightsource bp consider locating the TWA Facility: <ul style="list-style-type: none"> Further from Wollara Road (compared to closer). On lower ground (compared to an elevated location). Not in direct (i.e. straight ahead) line-of-sight of Wollara Road users (compared to directly in-line-of- sight). In the vicinity of existing elements (such as trees and buildings) to provide screening, or a background that would reduce contrast in the landscape. 	—	—	—	—	✓	—	—	1	Design	Detailed design	Detailed design
Amendment Report TWA (Umwelt 2024)	EMS 12	Social Amenity	Where possible, Lightsource bp will aim to manage potential night lighting impacts by: <ul style="list-style-type: none"> Locating common areas within the internal zone of the TWA Facility to contain light spill. Selecting and designing lights to avoid excessive light spill onto surrounding areas. Encouraging the use of the TWA Facility shuttle to reduce excessive vehicle headlights at night. 	—	—	—	—	✓	—	—	1	Design	Detailed design	Detailed design

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
Amendment Report TWA (Umwelt 2024)	EMS 13	Social Amenity	Prepare and implement an Emergency Plan with due consideration to additional bushfire risks associated with the inclusion of the on-site TWA Facility.	✓	✓	—	—	✓	—	—	1 & 2	Prior to construction	The FM&ERP	The FM&ERP
Amendment Report TWA (Umwelt 2024)	EMS 14	Social Amenity	Prepare and implement a Traffic Management Plan.	✓	✓	—	—	✓	—	—	1 & 2	Prior to construction	The TMP	The TMP
Amendment Report TWA (Umwelt 2024)	EMS 15	Social Amenity	Implement the Amended Accommodation and Employment Strategy	✓	✓	—	—	✓	✓	—	1 & 2	Prior to construction and construction	Accommodation Management Plan and Employment Strategy	Accommodation Management Plan and Employment Strategy
Amendment Report TWA (Umwelt 2024)	EMS 16	Social Amenity	Prepare and implement a Code of Conduct for the resident Project workforce at the on-site TWA Facility, to ensure that all social, ecological, environmental and safety requirements are understood and adhered to by all workers.	✓	✓	—	—	✓	✓	—	1 & 2	Construction	Accommodation Management Plan	Accommodation Management Plan
Amendment Report TWA (Umwelt 2024)	EMS 17	Social Amenity	Prepare and implement Water Sourcing Strategy and Waste Management Plan	✓	✓	—	—	✓	✓	—	1 & 2	Construction	Accommodation Management Plan	Accommodation Management Plan
Amendment Report TWA (Umwelt 2024)	EMS 18	Social Amenity	Develop and operate an on-site Sewage Treatment Plant (STP) for the on-site TWA Facility	✓	✓	—	—	✓	✓	—	1 & 2	Construction	Accommodation Management Plan	Accommodation Management Plan
SSD 33964533 Development Consent	EMS19	Waste	The Applicant must: (a) Minimise waste generated by the development; (b) Classify all waste generated on site in accordance with the EPA's <i>Waste Classification Guidelines 2014</i> (or its latest version); (c) Store and handle all waste on site in accordance with its classification; (d) Not receive or dispose of any waste on site; and (e) Remove all waste from the site as soon as practicable, and ensure it is reused, recycled or sent to an appropriately licensed waste facility for disposal (including consultation with Council for use of Council facilities).	✓	✓	✓	✓	✓	✓	✓	2,3,6 & 7	Construction, Operation and Decommissioning	Waste Management Plan CEMP OEMP Section 4.1.1 of this EMS	Waste Management Plan CEMP OEMP

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
SSD 33964533 Development Consent	EMS20	Visual	The Applicant must: (a) Minimise the off-site visual impacts of the development, including the potential for any glare or reflection; (b) Ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape; and (c) Not mount any advertising signs or logos on site, except where this is required for identification or safety purposes	✓	✓	✓	—	—	✓	✓	2, 3, & 4	Construction and Operation	CEMP OEMP Section 4.1.2 of this EMS	CEMP OEMP
Traffic														
SSD 33964533 Development Consent	TMP 01a	Traffic (general)	Prepare a TMP in accordance with Schedule 2, Condition B10	✓	✓	—	—	✓	—	—	1	Prior to construction	The TMP	The TMP
SSD 33964533 Development Consent	TMP 01b	Traffic (general)	Implement the TMP in accordance with Schedule 2, Condition B10	✓	✓	—	—	✓	✓	✓	1, 2, 3 & 4	Prior to Construction	The TMP	The TMP
SSD 33964533 Development Consent	TMP 02	Traffic (general)	The Applicant must ensure that the Project does not generate more than 55 heavy vehicle movements a day during construction, upgrading or decommissioning;	✓	✓	—	✓	—	✓	✓	3 & 4	Construction and Decommissioning	Construction Traffic (Section 3.6.3 of the TMP)	Daily Traffic Movements Register A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance.
SSD 33964533 Development Consent	TMP 03	Traffic (general)	The Applicant must ensure that the Project does not generate more than 24 movements of heavy vehicle requiring escort during construction, upgrading and decommissioning	✓	✓	—	✓	—	✓	✓	3 & 4	Construction and Decommissioning	Construction Traffic (Section 3.6.3 of the TMP)	Daily Traffic Movements Register
SSD 33964533 Development Consent	TMP 04	Traffic (general)	The Applicant must ensure that the length of any vehicles (excluding heavy vehicle requiring escort) used for the Project does not exceed 19 metres,	✓	✓	—	✓	—	✓	✓	3 & 4	Construction and Decommissioning	Management of Construction Vehicle Routes (Section 5.6 of the TMP)	This will be a contractual requirement of the construction contractor and all sub-contractors. Daily Traffic Movements Register

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
SSD 33964533 Development Consent	TMP 05	Traffic (general)	The Applicant must keep accurate records of the number of heavy vehicles and vehicles requiring escort entering or leaving the site each day for the duration of the project.	✓	✓	✓	✓	—	✓	✓	3 & 4	Construction, Operation and Decommissioning	Management of Construction Vehicle Routes (Section 5.6 of the TMP)	Daily Traffic Movements Register A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance.
SSD 33964533 Development Consent	TMP 06	Traffic (access routes)	Unless otherwise agreed by the Planning Secretary, all heavy vehicles and heavy vehicles requiring escort associated with the Project must travel to and from the site via the Golden Highway / Ringwood Road intersection.	✓	✓	—	✓	—	✓	✓	3 & 4	Construction and Decommissioning	OSOM Vehicle Routes (Section 3.5.2 of the TMP) OSOM Vehicle Checks (Appendix D of the TMP) Driver Code of Conduct (Appendix F of the TMP)	A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance.
SSD 33964533 Development Consent	TMP 07	Traffic (access routes)	All vehicles (excluding heavy vehicles requiring escort) associated with the Project must access Ringwood Road by turning left in from the Golden Highway only.	✓	✓	—	✓	—	✓	✓	3 & 4	Construction and Decommissioning	Construction Vehicle Routes (Section 3.5 of the TMP) Swept Paths (Appendix C of the TMP) Driver Code of Conduct (Appendix F of the TMP)	A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance.
SSD 33964533 Development Consent	TMP 08	Traffic (access routes)	All vehicles (excluding heavy vehicles requiring escort) associated with the Project must exit Ringwood Road by turning left on to the Golden Highway only as shown in Figure 4 of Appendix 4 of the TMP;	✓	✓	—	✓	—	✓	✓	3 & 4	Construction and Decommissioning	Construction Vehicle Routes (Section 3.5 of the TMP) Swept Paths (Appendix C of the TMP) Driver Code of Conduct (Appendix F of the TMP)	Signage will be installed on Ringwood Road stating that “site traffic must turn left”. A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance. The construction contractor will undertake spot checks at the intersection for compliance.

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
SSD 33964533 Development Consent	TMP 09	Traffic (access routes)	All heavy vehicles associated with the Project departing the site and needing to travel east along the Golden Highway must use the turnaround point at Barnett Street, as shown on Figure 4 in Appendix 4 of the TMP.	✓	✓	—	✓	—	✓	✓	3 & 4	Construction and Decommissioning	Construction Traffic (Section 3.6.3 of the TMP) Appendix C of the TMP Appendix G of the TMP	Signage will be installed on Ringwood Road stating that “site traffic must turn left”. A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance. The construction contractor will undertake spot checks at the intersection for compliance.
SSD 33964533 Development Consent	TMP 10	Traffic (site access point)	All vehicles associated with the Project must enter and exit the site via the Primary Access point off Ringwood Road, as identified in Appendix 1 of the TMP. Note: Other site access points may be used for emergency purposes.	✓	✓	—	✓	—	✓	✓	4 & 4	Construction and Decommissioning	Construction Vehicle Routes (Section 3.5 of the TMP) Swept Paths (Appendix C of the TMP) Driver Code of Conduct (Appendix F of the TMP)	A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance.
SSD 33964533 Development Consent	TMP 11	Traffic (site access point)	Unless the Planning Secretary agrees otherwise, prior to commencing construction the Applicant must complete the road upgrades detailed in Appendix 4 of the TMP. Unless the relevant road authority agrees otherwise, these upgrades must comply with the current Austroads Guidelines, Australian Standards (as amended by TfNSW supplements), and be carried out to the satisfaction of the relevant roads authority.	✓	—	—	✓	✓	✓	—	1 & 2	Pre-construction	Early Works – Pre-Construction (Section 3.1 of the TMP), Traffic Guidance Scheme (Section 5.3 of the TMP) and Road and Culvert Upgrades (Appendix A of the TMP) and Intersection Upgrades (Appendix B of the TMP)	Detailed Design

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
SSD 33964533 Development Consent	TMP 12	Traffic (site access point)	The Applicant must, in consultation with the relevant roads authority undertake an independent dilapidation survey to assess the: <ul style="list-style-type: none"> existing condition of Ringwood Road and Wollara Road on the transport route, prior to construction, upgrading or decommissioning works; and condition of Ringwood Road and Wollara Road on the transport route, following construction, upgrading or decommissioning works. 	✓	—	—	—	✓	✓	—	1 & 2	Pre-construction	Dilapidation Surveys (Section 5.71 of the TMP)	Pre-Construction Dilapidation Survey Report Post Construction Dilapidation Survey Report
SSD 33964533 Development Consent	TMP 13	Traffic (site access point)	On completion of the dilapidation reports undertaken in B8(a)(i) and (ii) provide a copy to the relevant road authority;	✓	—	—	—	✓	✓	—	1 & 2	Pre-construction	Dilapidation Surveys (Section 5.7.1 of the TMP)	Stakeholder Consultation Records
SSD 33964533 Development Consent	TMP 14	Traffic (site access point)	Repair the roads identified in condition B8(a) if dilapidation surveys identify that the road has been damaged due to Project-related traffic during construction, upgrading or decommissioning works;	—	—	✓	✓	✓	✓	—	1 & 2	Post-construction	Repair of Roads (Section 5.7.3 of the TMP)	Stakeholder Consultation Records
SSD 33964533 Development Consent	TMP 15	Traffic (site access point)	If there is a dispute between the Applicant and the relevant roads authority about road repairs (including timeframes) required under this condition, then either party may refer the matter to the Planning Secretary for resolution.	—	—	✓	✓	✓	✓	—	1 & 2	Post-construction	Repair of Roads (Section 5.7.3 of the TMP)	Stakeholder Consultation Records
SSD 33964533 Development Consent	TMP 16	Traffic (operating conditions)	The Applicant must ensure the internal roads are constructed as all-weather roads;	✓	✓	—	—	✓	✓	—	2, 3 & 4	Construction	Tracking of Dirt onto Public Roads (Section 5.7.2 of the TMP)	Detailed Design
SSD 33964533 Development Consent	TMP 17	Traffic (operating conditions)	The Applicant must ensure there is sufficient parking on site for all vehicles, and no parking occurs on the public road network in the vicinity of the site;	✓	✓	✓	✓	✓	✓	✓	2, 3 &	Construction, Operation and Decommissioning	Parking (Section 3.8 of the TMP)	Detailed Design Site Induction
SSD 33964533 Development Consent	TMP 18	Traffic (operating conditions)	The Applicant must ensure the capacity of the existing roadside drainage network is not reduced;	✓	✓	—	—	✓	✓	✓	1 & 2	Construction	Section 3.1.1 of the TMP	Detailed Design

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
SSD 33964533 Development Consent	TMP 19	Traffic (operating conditions)	The Applicant must ensure all vehicles are loaded and unloaded on site, and enter and leave the site in a forward direction.	✓	✓	—	✓	—	✓	✓	2, 3 & 4	Construction and Decommissioning	Management of Construction Vehicle Routes (Section 5.6 of the TMP) Driver Code of Conduct (Appendix F of the TMP)	A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance. Traffic controllers will undertake spot checks at the intersection for compliance.
SSD 33964533 Development Consent	TMP 20	Traffic (operating conditions)	The Applicant must ensure development-related vehicles leaving the site are in a clean condition to minimise dirt being tracked onto the sealed public road network.	P	P	P	P	—	P	P	2, 3 & 4	Construction, Operation and Decommissioning	Tracking of Dirt onto Public Roads (Section 5.7.2 of the TMP)	Routine road sweeping A monitoring camera will be installed at the intersection, with footage to be reviewed weekly for months one and two of construction, then monthly thereafter or in response to a complaint to ensure necessary corrective measures are taken to ensure compliance. Traffic controllers will undertake spot checks at the intersection for compliance.
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 21	Traffic (heavy vehicles)	Deliveries to site (excluding oversized loads) would be carried out by 19 metre semi-trailers to comply with heavy vehicle restrictions on Wollara Road and Ringwood Road.	✓	✓	—	—	—	✓	✓	2, 3 & 7	As Required,	Construction Vehicle Routes (Section 3.5 of the TMP)	Refer to final Drivers Code of Conduct and Site Induction Daily Traffic Movements Register
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 22	Traffic (oversize over mass vehicles)	A detailed OSOM vehicle route assessment would be undertaken by the construction contractor and outlined in a Transport Management Plan. The Plan would discuss any traffic management measures required and include details on the OSOM vehicle route, duration, road closures, traffic detours, notifications and any required Traffic Guidance Schemes.	✓	✓	—	—	✓	✓	—	1	Prior to OSOM movements	OSOM Vehicles (Sections Section 3.5.2 and Section 5.9 of the TMP)	OSOM TMP (Appendix E of the TMP) <i>Note: The current Appendix G of the TMP will be updated prior to the commencement of OSOM movements.</i>

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 23	Traffic (road closures)	The community would be notified in advance of proposed road and transport network changes through appropriate media and other forms of community liaison.	✓	✓	—	—	✓	—	—	1	As Required	Community and Stakeholder Consultation (Section 6.1 of the TMP)	Community and Stakeholder Consultation Records
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 24	Traffic (transport)	Construction workers would be encouraged to carpool or use the shuttle buses to travel to and from the construction site	✓	✓	—	—	—	✓	—	2 & 3	Construction	Construction Vehicle Routes (Section 3.5 of the TMP)	Pre-Start Briefings Site inductions
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 25	Traffic	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 site.	✓	✓	✓	—	—	✓	✓	2 & 3	Construction and Operation	Parking (Section 3.8 of the TMP)	Site Induction
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 26	Traffic (signage)	Additional warning signs (“Symbolic Truck”) are recommended near the primary site access point.	✓	✓	—	✓	—	✓	—	2 & 3	Once off	Additional Line marking and Signage (Section 5.2 of the TMP)	Environmental/Safety Inspection and site induction
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 27	Traffic (road upgrades)	Upper Hunter Shire Council would continue to be consulted on upgrades required on Ringwood and Wollara Road.	✓	✓	—	—	—	✓	—	1	Construction	Road Condition (Section 5.7 of the TMP) Community and Stakeholder Consultation (Section 6.1 of the TMP)	Stakeholder Consultation Records
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 28	Traffic (road upgrades)	Upgrades to Ringwood Road and Wollara Road (including culverts) and the Golden Highway / Ringwood Road intersection, as described in this TTIA.	✓	—	—	—	—	✓	—	2 & 3	Construction	Road Upgrades (Section 3.1.2 of the TMP)	Post construction Road Safety Audit Road upgrade certificates

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 29	Traffic (signage)	Additional warning signs are recommended along sections of Ringwood Road and Wollara Road where the road narrows and near the site access points.	✓	—	—	—	—	✓	—	2 & 3	Construction	Additional line marking and signage (Section 5.2 of the TMP)	Post construction Road Safety Audit Site inductions Vehicle Movement Plan (Appendix G of the TMP)
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 30	Traffic (general)	As part of the Construction Traffic Management Plan (CTMP) to be prepared post-approval, a Vehicle Movement Plan will be included that clearly shows the construction vehicle routes and permitted movements, including restriction at the Ringwood Road/Golden Highway intersection (left in/left out movement permitted). The CTMP will also encompass a Drivers Code of Conduct that all construction phase vehicle drivers (including of light vehicles) would need to read and sign to confirm their responsibilities and reinforce correct behaviour.	✓	—	—	—	✓	✓	—	1 & 2	Pre-construction	Driver Code of Conduct (Appendix F of the TMP) Vehicle Movement Plan (Appendix G of the TMP)	The TMP Driver Code of Conduct (Appendix F of the TMP) Vehicle Movement Plan (Appendix G of the TMP)
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 31	Traffic (road upgrades)	Osborn’s Transport, Merriwa Pre School, Scone Grammar School and Scone High School would be consulted on the proposed formalisation of the bus stop on Ringwood Road at the Golden Highway intersection and informed of the additional construction traffic that would be generated by the Project.	✓	—	—	—	✓	—	—	1	Pre-construction	Impacts on Public Transport (Section 4.1.3 of the TMP) Community and Stakeholder Consultation (Section 6.1 of the TMP)	Stakeholder Consultation Records
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 32	Traffic (signage)	Additional signage and line marking is recommended at the Golden Highway and Barnett Street intersection and installation of warning signs (“Symbolic Truck”) are recommended near the primary site access point.	✓	—	—	—	✓	✓	—	1 & 2	Pre-construction	Additional line marking and signage (Section 5.2 of the TMP)	Post construction Road Safety Audit Site inductions
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 33	Traffic (general)	Where relevant, Road Occupancy Licences (ROLs) and crane permits would be submitted and approved prior to the closure of any roads.	✓	✓	—	—	✓	✓	—	1 & 2	Construction	Quality Assurance (Section 1.2 of the TMP)	Stakeholder Consultation Records

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 34	Traffic (general)	Upgrades and modifications to existing intersections for construction access. Based on turn path assessments and request from TfNSW.	✓	✓	—	—	✓	✓	—	1 & 2	Construction	Swept Paths (Section 3.5.1 of the TMP)	Post construction Road Safety Audit Swept Paths (Appendix C of the TMP)
Traffic and Transport Impact Assessment (Turnbull 2023)	TMP 35	Traffic (road upgrades)	Works are to include vehicle volume monitoring during construction to ensure the morning peak traffic volume is not exceeded. Periodic traffic volume surveys on the Golden Highway will be undertaken to ensure Turn Warrants assessment remains valid. Lightsource bp propose to limit project-related vehicle movements to outside of the AM peak period when cumulative traffic levels along Golden Highway exceed the threshold for a CHRs turn treatment during the AM peak period.	—	✓	—	—	✓	—	—	1 & 2	Construction	Monitoring of construction traffic (Section 3.6.5 of the TMP)	Traffic survey data collected periodically throughout construction.
Response to RFI (Umwelt 2024)	TMP 36	Traffic (site access)	A pre-and post-construction dilapidation survey will also be undertaken along the 1.32 km stretch of Ringwood Rod that sits within the Mid-Western Region LGA, considering potential impacts from use by locally-based workers travelling to site.	✓	—	—	—	✓	✓	—	1 & 2	Pre-construction	Dilapidation Surveys (Section 5.7.1 of the TMP)	Pre-Construction Dilapidation Survey Report Post Construction Dilapidation Survey Report
Biodiversity														
SSD 33964533 Development Consent	BMP-01a	Biodiversity (general)	Prepare a BMP in accordance with Condition B16.	✓	✓	✓	✓	✓	—	—	1	Prior to any development which could have direct or indirect impacts on biodiversity values	The BMP	The BMP
SSD 33964533 Development Consent	BMP-01b	Biodiversity (general)	Implement the BMP in accordance with Condition B16.	✓	✓	✓	✓	✓	✓	✓	5	Prior to any development which could have direct or indirect impacts on biodiversity values	The BMP	The BMP
BDAR (Umwelt 2024a)	BMP-02	Biodiversity (general)	Inductions for the workforce will be undertaken to make them aware of the key ecological issues present in the Development Footprint to aid in their understanding of their role and responsibilities in the protection and/or minimisation of impacts to all native biodiversity.	✓	✓	✓	✓	—	✓	✓	2 & 3	As required	Training requirements (Section 8.1 of the BMP)	Induction Register Pre-start briefing The BMP

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
BDAR (Umwelt 2024a)	BMP-03	Biodiversity (general)	Inductions will identify the location of sensitive flora and fauna, including any defined exclusion / no-go areas, and the policies being implemented to protect the biodiversity values of such areas.	✓	✓	✓	✓	—	✓	✓	2 & 3	As required	Training requirements (Section 8.1 of the BMP)	Induction Register Pre-start briefing The BMP
BDAR (Umwelt 2024a)	BMP-04	Biodiversity (flora)	BMP will include responsibilities with respect to weed management and biosecurity.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Monthly	Weed and Pathogen Management Procedure (Section 6.6 of the BMP)	Weed Inspection Checklist
BDAR (Umwelt 2024a)	BMP-05	Biodiversity (general)	Appropriate temporary fencing (or other form of suitable marking measures) and signposting of areas to prevent the uncontrolled entry of people, accidental disturbance and to minimise vehicular and human traffic. Security fencing will also be constructed around the perimeter of the Project for access control purposes.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	As required	Exclusion Fencing and 'No go Zone' Procedure (Section 6.3.2 of the BMP)	Induction Register Pre-start briefing Weekly Site Environmental Inspection Record
BDAR (Umwelt 2024a)	BMP-06	Biodiversity (general)	Clear and visible signage is to be appropriately located to inform the workforce and others of the restricted access or otherwise of areas outside the Development Footprint.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Once off	Exclusion Fencing and 'No go Zone' Procedure (Section 6.3.2 of the BMP)	Monthly Inspection Job Safety and Environment Observation Record
BDAR (Umwelt 2024a)	BMP-07	Biodiversity (general)	Worker education and awareness of exclusion areas, including as delivered through site induction information.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Daily	Training requirements (Section 8.1 of the BMP)	Induction Register Pre-start briefing
BDAR (Umwelt 2024a)	BMP-08	Biodiversity (general)	The use of GPS enabled machinery (where available) to help prevent accidental disturbance of exclusion areas.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Daily	Exclusion Fencing and 'No go Zone' Procedure (Section 6.3.2 of the BMP)	Induction Register Pre-start briefing
BDAR (Umwelt 2024a)	BMP-09	Biodiversity (fauna)	Pre-clearance surveys and tree felling supervision will be undertaken by an appropriately qualified and experienced ecologist to minimise potential impacts to fauna species, particularly hollow-dependent fauna.	✓	✓	—	—	—	✓	—	2, 3 & 4	Daily	Monitoring the Total Clearing Footprint for the Development (Section 6.3.1 of the BMP) Tree Felling and Fauna Habitat Feature Removal Procedure (Section 6.3.6 of the BMP) Pre-Clearance Survey Procedure (Section 6.3.4 of the BMP) and Pruning Procedure (Section 6.3.5 of the BMP)	Induction Register Pre-start briefing Vegetation Clearance Procedures

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
BDAR (Umwelt 2024a)	BMP-10	Biodiversity (flora)	A detailed tree-felling supervision protocol is to be developed and documented as part of the CEMP for the Project. Note: The tree feeling procedure is included in Section 6.3.6 of the BMP and will not be duplicated in a CEMP.	✓	✓	—	—	—	✓	—	2, 3 & 4	Once off	Tree Felling and Fauna Habitat Feature Removal Procedure (Section 6.3.6 of the BMP) Pre-Clearance Survey Procedure (Section 6.3.4 of the BMP) and Pruning Procedure (Section 6.3.5 of the BMP)	Pre-start briefing Vegetation Clearance Procedures
BDAR (Umwelt 2024a)	BMP-11	Biodiversity (fauna)	Rock piles within the site should also be retained (where possible) or otherwise relocated to Project exclusion areas and/or the BSS during pre-clearance surveys.	✓	✓	—	—	—	✓	—	2, 3 & 4	During pre-clearance surveys.	Re-use of Rocks (Section 6.9.2.3 of the BMP)	Induction register Pre-start briefing Vegetation Clearance Procedures
BDAR (Umwelt 2024a)	BMP-12	Biodiversity (general)	A Stormwater Management Plan including an Erosion Sediment Control Plan (ESCP) will be prepared to appropriately limit post Project flows and manage downstream water quality as part of the site establishment and clearing works.	✓	✓	—	—	—	✓	—	2 & 3	Once off preparation and ongoing implementation	Waterways Management (Section 6.11 of the BMP)	Soil and Water Management Plan Induction register
BDAR (Umwelt 2024a)	BMP-13	Biodiversity (flora)	Pre-clearance surveys will identify invasive weed species, which will be treated prior to the disturbance of topsoil within the Development Footprint to prevent an outbreak and/or the spread of species to previously unaffected areas within the Development Footprint.	✓	✓	—	—	—	✓	—	2, 3 & 4	As required	Waterways Management (Section 6.11 of the BMP)	Induction register Pre-clearance surveys Vegetation Clearance Procedures
BDAR (Umwelt 2024a)	BMP-14	Biodiversity (flora)	Ongoing environmental inspections and treatment of outbreaks of invasive weed species as required within the Development Footprint during construction and operation of the Project.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Monthly	Weed and Pathogen Management Procedure (Section 6.6 of the BMP) Weed Inspection (Section 6.6.1 of the BMP) and Weed Treatment (Section 6.6.2 of the BMP)	Monthly Management Job Safety and Environment Observation Record.
BDAR (Umwelt 2024a)	BMP-15	Biodiversity (flora)	All machinery and equipment will be cleaned thoroughly prior to entering the Development Footprint. Cleaning must include the removal of all mud and plant matter (inside and out), followed by washing with high pressure water.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Daily	Weed and Pathogen Management Procedure (Section 6.6 of the BMP)	Induction register Monthly Management Job Safety and Environment Observation Record. Weed Inspection Clearance Certificate

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
BDAR (Umwelt 2024a)	BMP-16	Biodiversity (fauna)	A security fence will be constructed to deter medium and large-sized terrestrial mammals from occupying and becoming entrapped within the site infrastructure.	✓	✓	—	—	—	✓	—	2, 3 & 4	Once off	Vehicle Hygiene Procedure (Section 6.6.5 of the BMP).	The BMP
BDAR (Umwelt 2024a)	BMP-17	Biodiversity (fauna)	Maintain a wildlife corridor across the Project Area through retention of large areas of suitable habitat for the regent honey eater (<i>Anthochaera phrygia</i>) and White Box – Yellow Box – Blakely’s Red Gum Grassy woodland and derived native grassland.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction and Operation	Exclusion Fencing and ‘No go Zone’ Procedure (Section 6.3.2 of the BMP)	Monthly Management Job Safety and Environment Observation Record.
Aquatic Assessment (Coastal Ecology 2023)	BMP-18	Biodiversity (riparian Vegetation)	Detailed design and construction planning avoided direct impacts on native riparian vegetation.	✓	✓	—	—	—	✓	—	2, 3 & 4	Detailed design/ Pre-construction	Exclusion Fencing and ‘No go Zone’ Procedure (Section 6.3.2 of the BMP)	Pre-start briefing Vegetation Clearance Procedures
Aquatic Assessment (Coastal Ecology 2023)	BMP-19	Biodiversity (aquatic habitat)	Detailed design and construction planning would seek to identify refinements that further avoid or minimise impacts on key fish habitat (KFH).	✓	✓	—	—	—	✓	—	2, 3 & 4	Detailed design/ Pre-construction	Waterways Management (Section 6.11 of the BMP)	The BMP Vegetation Clearance Procedures Soil and Water Management Plan
Aquatic Assessment (Coastal Ecology 2023)	BMP-20	Biodiversity (aquatic habitat)	Fish passage would be maintained at watercourses identified as KFH within the Development Footprint. It is proposed that culverts would be installed to prevent blocking of fish passage where access roads cross watercourses.	✓	✓	—	✓	—	✓	—	2, 3 & 4	Detailed design/ Pre-construction / Construction	Waterways Management (Section 6.11 of the BMP)	Monthly inspection Job Safety and Environment Observation Record.
Aquatic Assessment (Coastal Ecology 2023)	BMP-21	Biodiversity (fauna)	Pre-clearance surveys would be carried out prior to construction by a suitability qualified ecologist including native aquatic fauna salvage in accordance with a farm dam dewatering policy. All salvaged aquatic fauna would be relocated to similar habitat nearby.	✓	✓	—	—	—	✓	—	2, 3 & 4	Pre-construction/ Construction	Aquatic Fauna Salvage Procedure (Section 6.4.5.1 of the BMP) Dam Dewatering Policy (Section 6.4.5 of the BMP)	Pre-start briefing Pre-clearance surveys
Aquatic Assessment (Coastal Ecology 2023)	BMP-22	Water (instream impacts)	Appropriate erosion and sediment control would be installed in accordance with the Erosion and Sediment Control Plan, around ground disturbance works conducted on waterfront land or within watercourses mapped as KFH.	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction	Waterways Management (Section 6.11 of the BMP)	Weekly Site Environmental Inspection Record Pre-start briefing Soil and Water Management Plan
Aquatic Assessment (Coastal Ecology 2023)	BMP-23	Biodiversity (riparian vegetation)	Exclusion areas would be established and maintained around riparian vegetation to be retained on waterfront land (40 metres from top of bank for watercourses with defined bed and banks (parts of Redlynch Creek and Rocky Creek).	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction	Exclusion Fencing and ‘No go Zone’ Procedure (Section 6.3.2 of the BMP)	Pre-start briefing Vegetation Clearance Procedures

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
Aquatic Assessment (Coastal Ecology 2023)	BMP-24	Biodiversity (riparian vegetation)	Activities within vegetated riparian zones would be managed to minimise impacts to aquatic environments as far as practicable. Riparian areas subject to disturbance would be progressively stabilised and rehabilitated. The spread of exotic species would be minimized through implementation of the Weed and Pest Management Plan. <i>Note: The Weed and Pest Management Plan has been incorporated as Section 6.6 of the BMP.</i>	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction	Vegetation Clearance Procedures (Section 6.3 of the BMP) Weed and Pathogen Management Procedure (Section 6.6 of the BMP) Waterways Management (Section 6.11 of the BMP)	Monthly Management Job Safety and Environment Observation Record Pre-start.
Aquatic Assessment (Coastal Ecology 2023)	BMP-25	Water (instream impacts)	Instream works in areas mapped as KFH (i.e. Redlynch Creek, unnamed tributary of Pogy Creek and unnamed tributary of Rocky Creek) would be undertaken in dry conditions as far as practicable and appropriate erosion and sediment control would be installed and maintained. Watercourses impacted by instream works would have the bed and bank morphology reinstated, and disturbed areas would be stabilized using vegetation to minimize erosion in accordance with the BMP.	✓	✓	—	—	—	✓	—	2, 3 & 4	Construction/ Decommissioning	Waterways Management (Section 6.11 of the BMP)	Pre-start briefing Weekly Site Environmental Inspection Record Vegetation Clearance Procedures
Aquatic Assessment (Coastal Ecology 2023)	BMP-26	Biodiversity (unexpected finds)	A species unexpected finds protocol would be implemented if threatened species, not assessed in the aquatic assessment, are identified in the Development Footprint. This would include stop work orders in the immediate area and notifying DPHI.	✓	✓	—	✓	—	✓	—	2, 3 & 4	Construction	Unexpected Threatened Species Finds Protocol (Section 6.5 of the BMP)	The BMP Unexpected Threatened Species Finds Protocol
Aquatic Assessment (Coastal Ecology 2023)	BMP-27	Water (instream impacts)	Refuelling would be conducted outside of waterfront land with appropriate measures in place to avoid impacts to waterways, aquatic habitats, and groundwater. This includes spill kits always kept with maintenance vehicles and or machinery within 100 metres of a watercourse.	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction, Operation and Decommissioning	Waterways Management (Section 6.11 of the BMP)	Soil and Water Management Plan
Aquatic Assessment (Coastal Ecology 2023)	BMP-28	Biodiversity (flora)	If herbicide is used to control exotic species within the Project Area, its use would be applied in accordance with relevant application guidelines.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction and Operation	Herbicide Application Record (Section 6.6.2.1 of the BMP).	Safety Datasheets (SDS)

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
Amendment Report (Umwelt 2023b)	BMP-29	Biodiversity (fauna)	The BMP will include implementation of measures to minimise fauna strike, as follows: <ul style="list-style-type: none"> 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. 	✓	✓	✓	✓	✓	✓	✓	1, 2, 3, 4 & 5	Construction and Operation	Vehicle Strike (Section 6.4.2.1 of the BMP)	Traffic Management Plan
Amendment Report (Umwelt 2023b)	BMP-30	Biodiversity (riparian vegetation)	Sections of Redlynch Creek and the unnamed tributary of Rocky Creek containing bed and banks, are to be electronically mapped to identify Waterfront land. Waterfront land is measured as 40 m from the top of bank and any waterfront land disturbed is to be revegetated following completion of works.	✓	—	—	—	—	✓	—	2 & 3	Pre-Construction	Waterways Management (Section 6.11 of the BMP) (Figure 2.2)	Detailed designs
The BMP	BMP 31	Biodiversity (Riparian Vegetation)	The Development Footprint will be marked out, with retained vegetation, important environmental features and everything outside to be identified as a 'No-go Zone'.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction, Operation and Decommissioning	Exclusion Fencing and 'No go Zone' Procedure (Section 6.3.2 of the BMP)	Weekly Site Environmental Inspection Record Monthly Management Job Safety and Environment Observation Record. Pre-start briefing
The BMP	BMP 32	Biodiversity (Threatened Species)	Identify if timing constraints for threatened species are applicable when undertaking this work, i.e., are the clearing activities occurring during the critical life cycle events (breeding or nursing times) for the threatened species that were identified or assumed as being present within the Development Footprint (see Section 4.9 of the BMP). If so, the procedures presented in Section 6.3.3, Section 6.3.6, Section 6.4 and Section 6.5 of the BMP are to be known and implemented by those undertaking clearing activities.	✓	✓	—	—	—	✓	—	2, 3 & 4	Construction	Vegetation Disturbance Permit Procedure (Section 6.3 of the BMP)	Implementation of: <ul style="list-style-type: none"> Pre Clearance-Survey Procedure Tree Felling and Fauna Habitat Feature Removal Procedure Fauna Handling Procedure Unexpected Threatened Species Finds Protocol
The BMP	BMP 33	Biodiversity (weeds)	Prior to the commencement of clearing, the location of weeds and pathogens within the Project Area will be surveyed and mapped prior to or as part of pre-clearance surveys. The ecologist will use the survey as a basis to provide / confirm applicable weed (primary and secondary) and pathogen control methods.	✓	✓	—	—	—	✓	—	2, 3 & 4	Construction	Weed and Pathogen Management Procedure (section 6.6 of the BMP)	Weed Baseline Surveys

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The BMP	BMP 34	Biodiversity (Operational Vegetation Management)	Mowing, weed control, and removal of revegetating woody vegetation will occur under and around the solar farm infrastructure through operation and manage access, safety and bushfire risk. The height of vegetation under and around the solar infrastructure should be maintained to an average height of 15 cm, or as advised to be suitable for site conditions by a bushfire specialist.	—	—	—	—	—	—	✓	3	Operation	Pruning, Mowing and Managing Regrowth Procedure (Section 6.3.5 of the BMP)	Unexpected Threatened Species Finds Protocol
Soil and Water														
SSD 33964533 Development Consent	SWMP 01a	Soil and Water (General)	Prepare a SWMP in accordance with Condition 30.	✓	✓	✓	✓	✓	—	—	1	Prior to construction	The SWMP	The SWMP
SSD 33964533 Development Consent	SWMP 01b	Soil and Water (General)	Implement the SWMP in accordance with Condition 30.	✓	✓	✓	✓	✓	✓	✓	4	Prior to construction	The SWMP	The SWMP
Soil Land and Agricultural Assessment (Umwelt 2023)	SWMP 02	Soil and Water (Erosion and Sediment Control)	Erosion risks (including prevention of tunnel erosion) will be managed through an erosion and sediment control plan (ESCP), that will be developed as part of the CEMP for the Project, in accordance with the Managing Urban Stormwater: Soils and Construction Volume 1 (NSW DPIE, 2004) “The Blue Book”.	✓	✓	✓	✓	✓	✓	✓	2 & 3	Prior to Construction	Erosion and Sediment Controls (Section 7.0 of the SWMP)	Progressive ESCP’s Inspection and Test Plans (ITPs)
Soil Land and Agricultural Assessment (Umwelt 2023)	SWMP 03	Soil and Water (Erosion and Sediment Control)	The ESCP will be implemented, and consideration of the sodic/dispersive soils identified within the project area will be considered in the project design. In this instance, where sodic/dispersive soils are identified, application of an ameliorate such as gypsum may assist in improving soil structure. Further, the application of gypsum, which contains calcium is recommended to counter the Ca: Mg imbalance.	✓	✓	✓	✓	✓	✓	✓	2 & 3	Detailed Design	Soil and Stockpile Management (Section 7.5 of the SWMP)	Detailed Design Drawings
GRSF Amendment Report (Umwelt, 2023d) – Appendix C – Update Table of Mitigation	SWMP 04	Soil and Water (Flood Risk)	No sensitive infrastructure (e.g., substation, BESS, etc.) will be placed within 20 m of any Strahler 3 or above order streams.	✓	✓	—	—	✓	✓	—	1 & 2	Construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Construction Drawings
	SWMP 05	Soil and Water (Waterway Crossings)	All waterway crossings will be designed and constructed in compliance with the Department of Primary Industries, Office of Water, Guidelines for riparian corridors on waterfront land and Guidelines for watercourse crossings on waterfront land.	✓	✓	—	—	✓	✓	✓	1, 2 & 3	Construction	Temporary Access Tracks (Section 7.4 of the SWMP)	ITPs Detailed Design Drawings

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
Measures	SWMP 06	Soil and Water (Erosion and Sediment Control)	<p>A Construction Soil and Water Management Plan (CSWMP) will be prepared to outline measures to manage soil and water impacts associated with the construction and decommissioning works. The CSWMP will provide:</p> <ul style="list-style-type: none"> 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. 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 (NSW Department of Environment, Climate Change and Water 2008b), commonly referred to as the "Blue Book". 	✓	✓	—	—	✓	✓	✓	1, 2 & 3	Prior to construction	The SWMP Stormwater Management (Section 4.2), Conceptual Erosion and Sediment Controls (Section 7.0) General Site Management (Section 7.3) Unexpected Contaminated Finds Management (Section 9.5) Spill Response Procedure (Section 9.4) Work in Waters and on Waterfront Land (Section 7.8) Drainage and Erosion Controls (Section 7.6) Stormwater Management (Section 4.2)	The SWMP
	SWMP 07	Soil and Water (Flood Risk)	Debris will be cleared from fencing following flood events.	✓	✓	✓	✓	✓	✓	✓	✓	2 & 3	As Required	General Site Management (Section 7.3 of the SWMP)

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
	SWMP 08	Soil and Water (Water Quality)	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.	—	—	✓	—	✓	✓	✓	2 & 3	Operation	The SWMP	The SWMP
	SWMP 09	Soil and Water (Water Sources)	Water sources would be confirmed during detailed design phase and in consultation with suppliers and landholders and be subject to availability. A water sourcing strategy will be developed so that water used during the construction phase does not cause issues to adjacent landowners or other stakeholders.	✓	✓	—	—	✓	✓	✓	1, 2 & 3	Detailed Design and Construction	Surface Water Management Strategy (Section 4.0 of the SWMP)	Detailed Design
	SWMP 10	Soil and Water (Groundcover)	Post-construction, disturbed areas will be stabilised by the establishment and maintenance of a vegetated groundcover consisting of low-growing grasses.	—	—	✓	—	—	✓	✓	2 & 3	Operation	Operational Erosion and Sediment Controls (Section 7.1.2 of the SWMP) Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Monthly Operational Site Monitoring
The SWMP	SWMP 11	Ground Disturbance	To minimise ground disturbance, construction activities including vehicle and machinery movements, stockpiling, temporary vehicle parking and material laydown will be restricted to designated work areas where possible.	✓	✓	✓	—	—	✓	✓	2, 3 & 4	Construction and Operation	General Site Management (Section 7.3 of the SWMP)	ESCP Routine ESC Inspections
The SWMP	SWMP 12	Vehicle Wash Down	Vehicle wash down is to occur in a designated bunded area and potable water is to be used. This bunded area is to be located at least 5 m from any on-site drain and 50 m from any drainage line. Excess debris from cleaning and washing is to be removed using hand tools.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction, Operations and Decommissioning	General Site Management (Section 7.3 of the SWMP)	Vehicle Hygiene Procedure

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP	SWMP 13	Hazardous Liquids and Chemical Storage	All fuels, chemicals and liquids are to be stored in an impervious bunded area, a minimum of 50 m away from: <ul style="list-style-type: none"> Rivers, creeks or any areas of concentrated water flow. Flooded or poorly drained areas. Slopes above 10%. 	✓	✓	✓	✓	✓	✓	✓	1, 2, 3 & 4	Construction, Operations and Decommissioning	General Site Management (Section 7.3 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 14	Refuelling	Refuelling of plant and equipment is to be undertaken in an impervious bunded area located a minimum of 50 m from drainage lines or waterways. For plant and equipment that requires refuelling on waterfront land appropriate controls are to be implemented including: <ul style="list-style-type: none"> Placement of filter socks around area that could potentially be impacted by fuel spills. Ensuring spill kits are present during refuelling. Ensuring an appropriate number of trained personnel are available during refuelling to monitor for spills and respond rapidly to contain a spill. 	✓	✓	✓	✓	✓	✓	✓	1, 2, 3 & 4	Construction, Operations and Decommissioning	General Site Management (Section 7.3 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 15	Spills	Emergency spill kits are to be kept on site at all times. All workers are to be made aware of the location of the spill kits and trained in their use.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction, Operations and Decommissioning	General Site Management (Section 7.3 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 16	Waste Management	Site spoil must be disposed of to a licensed waste management facility and in accordance with any Council requirements.	✓	✓	✓	—	—	✓	✓	2 & 3	Construction and Operation	General Site Management (Section 7.3 of the SWMP)	Waste Receipts and Waste Register
The SWMP	SWMP 17	ESCP Products	Ensure a suitable stock of consumable erosion and sediment control products (e.g., geotextile, sediment fence) is available on site to ensure repairs to ESCs can be made promptly and temporary stabilisation measures can be implemented under wet weather provisions.	✓	✓	✓	✓	—	✓	✓	2 & 3	Operations, Construction and Decommissioning	General Site Management (Section 7.3 of the SWMP)	Stock Inventory List

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP	SWMP 18	Temporary Access Tracks	All access is to be controlled on the site and vehicles and mobile plant equipment will be kept to well defined access tracks to minimise ground disturbance and compaction. Access tracks will be installed and maintained as per Volume 2C: Unsealed Roads of Landcom's Managing Urban Stormwater (the Blue Book) (2004). Access tracks and appropriate ESCs are to be included within the progressive ESCPs developed for the Project.	✓	✓	✓	—	✓	✓	✓	2, 3 & 4	Construction, Operations, and Decommissioning	Temporary Access Tracks (Section 7.4 of the SWMP)	Construction Traffic Management Plan (CTMP) Exclusion Fencing and No-Go Zone Procedure
The SWMP	SWMP 19	Temporary Access Tracks	Access tracks on waterfront land are to be surfaced to achieve a C-factor of 0.1 or less. A stone mulch surface (e.g. gravel) applied at a rate of 330 tonnes/ha (33 kg/m ²) will achieve a C-factors of approximately 0.05 (International Erosion Control Association (IECA), 2008).	✓	✓	✓	—	✓	✓	✓	1, 2 & 3	Construction and Operation	Temporary Access Tracks (Section 7.4 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 20	Temporary Drainage Line Crossings	Temporary drainage line crossings along access roads shall be constructed as per 'Blue Book' standard drawing SD 5-1 Temporary Waterway Crossings for minor drainage lines/depressions. Temporary waterway crossings will: <ul style="list-style-type: none"> • Be designed to minimise impacts on stream stability and fish passage. • Have minimum width of 4 metres with a maximum width of 6 m. • Be designed so they do not cause upstream flooding of any works or facilities. • Be constructed of 100–150 mm aggregate (minimum acceptable size). • Be removed within a month after the structure is no longer needed. 	✓	✓	✓	—	✓	✓	✓	1, 2 & 3	Construction and Operation	Temporary Access Tracks (Section 7.4 of the SWMP)	Progressive ESCP ITPs BMP
The SWMP	SWMP 21	Soil and Stockpile Management	Spoil is to be placed in designated stockpile locations within the project disturbance boundary at locations determined by the Construction Contractor Site Manager. Stockpiles are to have sediment fencing installed on the downslope side and a clean water diversion bund installed on the upslope side as per 'Blue Book' standard drawing SD 4-1 Stockpiles to protect from run-on water. Site spoil will be lawfully disposed of in a manner that does not result in ongoing soil erosion or environmental harm.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Soil and Stockpile Management (Section 7.5 of the SWMP)	Progressive ESCP's ITPs Waste Management Plan Waste Receipts and Waste Register

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
The SWMP	SWMP 22	Soil Management	In the event that material is suspected of contamination (in the form of ash, staining, discolouration, odours, underground petroleum storage systems or suspected asbestos containing material) is exposed, all works shall stop immediately in that area and Council be contacted and works shall not recommence until approval has been received by Council. Any material that is confirmed to be contaminated shall be classified in accordance with the Waste Classification Guidelines (EPA NSW, 2014) and disposed of offsite to a licensed waste management facility and in accordance with any Council requirements.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Soil and Stockpile Management (Section 7.5 of the SWMP) Management of Spills, Incidents and Unexpected Contaminated Finds (Section 9.0 of the SWMP)	Progressive ESCP's Waste Management Plan
The SWMP	SWMP 23	Stockpile Management	<p>Ensure stockpiles of erodible material that have the potential to cause environmental harm if displaced are:</p> <ul style="list-style-type: none"> • Appropriately protected from wind, rain, concentrated surface flow and excessive up-slope stormwater surface flows. • Constructed on the contour at least 2 m (preferably 5 m) away from high erosion hazard areas, particularly areas of likely concentrated water flows, e.g. roads, slopes steeper than 10% etc. • Located within areas of degraded land (where possible), on slopes of less than 10% and at least 40 m away from any concentrated water flows, flood-prone or poorly drained areas, contaminated ground, archaeological sites or heritage items. • Stabilised to achieve a C-factor of 0.1 (60% ground cover) if the stockpiles are to be in place for more than 10 days. 	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Soil and Stockpile Management (Section 7.5 of the SWMP)	Progressive ESCP's ITPs

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP	SWMP 24	Soil Management	<p>Topsoil should be:</p> <ul style="list-style-type: none"> Stripped while in a moist condition to maintain soil structure. If the soil is too dry the soil will be pulverised, if the soil is too wet it may lead to clodding and hardsetting. Avoid mixing topsoil with subsoil during stripping and stockpiling. Preserved on site for reuse during the site stabilisation stage. Be stockpiled at heights no greater than 2 m to assist in maintaining seed viability and avoid compaction of topsoil stockpiles as far as practicable to maintain soil structure. Reapplied within 12 months of stripping and as such, the staging of works to allow progressive site rehabilitation is of significant importance to successful revegetation. 	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Soil and Stockpile Management (Section 7.5 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 25	Drainage and Erosion	Dirty Water Catch Drains and Clean Water Diversions will be implemented. Clean water diversion drains, and dirty water catch drains will be designed and constructed in accordance with Figure 7.2	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Drainage and Erosion Controls (Section 7.6 of the SWMP)	Construction Drawings Progressive ESCP's
The SWMP	SWMP 26	Drainage and Erosion	<p>Stabilised access points are intended to reduce the potential for tracking of soil material off-site and provide a stable surface for vehicle and mobile plant access/egress to the construction site. Stabilised access points will be installed in accordance with Figure 7.3 and the instructions below:</p> <ul style="list-style-type: none"> Remove top layer of soil at least 3 metres wide from the road to the construction site. Use minimum 40 mm aggregate or recycled concrete or equivalent to a depth of 20 mm with an underlay of heavy-duty geotextile. Where the pad slopes toward the road (i.e., will drain off-site), install a 300 mm high bund (hump) across the pad to divert stormwater run-off to a suitable sediment trap. The access pad is to have a minimum length of approximately 15 m. 	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Drainage and Erosion Controls (Section 7.6 of the SWMP)	Progressive ESCP's ITPs CTMP

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP	SWMP 27	Drainage and Erosion	Limit construction equipment activity to disturbed areas. Minimise disturbance and retain as much existing ground cover as practicable. The disturbance boundary is to be clearly delineated with construction fencing or barrier tape.	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Drainage and Erosion Controls (Section 7.6 of the SWMP)	BMP - Exclusion Fencing and No-go Zone Procedure Progressive ESCP's ITPs
The SWMP	SWMP 28	Drainage and Erosion	Slopes subject to sheet flow are to be limited to a maximum length of 80 m.	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Drainage and Erosion Controls (Section 7.6 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 29	Drainage and Erosion	Grassed table drains will be installed and maintained near access tracks to minimise the potential for erosion and export of sediment.	✓	✓	✓	—	—	✓	✓	2 & 3	Construction and Operation	Drainage and Erosion Controls (Section 7.6 of the SWMP)	Progressive ESCP's ITPs Monthly Operational Site Monitoring
The SWMP	SWMP 30	Sediment Control	All runoff from the works is to be passed through sediment controls.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Sediment Control (Section 7.7 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 31	Sediment Control	Sediment traps should be located as close to the source of the sediment as practicable.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Sediment Control (Section 7.7 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 32	Sediment Control	Sediment removed from any trapping device is to be disposed of in locations where further erosion and consequent pollution to downslope lands and waterways will not occur.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Sediment Control (Section 7.7 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 33	Sediment Control	Temporary soil and water management structures are to be removed only after the Project site is stabilised appropriately in accordance with the requirements of the SWMP and the 'Blue Book' (Landcom, 2004).	✓	✓	—	—	—	✓	—	2 & 3	Construction	Sediment Control (Section 7.7 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 34	Sediment Control	Sediment control devices must be de-silted and made fully operational as soon as reasonable and practicable after a sediment-producing event. Sediment traps should be maintained to ensure that no more than 30% of their design capacity is lost to accumulated sediment.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Sediment Control (Section 7.7 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 35	Sediment Control	Materials, whether liquid or solid, removed from sediment control devices during maintenance or decommissioning, must be disposed of in a manner that does not cause ongoing soil erosion or environmental harm.	✓	✓	✓	—	—	✓	✓	2 & 3	Operation and Decommissioning	Sediment Control (Section 7.7 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 36	Sediment Control	Any concrete washout undertaken on site will be in a bunded area that is not on waterfront land and at least 10 m from drains.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Sediment Control (Section 7.7 of the SWMP)	Progressive ESCP's ITPs

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP	SWMP 37	Sediment Control	Sediment basins are to be installed and maintained in accordance with the requirements of the SWMP and the 'Blue Book' (Landcom, 2004).	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Sediment Control (Section 7.7 of the SWMP)	Construction Drawings
The SWMP	SWMP 38	Works in Water and on Waterfront Land	Detailed site and works specific progressive ESCPs are to be prepared for all works in waters and on waterfront land with the aim of achieving "no visible turbid plumes reaching the waterway".	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Progressive ESCP's Routine Visual Monitoring of local water quality
The SWMP	SWMP 39	Works in Water and on Waterfront Land	When working near riparian vegetation or water land these areas need to be identified and appropriately delineated as "No Go" areas (with the aim of avoiding harm to these areas). Harm to riparian vegetation or waterfront land outside of the approved disturbance boundary is not permitted and any harm caused is to be documented and reported to the DPI Fisheries contact officer. Any harm caused is to be restored in accordance with directions provided by the DPI Fisheries contact officer.	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	BMP - Exclusion Fencing and 'No go Zone' Procedure Progressive ESCP's
The SWMP	SWMP 40	Works in Water and on Waterfront Land	Material storage and stockpiling is not to be undertaken on waterfront land or riparian vegetation. Stockpiling must be undertaken in a manner to avoid harm to these types of vegetation or water land. Stockpiles should also be located 10 m away from adjacent waterfront land. Stockpiles are to be managed as detailed in Section 7.5 of the SWMP.	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	BMP Progressive ESCP's
The SWMP	SWMP 41	Works in Water and on Waterfront Land	On completion of the works the site is to be rehabilitated and stabilised including: <ul style="list-style-type: none"> Surplus construction materials and temporary structures (other than erosion and sediment control devices that should be maintained in proper working order until the site is adequately stabilised) installed during the course of the works are to be removed. Replanting the disturbed area with native endemic riparian vegetation. 	✓	✓	—	—	✓	✓	—	1, 2 & 3	Construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Construction Rehabilitation Plan Construction Rehabilitation Inspection Checklist Stabilisation Matrix
The SWMP	SWMP 42	Trenching	Avoid trenching in areas where water flow is likely to concentrate. Alternatively, schedule work during periods when rainfall erosivity is low.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Trenching (Section 7.9 of the SWMP)	Progressive ESCP's ITPs

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP	SWMP 43	Trenching	Ensure trench widths and depths are the minimum necessary. Limiting the width of the disturbed area within the easement is an important management tool, particularly in sensitive environments.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 44	Trenching	Divert surface water away from trench openings.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 45	Trenching	Use sandbags as plugs or bulkheads across trench inverts to shorten the length of sediment-laden water flow in the trench.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 46	Trenching	Leave excavations open for the minimum practical time (try to limit the time trenches are left open to fewer than three days). Avoid opening trenches whenever the risks of storms are high.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 47	Trenching	Organise service installations to enable progressive backfilling.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 48	Trenching	Ensure plugs, collars or trench stops are employed to control tunnel erosion after backfilling is completed.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 49	Trenching	Provide an appropriate allowance for settling of uncompacted backfill material (e.g., 10%).	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 50	Trenching	After backfilling, remove excess or unsuitable spoil from the site. Then, replace topsoil and vegetate (if area is to be vegetated) to match surrounding ground levels and vegetation species as soon as possible.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 51	Trenching	Due to the likely dispersivity of the development area subsoils, appropriate amelioration of the soil (based on advice from a suitably qualified and experienced soil specialist) is to be undertaken to stabilise the soil and reduce the risk of tunnel erosion.	✓	✓	—	—	—	✓	—	2 & 3			
The SWMP	SWMP 52	Dust Suppression	Where construction works generate dust, all reasonable and practicable measures are to be undertaken to prevent dust and street sweepers to be used to remove sediment from sealed roads.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Dust Suppression Controls (Section 7.10 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 53	Dust Suppression	Areas are to be stripped progressively and only where it is necessary for works to occur.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Dust Suppression Controls (Section 7.10 of the SWMP)	Progressive ESCP's ITPs

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
The SWMP	SWMP 54	Dust Suppression	Disturbed areas are to be stabilised as soon as practical.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Dust Suppression Controls (Section 7.10 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 55	Dust Suppression	Disturbed areas are to be dampened with a light water spray as required.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Dust Suppression Controls (Section 7.10 of the SWMP)	Progressive ESCP's ITPs
The SWMP	SWMP 56	Dust Suppression	Vehicle movements are to be restricted to designated access roads.	✓	✓	—	—	—	✓	—	2, 3 & 4	Construction	Dust Suppression Controls (Section 7.10 of the SWMP)	CTMP Exclusion Fencing and No-go Zones Procedure
The SWMP	SWMP 57	Dust Suppression	All loads are to be covered when transporting material where practical.	✓	✓	—	—	—	✓	—	2, 3 & 4	Construction	Dust Suppression Controls (Section 7.10 of the SWMP)	CTMP ITPs
The SWMP	SWMP 58	Site Stabilisation and Rehabilitation	Stabilise disturbed areas by sealing or revegetation to achieve a C-factor of 0.05 (approximately 70% groundcover) within 60 days following the completion of construction activities.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Construction Rehabilitation Plan Construction Rehabilitation Inspection Checklist Site Stabilisation Matrix
The SWMP	SWMP 59	Site Stabilisation and Rehabilitation	All ESC measures shall be maintained in a functioning condition during construction until all construction activities are complete and full stabilisation of the site is achieved (i.e., greater than 70% permanent ground cover across the entirety of the catchment).	✓	✓	—	—	—	✓	—	2 & 3	Construction	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	ITPs Construction Rehabilitation Plan Construction Rehabilitation Inspection Checklist Site Stabilisation Matrix
The SWMP	SWMP 60	Site Stabilisation and Rehabilitation	<p>Following completion of land shaping, site stabilisation should:</p> <ul style="list-style-type: none"> For areas outside of watercourses during March to November inclusive (i.e. during periods of low rainfall erosivity): Achieve a c-factor of less than 0.15 and keep it there by vegetation, paving, armouring, etc. For areas within watercourses and all other areas from December to February inclusive (i.e. during periods of moderate to high rainfall erosivity): achieve a C-factor of 0.1 (i.e., 60% ground cover) within 20 working days and a program of works set in motion to reduce the C-factor permanently to less than 0.05 (i.e. 70% ground cover) within a further 60 days. Local water restrictions however may affect this in drought times. 	✓	✓	—	—	—	✓	—	2 & 3	Construction	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Construction Rehabilitation Plan Construction Rehabilitation Inspection Checklist Site Stabilisation Matrix

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
The SWMP	SWMP 61	Site Stabilisation and Rehabilitation	Temporary site stabilisation procedures will commence at least 30 days prior to any nominated site shutdown dates. At least 70% stable cover on all unstable and/or disturbed soil surfaces must be achieved prior to the start of a shutdown. The stabilisation works must not rely upon the longevity of non-vegetated erosion control blankets, or temporary soil binders. Refer to Table A3 and D1 of the 'Blue Book' (Landcom, 2004) for recommendations. Specific site shutdown progressive ESCPS will be developed for all key areas.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Construction Rehabilitation Plan Construction Rehabilitation Inspection Checklist Site Stabilisation Matrix
The SWMP	SWMP 62	Site Stabilisation and Rehabilitation	Stabilise permanent drainage diversions and concentrated flow paths which are not to be sealed (e.g., concreted drains) but only subject to infrequent channelised flows as follows: <ul style="list-style-type: none"> Apply a 75 mm layer as recommended in Appendix C (page C.25 of Book 2) of Best Practice Erosion and Sediment Control (IECA, 2008) of topsoil and fertilise (if required). Seed with groundcover species containing sterile cover crop species (e.g., oats and Japanese millet as outlined in Table 9.4 of the 'Blue Book' to rapidly establish groundcover) and, where feasible, indigenous grass species (which take longer to establish) endemic to the area for drains that will remain following the completion of construction activities or non-invasive exotic species for drains that will be removed during site rehabilitation. Cover with jute mat as per 'Blue Book' standard drawing SD 5-7 RECP: Concentrated flow. Spray apply anionic bitumen emulsion at a rate of 1.2 litres/m². 	✓	✓	—	—	—	✓	—	2 & 3	Construction	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Construction Rehabilitation Plan Construction Rehabilitation Inspection Checklist Site Stabilisation Matrix
The SWMP	SWMP 63	Site Stabilisation and Rehabilitation	Following installation of underground services, trenches will be backfilled with non-dispersive soils or soils will be ameliorated with appropriate techniques.	✓	✓	—	—	—	✓	—	2 & 3	Construction	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Progressive ESCP's ITPs

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP	SWMP 64	Site Stabilisation and Rehabilitation	Lands recently established with grass species will be watered regularly where required until an effective cover has been properly established and plants are growing vigorously. Watering should be with low pressure sprays to avoid washing away any mulch cover that has been applied.	—	—	✓	—	—	✓	✓	2	Operation	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Operational Site Monitoring
The SWMP	SWMP 65	Site Stabilisation and Rehabilitation	Suitable groundcover around solar panel will be maintained for the life of the development.	—	—	✓	—	—	✓	✓	2	Operation	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Operational Site Monitoring
The SWMP	SWMP 66	Site Stabilisation and Rehabilitation	Undertake a site inspection after major weather events (i.e., > 25 mm of rainfall recorded within a 24-hour period)	—	—	✓	—	—	—	✓	7	Operation	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Operational Site Monitoring
The SWMP	SWMP 67	Site Stabilisation and Rehabilitation	Ensure the development area is compatible with sheep grazing to facilitate ongoing agricultural land use.	—	—	✓	—	—	✓	✓	2	Operation	Site Stabilisation and Rehabilitation (Section 7.11 of the SWMP)	Operational Site Monitoring
GRSF Amendment Report (Umwelt, 2023d)– Appendix C – Update Table of Mitigation Measures	SWMP 68	Water Resources	Works will be setback from the mapped watercourses in accordance with the Guidelines for Controlled Activities on Waterfront Land – Riparian Corridors (DPE 2022).	✓	✓	✓	—	—	✓	✓	2	Construction and Operation	Works in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Detailed Design Drawings Construction Drawings Routine ESC Inspections Operational Site Monitoring
GRSF Amendment Report (Umwelt, 2023d) – Appendix C – Update Table of Mitigation Measures	SWMP 69	Erosion and Sediment Control	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).	✓	✓	✓	✓	✓	—	—	1	Pre-Construction	The SWMP Guidelines and Standards (Section 2.2 of the SWMP)	The SWMP

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
GRSF Amendment Report (Umwelt, 2023d) – Appendix C – Update Table of Mitigation Measures	SWMP 70	Aquatic Ecology	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.	✓	✓	✓	✓	–	✓	✓	2	Construction, Operation and Decommissioning	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Routine ESC Inspections Operational Site Monitoring
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 71	Water Resources	All other water sourced from either surface water or groundwater sources to meet Project construction demands will be licenced and managed, as required, in accordance with the requirements of the NSW Water Management Act 2000, the Water Management (General) Regulation 2018 and relevant WSPs (i.e. the Hunter Unregulated and Alluvial Water Sources 2022).	✓	✓	✓	–	✓	✓	✓	1 & 2	Construction and Operation	Non-potable Water (Section 4.1.1.1 of the SWMP)	Water Access Licence(s) where required
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 72	Potable Water Supply	Potable water storages will be monitored in accordance with the requirements of the Australian Drinking Water Guidelines (ADWG) (National Health and Medical Research Council, 2011) to ensure water quality meets the requirements of the ADWG and an appropriate maintenance regime will be implemented to ensure ADWG water quality standards are maintained. A water quality monitoring program will be developed to identify the appropriate frequency and nature of monitoring to be undertaken.	✓	✓	✓	–	–	✓	✓	2 & 3	Construction and Operation	Potable Water (Section 4.1.1.1 of the SWMP)	Routine Potable Water Monitoring
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 73	Stormwater Management	All DESCs will be designed, installed and maintained as per Landcom’s Managing Urban Stormwater (the Blue Book) (2004).	✓	✓	✓	–	–	✓	✓	2 & 3	Pre-construction and Construction	Stormwater Management (Section 4.2 of the SWMP)	Detailed Design Drawings
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 74	Stormwater Management	Detailed ESCP drawings (known as progressive ESCPs) for the entirety of the Project Area will be prepared progressively before and during construction (as required) at a scale relevant to each component of the Project as detailed in Section 7.1 of the SWMP. The progressive ESCPs will be based on the principles of the SWMP and the Blue Book.	✓	✓	–	–	✓	✓	–	1 & 2	Pre-construction and Construction	Stormwater Management (Section 4.2 of the SWMP)	Detailed ESCP Drawings

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 75	Stormwater Management	A permanent stormwater management system will be designed, constructed and maintained to ensure stormwater runoff from the Project is appropriately managed to minimise impacts on localised flooding and groundwater within and surrounding the Project Area throughout the Project's operational life.	✓	✓	✓	—	✓	✓	✓	1, 2 & 3	Pre-construction, Construction and Operation	Stormwater Management (Section 4.2 of the SWMP)	Detailed Design Drawings
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 76	Stormwater Management	The design will ensure that solar panels will not increase the volume of water being diverted off the site or alter the hydrology of the site and will avoid causing enhanced erosion of the site.	✓	✓	—	—	✓	—	—	1	Pre-construction	Stormwater Management (Section 4.2 of the SWMP)	Detailed Design Drawings
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 77	Storage and Handling of Chemicals	Ensure chemicals (e.g. hydrocarbons) and other potential pollution sources are managed to minimise the risk of release/spills to the environment.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Chemical and Hazardous Materials Inventory Chemical Safety Data Sheets SWMP Pollution Control Measures Training Register Inspection Checklist Monthly Operational Monitoring
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 78	Storage and Handling of Chemicals	All fuels, chemicals and liquids are to be stored in an impervious bunded area, a minimum of 50 m away from: <ul style="list-style-type: none"> • Drainage lines or any areas of concentrated water flow. • Flooded or poorly drained areas. • Slopes greater than 10%. 	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.0 of the SWMP)	SWMP Pollution Control Measures Training Register Inspection Checklist Monthly Operational Monitoring

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 79	Storage and Handling of Chemicals	Refuelling of plant and equipment is to be undertaken, as follows: <ul style="list-style-type: none"> If on steep slopes or waterfront land (within 40 m of the top of bank of a defined watercourse), place filter socks around the area that could potentially be impacted by fuel spills. Ensuring spill kits are present during refuelling. Ensuring an appropriate number of trained personnel are available during refuelling to monitor for spills and respond rapidly to contain a spill. 	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	SWMP Pollution Control Measures Training Register Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 80	Storage and Handling of Chemicals	Emergency spill kits are to be kept on site at all times. All workers are to be made aware of the location of the spill kits and trained in their use.	✓	✓	✓	✓	—	✓	✓	2, 3 & 4	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	SWMP Pollution Control Measures Training Register Pre-start Checklist Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 81	Storage and Handling of Chemicals	Additional mobile spill kits will be located at designated locations across the site to enable prompt clean up in the event of a spill.	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Pre-start Checklist Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 82	Storage and Handling of Chemicals	Daily pre-start checks and regular ongoing vehicle and equipment maintenance in accordance with manufacturer's instructions will be undertaken to reduce the risk of fuel and oil leaks from vehicles, equipment and machinery.	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Pre-start Checklist Vehicle and Equipment Routine Maintenance Records
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 83	Storage and Handling of Chemicals	All chemical and fuel storages on the Project site are to comply with the management measures outlined by DEC (2005).	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Detailed Design Drawings Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 84	Storage and Handling of Chemicals	Bulk tanks should be protected by a secondary containment facility, such as a bund (a low impervious wall) around an individual tank or cluster of tanks (tank farm) with a sump, to contain spills and leaks which may otherwise be discharged off-site.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Pre-construction, Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Detailed Design Drawings Inspection Checklist

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 85	Storage and Handling of Chemicals	Bulk tanks should be located in a compound that has a containment system that provides sufficient containment for 100% of net capacity of the largest tank in the compound and holds the input from a 1-in-20-year 24-hour storm or the output of any firewater for 20 minutes, whichever is greater.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Pre-construction, Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Detailed Design Drawings Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 86	Storage and Handling of Chemicals	Secondary containment facilities should have low permeability, the capacity to contain at least the volume of liquid in the largest tank within the facility, and adequate additional capacity to contain any rainwater or firewater as necessary.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Pre-construction, Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Detailed Design Drawings Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 87	Storage and Handling of Chemicals	Packaged materials should be stored within impervious secondary containment facilities.	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 88	Storage and Handling of Chemicals	Dangerous goods (substances listed in the Australian Dangerous Goods Code) must be stored in designated areas with appropriate placarding and isolated from incompatible materials.	✓	✓	✓	✓	—	✓	✓	2 & 3	Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Inspection Checklist
The SWMP (Section 4.0 Surface Water Management Strategy)	SWMP 89	Storage and Handling of Chemicals	For multiple container storage, containment stores should have sufficient capacity to contain at least 25% of the total volume of the containers being stored and have adequate additional capacity to contain any rainwater or firewater as necessary.	✓	✓	✓	✓	—	✓	✓	2 & 3	Pre-construction, Construction, Operation and Decommissioning	Chemicals and Fuels (Section 4.3 of the SWMP)	Detailed Design Drawings Inspection Checklist
GRSF Amendment Report (Umwelt, 2023d)– Appendix C – Update Table of Mitigation Measures	SWMP 90	Design – Flood Management	Solar panels will be designed to provide a minimum of 300 mm freeboard for the lowest edge above the maximum 1% AEP flood level.	✓	—	—	—	✓	—	—	1 & 2	Pre-construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Detailed Design Drawings

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
GRSF Amendment Report (Umwelt, 2023d)– Appendix C – Update Table of Mitigation Measures	SWMP 91	Design – Flood Management	Solar panel piles will be designed to withstand the 1% AEP flood velocities expected in the Project Area.	✓	–	–	–	✓	–	–	1 & 2	Pre-construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Detailed Design Drawings
GRSF Amendment Report (Umwelt, 2023d)– Appendix C – Update Table of Mitigation Measures	SWMP 92	Design – Flood Management	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.	✓	–	–	–	✓	–	–	1 & 2	Pre-construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Detailed Design Drawings
GRSF Amendment Report (Umwelt, 2023d)– Appendix C – Update Table of Mitigation Measures	SWMP 93	Road Upgrades	Road repairs and upgrades to Ringwood Road and culvert upgrades will include: <ul style="list-style-type: none"> • 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. 	✓	–	–	–	✓	✓	–	1 & 2	Pre-construction	Work in Waters and on Waterfront Land (Section 7.8 of the SWMP)	Detailed Design Drawings Inspection Checklist
Heritage														
ACHAR (OzArk 2023)	HMP 01	Heritage (General)	37-1-1033 (Killoe Creek GG1) is outside of the Access route. The site will be included on all applicable construction plans.	✓	✓	–	–	✓	✓	–	1 & 2	As required. Will need to be included on all plans prior to and throughout construction	Section 6.2.3.2 of the HMP Additional investigation at 37-1-1033 (Killoe Creek GG1)	Daily Briefing Record Construction Plans

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
ACHAR (OzArk 2023)	HMP 02	Heritage (General)	Undertake the mapping, description, and collection of surface artefacts prior to commencement of construction.	✓	—	—	—	✓	—	—	1	Prior to development activities in the vicinity (100 m) of sites to be salvaged	Section 6.2.1.3 of the HMP Obligation to implement management measures	Salvage Report
ACHAR (OzArk 2023)	HMP 03	Heritage (General)	The Aboriginal cultural heritage sites outside of the Development Footprint but inside the Project Area identified in Table 6.1 of the HMP will be protected by: <ul style="list-style-type: none"> All ground disturbance being restricted to the approved Development Footprint. All sites outside of the Development Footprint being identified on applicable plans. Restricting vehicle traffic to established roads and tracks. Ensuring all contractors working in the vicinity of the sites are informed of their location and management requirements. 	✓	✓	✓	✓	✓	✓	✓	1, 2, 3 & 4	Prior to construction and on-going	Section 6.2.3.9 of the HMP Protection of known sites outside the Development Footprint	Construction Plans
ACHAR (OzArk 2023)	HMP 04	Heritage (Salvage)	These sites will be salvaged through the recording and collection of the surface artefacts prior to construction works proceeding. The sites to be salvaged are: <ul style="list-style-type: none"> 37-1-1027 (Redlynch Creek IF1) 37-1-1028 (Rocky Creek Slope IF2) 37-1-1029 (Wollara Road IF3) 37-1-1030 (Monaghans Creek IF4) 37-1-1031 (Rocky Creek Gully IF5) 37-1-1034 (Redlynch Creek OS2) 37-1-1035 (Redlynch Creek OS1) 37-1-1036 (Redlynch Creek OS3). 	✓	—	—	—	✓	—	—	1	Prior to development activities in the vicinity (100 m) of sites to be salvaged	Section 6.2.3.4 of the HMP Aboriginal sites approved for salvage	Salvage Report

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
ACHAR (OzArk 2023)	HMP 05	Heritage (Aboriginal Objects)	<p>The methodology for the collection will include the following measures:</p> <ul style="list-style-type: none"> All visible surface artefacts will be flagged in the field. The sites will be photographed after flagging and before recording. All artefacts will have the following artefact information recorded: <ul style="list-style-type: none"> Location. Artefact class. Artefact type. Size. Reduction level. Raw material. Notes. A selection of indicative and / or unusual artefacts from each site will be photographed. Once all recording is complete, the artefacts will be collected according to site with artefacts from each site being kept separate. The recording of the artefacts recovered will be completed in the field and this data would be incorporated into a report. An ASIRF will be submitted by the archaeologist detailing the collection process and results at the sites. 	✓	✓	✓	—	✓	—	—	1	Prior to development activities in the vicinity (100 m) of sites to be salvaged	Section 6.2.3.6 of the HMP Surface collection methodology for Aboriginal sites	The HMP Salvage Report
ACHAR (OzArk 2023)	HMP 06	Heritage (General)	Avoid the visible standing posts by all works associated with the Project to conserve their important values by implementing a minimum 20 m no-go buffer around the visible remains of the ruins.	✓	✓	✓	✓	—	✓	✓	1,2,3 & 4	Prior to construction	Section 6.2.3.3 of the HMP Management of HS01	Construction Plans Photographic Record
ACHAR (OzArk 2023)	HMP 07	Heritage (General)	Include HS01 on all site construction plans and induction materials to ensure that the location is protected. Install permanent flagging and signage around HS01 to ensure that it is not harmed.	✓	✓	✓	✓	—	✓	✓	1,2 & 3	Construction	Section 6.2.3 of the HMP Measures to protect known Aboriginal objects	Construction Plans Daily Briefing Record

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
ACHAR (OzArk 2023)	HMP 08	Heritage (Aboriginal Objects)	<p>The long-term management of the Aboriginal objects salvaged for the Project, as well as any additional artefacts discovered during construction and operation of the Project will include either:</p> <ul style="list-style-type: none"> The reburial of artefacts at a location outside of the development footprint but within the Project Area. Or A RAP group nominating themselves to apply for a Care Agreement to retain the artefacts. Any Care Agreement will require the approval of Heritage NSW. <p>Any long-term management of Aboriginal objects will be done in consultation with the RAPs.</p>	✓	✓	—	—	✓	—	—	1	Construction/ Ongoing Implementation	Section 6.2.3.7 of the HMP Long-term Management of Aboriginal Objects	Stakeholder Records
ACHAR (OzArk 2023)	HMP 09	Heritage (Aboriginal Objects)	<p>Protocols related to the discovery of suspected human skeletal material include:</p> <ul style="list-style-type: none"> When suspected human skeletal remains are exposed or uncovered, all work is to cease immediately in the near vicinity of the find location. An exclusion zone with a radius of 20 m is to be cordoned off by temporary fencing around the outer extent of the exposed suspected human skeletal remains site. The Construction Contractor/O&M Contractor is to notify Lightsource bp and the New South Wales Police immediately. If the New South Wales Police determine that the remains are modern and human, the area will become a crime scene under the jurisdiction of the NSW Police. They may request that a suitably qualified forensic anthropologist or archaeologist be engaged to assist. If the remains are identified as ancient Aboriginal remains, Heritage NSW and RAPs are to be formally notified in writing and the procedure set out in Figure 6-4 of the HMP followed. If the remains are identified as historical, non-Aboriginal human remains, the site is to be secured, and Heritage NSW contacted. 	✓	✓	✓	✓	—	✓	✓	1, 2, 3 4 & 5	Construction	Section 6.4.2 of the HMP Identification of Potential Human Skeletal Remains	Stakeholder Records

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
			<ul style="list-style-type: none"> If the remains are identified as non-human, work can recommence immediately. 											
ACHAR (OzArk 2023)	HMP 10	Heritage (Aboriginal Objects)	<p>Implement the following procedures for any newly identified Aboriginal objects within the Development Footprint:</p> <ul style="list-style-type: none"> The site will be temporarily fenced with an exclusion buffer of at least 5 m. The site will be assessed by a qualified archaeologist and a RAP representative. If found to be of cultural significance, the site location will be registered with AHIMS. Depending on the Aboriginal cultural heritage values at the site and the degree of immediate threat to the site, the site will be salvaged according to the appropriate management process in the HMP. A brief report of the salvage will be produced to record the findings. On the completion of salvage at such sites, an ASIRF will be completed soon after completion of salvage fieldwork and certainly within four months. Copies of the forms will be archived. All artefacts salvaged will be subject to the approved long-term management process set out in the HMP. 	✓	✓	✓	✓	—	✓	✓	1,2,3, 4 & 5	Ongoing Implementation	Section 6.4.3 of the HMP Discovery of unrecorded Aboriginal object(s)	Stakeholder Records Aboriginal Site Card
ACHAR (OzArk 2023)	HMP 11	Heritage (General)	<p>Manage any new Aboriginal site identified outside the approved impact footprint in accordance with the following procedure:</p> <ul style="list-style-type: none"> The site will be assessed by a qualified archaeologist and a RAP. The site will be considered for fencing depending on its proximity to the impact footprint. If found to be of cultural significance, the site location will be registered with AHIMS, and a site card submitted. The site will not be able to be harmed without an AHIP. 	✓	✓	✓	✓	—	✓	✓	1,2,3, 4 & 5	Ongoing Implementation	Section 6.4.5 of the HMP New Sites outside the Development Consent	Stakeholder Records Aboriginal Site Card

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
ACHAR (OzArk 2023)	HMP 12	Heritage (General)	Following Development Consent of the Project, the proponent will develop an HMP which is to be agreed to by the RAPs and DPHI (with input from Heritage NSW).	✓	✓	✓	✓	✓	—	—	1	Once off	The HMP	The HMP
ACHAR (OzArk 2023)	HMP 13	Heritage (General)	The HMP 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 37-1-1032 (Ringwood Gully IF6), 37-1-1033 (Killoe Creek GG1), and 37-1-1037 (Rocky Creek Gully OS4) will not be harmed by the Project as they are located outside the Access route and the Development Footprint.	✓	✓	✓	✓	✓	✓	—	1 & 3	Once off / Ongoing Implementation	The HMP	The HMP
ACHAR (OzArk 2023)	HMP 14	Heritage (Salvage)	The entire extent of 37-1-1035 (Redlynch Creek OS1) should be salvaged as the portion of the site outside the Development Footprint will continue to be harmed by ongoing erosion.	✓	✓	—	—	✓	✓	—	1,2,& 4	Construction	Section 6.2.3.6 of the HMP Surface Collection Methodology for Aboriginal Sites	Aboriginal Site Impact Recording Form
ACHAR (OzArk 2023)	HMP 15	Heritage (Salvage)	The three trees of community interest (CST1, and CST4–CST5) that are liable to be impacted must be included in a site visit and photographic recording with RAPs at the time of the surface artefact collection. The results of the photographic recording and any comments from the RAPs about the trees will be included in the salvage report that will be produced following all salvage activities.	✓	✓	—	—	✓	✓	—	1,2, 3 & 4	Construction	Section 6.2.3.6 of the HMP Management of Community Interest Trees	Salvage Report
ACHAR (OzArk 2023)	HMP 16	Heritage (General)	All land-disturbing activities must be confined to within the Development Footprint.	✓	✓	✓	—	✓	✓	—	1,2,3 & 5	Ongoing Implementation	The HMP	Daily Briefing Record construction Plans
ACHAR (OzArk 2023) HHA (Umwelt 2023)	HMP 17	Heritage (General)	If impacts to areas of high historical archaeological potential cannot be avoided, due to modifications to the proposed design, 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.	✓	✓	—	—	✓	✓	—	1, 3 & 4	Ongoing Implementation	Section 6.4.3 of the HMP Discovery of Unrecorded Aboriginal Object(s)	Archaeological Assessment

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
ACHAR (OzArk 2023) HHA (Umwelt 2023)	HMP 18	Heritage (Awareness)	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 <i>Heritage Act 1977</i> and the Project Approvals.	✓	✓	✓	✓	✓	✓	✓	1, 2, 3 & 5	Ongoing implementation	Section 6.2.3.3 of the HMP Management of HS01 Section 7.2 of the HMP Cultural; Heritage Awareness Training	Induction Record
ACHAR (OzArk 2023) HHA (Umwelt 2023)	HMP 19	Heritage (Unexpected Finds)	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.	✓	✓	—	—	✓	—	—	1, 2 & 3	Construction	Section 6.4.1 of the HMP Unanticipated Finds Procedure	Stakeholder Records Aboriginal Site Card
Fire Management and Emergency Response Plan														
SSD 33964533 Development Consent	FM&ER P 01a	Fire Management and Emergency Response (general)	Prepare a FM&ERP in accordance with Condition B35.	✓	✓	✓	✓	✓	—	—	1	Prior to construction	The FM&ERP	The FM&ERP
SSD 33964533 Development Consent	FM&ER P 01b	Fire Management and Emergency Response (general)	Implement this FM&ERP in accordance with Condition B35.	✓	✓	✓	✓	✓	✓	✓	4	Prior to construction	The FM&ERP	The FM&ERP
GRSF Amendment Report (Appendix C)	FM&ER P 02	Fire Management and Emergency Response (Risk Mitigation)	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.	✓	✓	✓	✓	✓	✓	✓	4	Design	This FM&ERP	Principal Hazard Analysis (PHA)
GRSF Amendment Report (Appendix C)	FM&ER P 03	Emergency Response (Electrical)	Electrical transformers to be designed, installed, operated and maintained in accordance with relevant Australian Standards.	✓	✓	✓	✓	✓	✓	✓	4	Construction, Operation and Decommissioning	Section 2.4 of the FM&ERP	Design records

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
GRSF Amendment Report (Appendix C)	FM&ER P 04	Emergency Response (general)	A Final Hazard Analysis 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.	✓	✓	✓	✓	✓	✓	✓	4	Pre-construction	PHA	Fire Safety Study (FSS) and amended EP PHA
GRSF Amendment Report (Appendix C)	FM&ER P 05	Fire Management (Asset Protection Zones)	Asset protection zones will be implemented and maintained for the life of the Project.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction, Operation and Decommissioning	Appendix E – Bushfire Mitigation – Section 1.1 APZ Establishment and Section 2.1.1 Maintenance in the FM&ERP	Maintenance Records
GRSF Amendment Report (Appendix C)	FM&ER P 06	Fire Management (Access Tracks)	Roads and access points will be maintained throughout the Project life to allow for safe and accessible travel for emergencies (if required).	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction, Operation and Decommissioning	Appendix E – Bushfire Mitigation – Section 1.3 Access Tracks and Section 2.1.1 Maintenance in the FM&ERP	Maintenance Records
GRSF Amendment Report (Appendix C)	FM&ER P 07	Fire Management (Water Supply)	An appropriate dedicated water supply for bushfire protection will be provided	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction, Operation and Decommissioning	Appendix E – Bushfire Mitigation – Section 1.4 Fire Suppression in the FM&ERP	Detailed Design Bushfire Training and Awareness
GRSF Amendment Report (Appendix C)	FM&ER P 08	Emergency Response (Electrical)	All project infrastructure will be designed in accordance with relevant industry standards to manage any EMF risks.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Design	Section 2.4.1.2 of the FM&ERP	Detailed Design
GRSF Amendment Report (Appendix C)	FM&ER P 09	Emergency Response (Electrical)	All relevant procedures in relation to a high voltage installation will be adhered to throughout the life of the Project	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction, Operation and Decommissioning	Section 2.4.1.2 of the FM&ERP	Detailed Design.
GRSF Amendment Report (Appendix C)	FM&ER P 10	Fire Management and Emergency Response (Access Tracks)	Public access will be restricted throughout the life of the Project.	✓	✓	✓	✓	✓	✓	✓	4	Construction, Operation and Decommissioning	Appendix C7 – Intruders on site (Vandalism, Armed Hold-Up, Assault)	This FM&ERP

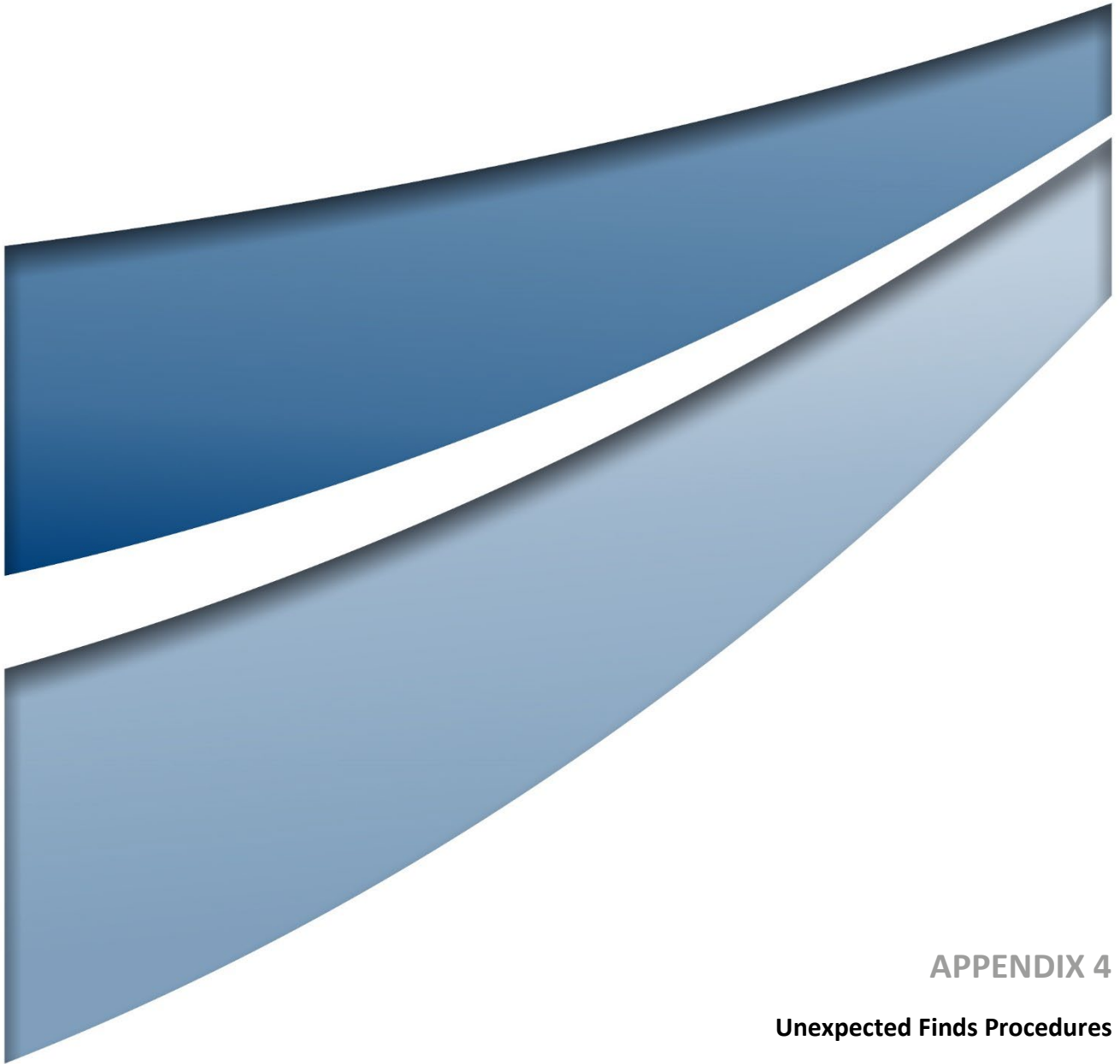
Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
GRSF Amendment Report (Appendix C)	FM&ER P 11	Fire Management (Asset Protection Zones)	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'.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction/Operation	Appendix E – Bushfire Mitigation – Section 1.1 APZ Establishment in the FM&ERP	Detailed Design Bushfire Training and Awareness Maintenance Records
GRSF Amendment Report (Appendix C)	FM&ER P 12	Fire Management (Water Supply)	A dedicated water supply for bushfire protection will include a 10,000-litre water supply (tank) fitted with a 65 mm storz fitting.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction/Operation	Appendix E – Bushfire Mitigation – Section 1.4 Fire Suppression in the FM&ERP	Detailed Design Bushfire Training and Awareness
GRSF Amendment Report (Appendix C)	FM&ER P 13	Fire Management (Asset Protection Zones)	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 10 m.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Construction/Operation	Appendix E – Bushfire Mitigation – Section 1.1 APZ Establishment in the FM&ERP	Detailed Design Bushfire Training and Awareness Maintenance Records
GRSF Amendment Report (Appendix C)	FM&ER P 14	Fire Management (general)	<p>A Fire Safety Study (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:</p> <ul style="list-style-type: none"> 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. The requirements of the Fire Management Plan (FMP) that would be prepared in consultation with NSW Rural Fire Service. <p>It is noted the FSS will also inform the requirements of the FMP including:</p> <ul style="list-style-type: none"> The methods and resources needed to manage and extinguish lithium battery fires. The management of a defendable Asset Protection Zone (APZ) as described in Planning for Bush Fire Protection 2019. 	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Prior to commencing construction of the BESS	The FM&ERP	FSS

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
			<p>The FSS will inform the requirements of an Emergency Response Plan (ERP) that will be prepared in accordance with HIPAP 2 prior to commencing construction of the BESS. The ERP will inform the requirements of an Emergency Services Information Package (ESIP) that would be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans. Both the ERP and the ESIP will:</p> <ul style="list-style-type: none"> inform first responders of site-specific features and safety measures required to ensure they are able to undertake their duties effectively include agency specific Standard Operational Guidelines. 											
GRSF Amendment Report (Appendix C)	FM&ER P 15	Fire Management (general)	The FSS will consider fire propagation and a worst-case scenario will be considered within the FSS.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Pre-construction	FSS	FSS
GRSF Amendment Report (Appendix C)	FM&ER P 16	Fire Management and Emergency Response (general)	The Emergency Plan will be developed in accordance with the HIPAP No.1 and will be informed by the findings of the PHA.	✓	✓	✓	✓	✓	—	—	1	Pre-construction	Section 1.6 of the FM&ERP	PHA
GRSF Amendment Report (Appendix C)	FM&ER P 17	Emergency Response (general)	<p>An Emergency Services Information Package and an Emergency Responders Induction Package will be prepared for the site prior to construction.</p> <ul style="list-style-type: none"> 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. 	✓	✓	✓	✓	✓	—	—	1	Pre-construction	Section 11.0 f the FM&ERP Appendix F - The Emergency Services Information Package (ESIP)	ESIP

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record	
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor				Personnel Responsible ^{1,2,3,4,5,6 & 7}
GRSF Amendment Report (Appendix C)	FM&ER P 18		Implement and maintain APZ distances applicable to the TWA Facility, including: <ul style="list-style-type: none"> Upslope – Grassland 10 m, Woodland 12 m, Forest 24 m Downslope (0–5 degrees) – Grassland 12 m, Forest 29 m 	✓	✓	✓	✓	✓	✓	✓	4	Pre-construction	Appendix E – Section 1.1 of the FM&ERP	Maintenance records Design Documents
GRSF Amendment Report (Appendix C)	FM&ER P 19		Provide an adequate supply of water at the TWA Facility in accordance with PBP, 2019. This will include the following: <ul style="list-style-type: none"> Dedicated on site firefighting water supply (minimum of 100,000 Litres) – in addition to the firefighting supply required for the proposed Solar Farm (volume to be confirmed during the assessment process by the NSW RFS). Provision of connection suitable for firefighting purposes located within the TWA Facility (65 mm Storz). Fire hydrant/hose reel systems and all firefighting equipment installed and maintained in accordance with relevant Australian Standards. 	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Pre-construction	Section 5.2.3 and Appendix E of the FM&ERP	Maintenance records Design Documents
GRSF Amendment Report (Appendix C)	FM&ER P 20		Include specific bushfire protection measures for the proposed TWA Facility within the Emergency Plan (and broader Risk and Emergency Plan), in accordance with PBP and in consultation with NSW RFS and NPWS. Detailed design of the TWA Facility and final siting will consider the requirements of PBP and provide for the implementation of appropriate bushfire protection measures. The Emergency Plan will include additional bushfire risks and mitigation measures associated with the TWA Facility, including: <ul style="list-style-type: none"> Detailed measures to prevent or mitigate fires igniting, outlining: <ul style="list-style-type: none"> APZ locations and management requirements. Access locations, passing bays and any alternate emergency access. Water supply and any other bush fire suppression systems. 	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Pre-construction	The FM&ERP	The FM&ERP

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party			Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor			
			<ul style="list-style-type: none"> ○ Code of Conduct (or similar) applicable to all staff and occupants outlining requirements to reduce potential ignition sources (i.e. no smoking or contained smoking areas, restricted access to fuel and electrical sources, no uncontained flammable liquids on site etc.). ● Work that should not be carried out during total fire bans during construction/operation. ● Availability of fire-suppression equipment. ● Storage and maintenance of fuels and other flammable materials. ● Notification of the local NSW RFS Fire Control Centre for any works that have high potential to ignite surrounding vegetation during construction/operation/maintenance, proposed to be carried out during a bushfire fire danger period to ensure weather conditions are appropriate. ● Development of any proposed land management practices either within the Feasibility Area and more broadly within the Project Area with consideration of existing land management practices undertaken within the National Park. ● Appropriate bush fire emergency management and relevant evacuation plan. ● An appropriate evacuation response in the event that an evacuation is required, including <ul style="list-style-type: none"> ○ Assigning responsibility for management actions. ○ Identifying the relevant contact details (RFS, FRNSW etc) who should be contacted and when. ○ Development of appropriate triggers for evacuation based on the applicable fire danger rating. ○ Identification of emergency assembly points on site and appropriate safety procedures 										

Source	ID	Aspect	Mitigation / Management Measure	Development Phase				Responsible Party				Timing/Frequency	Implementation Action	Compliance Record
				Early Works Construction	Main Works Construction	Operations and Maintenance	Decommissioning	Principal (Lightsource bp)	Construction Contractor	Operations and Maintenance Contractor	Personnel Responsible ^{1,2,3,4,5,6 & 7}			
			<ul style="list-style-type: none"> ○ Identification of safe assembly points offsite and relevant routes ○ Instructions relating to sheltering on site (if required) 											
GRSF Amendment Report (Appendix C)	FM&ER P 21	Fire Management (Detailed Design)	The Bushfire Attack Level (BAL) construction standard will not exceed BAL-29, and a minimum a BAL 12.5 construction standard will be applied.	✓	✓	✓	✓	✓	✓	✓	1, 2 & 3	Pre-construction	Appendix E Section 1.1 of the FM&ERP	The FM&ERP



APPENDIX 4

Unexpected Finds Procedures

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13.0 Identification of Previously Unknown Historical Heritage Sites

An unexpected finds protocol (Section 6.3.2.1 of the HMP) will be followed at all stages of the Project to ensure that any unexpected historical heritage or archaeological finds, features or subsurface deposits are correctly managed and assessed should they be identified.

13.1 Procedure

- The person who discovers or suspects they have discovered a potential historical heritage item during the proposed works will immediately notify the person in charge of the activity.
- Works in the immediate vicinity of the item(s) will cease and the area will be cordoned off with temporary fencing.
- An exclusion zone of 20 m radius is to be established with the temporary fencing around the suspected heritage item(s). In the case of multiple items, the 20 m area applies from the outermost cluster of items. The heritage item or archaeological remains must not be moved or disturbed until preliminary assessment has been undertaken by a heritage consultant.
- The Construction Contractor Site Manager/O&M Contractor will then inform Lightsource bp, who will contact a suitably qualified heritage consultant to evaluate the potential historical heritage item. Information about the location and condition of the site should also be provided. An inspection of the item(s) by the cultural heritage consultant may be required to confirm the significance of the item(s).
- Where item(s) are identified as having local or higher heritage significance, the Construction Contractor Site Manager or O&M Contractor will inform Lightsource bp, who will contact Heritage NSW to provide information about the newly identified site/material and determine an appropriate management strategy. Should it be determined that the material identified does not hold any significance, works may proceed and there are no further requirements.

14.0 Identification of New Aboriginal Objects or Aboriginal Ancestral Remains

The following sections outline the management strategies to be adhered to if any new Aboriginal objects or Aboriginal ancestral remains are identified within the Project Area.

Under the NPW Act (Part 6), an Aboriginal object is defined as: any deposit, object, or material evidence (not being a handicraft for sale) relating to Aboriginal habitation of the area that comprises NSW, being habitation both prior to and concurrent with the occupation of that area by persons of European extraction and includes Aboriginal remains.

It is noted that all new sites or Aboriginal ancestral remains will be recorded in accordance with Heritage NSW requirements, including submission of a site card to Heritage NSW in accordance with Section 89A of the NPW Act.

14.1 Identification of Potential Human Skeletal Remains

This procedure details the actions to be taken when suspected human skeletal remains are discovered during construction or operation activities. This information will be included in site inductions as per the training requirements discussed in Section 7.2 of the HMP.

This procedure is applicable to all activities conducted by any personnel during the construction and operation of the Project that have the potential to uncover suspected human skeletal remains. All human skeletal remains (both Aboriginal and non-Aboriginal) are subject to statutory protection and controls.

14.1.1 Procedure

- When suspected human skeletal remains are exposed or uncovered, all work is to cease immediately in the near vicinity of the find location.
- An exclusion zone with a radius of 20 m is to be cordoned off by temporary fencing¹ around the outer extent of the exposed suspected human skeletal remains site.
- The HSE Coordinator is to notify Lightsource bp and the New South Wales Police immediately.
- If the New South Wales Police determine that the remains are modern and human, the area will become a crime scene under the jurisdiction of the NSW Police. They may request that a suitably qualified forensic anthropologist or archaeologist be engaged to assist.
- If the remains are identified as ancient Aboriginal remains, Heritage NSW and the RAPs are to be formally notified in writing and the procedure set out in **Figure A4.1** followed.
- If the remains are identified as historical, non-Aboriginal human remains, the site is to be secured, and Heritage NSW contacted.

¹ A temporary fence will consist of 3–4 star pickets with orange caution tape strung between the star pickets.

- If the remains are identified as non-human, work can recommence immediately.

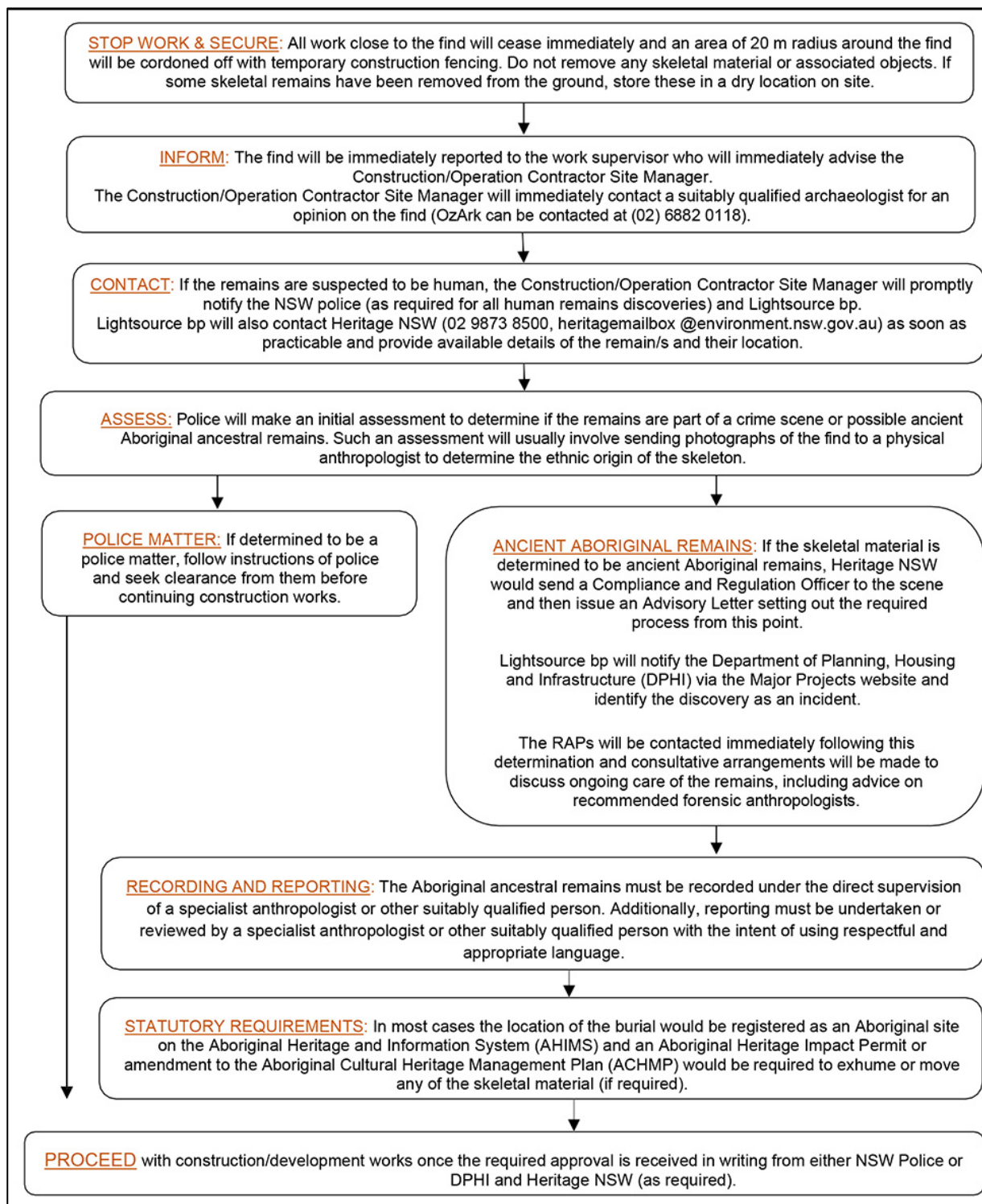


Figure A4.1 Discovery of Aboriginal Ancestral Remains Flowchart

14.2 Discovery of Unrecorded Aboriginal Object(s)

In the event of discovery of unrecorded Aboriginal object(s), all work close to the discovery will cease and an area of 20 m around the Aboriginal object(s) will be fenced with temporary construction fencing¹. An archaeologist and one representative from the RAPs will be contacted to determine the significance of the Aboriginal object(s) present.

If any unexpected, confirmed Aboriginal heritage finds, the protocols documented in **Section 2.1** and **Section 15.0** must be followed, including all agency notifications.

14.2.1 Aboriginal Scarred Trees

Should a previously unknown Aboriginal scarred tree be identified, all works in the vicinity of the site will cease, an area of 10 m around the scarred tree will be fenced with temporary construction fencing, and Lightsource bp will be informed of the presence of the potential site. The opportunity will then be provided to a qualified archaeologist to inspect the newly identified tree and evaluate whether the scarring is a result of Aboriginal cultural activities. If the scar has a cultural origin or there is doubt about the origin of the scar, a representative of the RAPs, and a qualified arborist (if required) will be consulted to assess the Aboriginal cultural and archaeological significance of the tree.

If the tree is confirmed as an Aboriginal scarred tree and is not required to be harmed because of approved Project activities, a fence should be erected with a 10 m buffer around the site as a protection measure. The location and dimensions of the fence should be determined with reference to the size and condition of the tree.

If the site is confirmed as an Aboriginal scarred tree and is subject to harm because of approved Project activities, it will be subject to temporary protection measures as described above until such time as an appropriate management strategy has been developed for the site. Lightsource bp will consult with the RAPs and a suitably qualified archaeologist to develop an appropriate management strategy for the site. If suitable, the methodology for scarred tree salvage outlined in **Section 14.3** may be used.

14.3 Newly Discovered Sites within Development Footprint

Any newly discovered Aboriginal sites identified within the approved Development Footprint (excluding human remains, see **Section 14.1**) will be temporarily fenced² as quickly as possible. Signage on the fencing is to state that the area is subject to environmental protection, that no ground disturbance is allowed, and will include relevant contact details for the Construction Contractor/O&M Contractor. The minor impact to the ground surface during installation of fence posts is permissible on condition that no soil is to be removed off site. The following procedure will be implemented for any newly identified sites:

- a. The site will be assessed by a qualified archaeologist and a representative from the RAPs. As well as recording the site, the site's significance will also be determined through this consultation.
- b. The site will be temporarily fenced.
- c. The site location will be registered with AHIMS, and a site card submitted.

- d. The site location will also be identified with GPS coordinates and entered on to Project plans including operational plans and maps.
- e. Depending on the Aboriginal cultural heritage values at the site and the degree of immediate threat to the site, the site will be salvaged according to the methodology outlined in the HMP (Section 6.2.3.6).
- f. A brief report of the salvage will be produced to record the findings.
- g. On the completion of salvage at such sites, an ASIRF will be completed and submitted to the AHIMS. Copies of the forms will be archived by Lightsource bp. The form will be lodged within a reasonable time of fieldwork completion and within four months, at the latest.
- h. All artefacts salvaged will be subject to relocation as per the long-term management of objects set out in the HMP (Section 6.2.3.7).

14.4 New Sites Outside the Development Footprint

Any new Aboriginal site identified outside the approved Development Footprint but within the Project Area will be managed in accordance with the following procedure:

- i. The site will be assessed by a qualified archaeologist and one representative of the RAPs. As well as recording the site, the site's significance will also be determined through this consultation.
- j. The site will be considered for fencing depending on its proximity to the impact footprint.
- k. The site location will be registered with AHIMS, and a site card submitted.
- l. The site location will be entered on to Project plans, including operational maps.
- m. If the site contains Aboriginal objects of interest such as many artefacts or rare features such as a hearth that is in an area of active and destructive erosion and is at risk of being destroyed, Heritage NSW must be contacted for advice. Any actions will only be undertaken with the full consultation and participation of the RAPs and Heritage NSW. All instructions from Heritage NSW will be followed, and unless under emergency provisions as set out in the NPW Act, an Aboriginal Heritage Impact Permit (AHIP) will be required.

15.0 Discovery of Aboriginal Objects

Under Section 89A of the NPW Act, it is a requirement that the AHIMS Registrar is notified of the existence of Aboriginal objects as soon as practicable after they are first identified. This is usually done through the completion of an Aboriginal site card by the Contractor Archaeologist which is submitted to the Registrar of the AHIMS for inclusion on the Aboriginal sites database. Information regarding AHIMS and site recording forms can be downloaded from the Heritage NSW website³.

3 <https://www.heritage.nsw.gov.au/protecting-our-heritage/record-aboriginal-sites/>

