# Submissions Report

## Blind Creek Solar Farm

November 2022

**Project Number: 22-319**

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# Document Verification

| | |
|---|---|
| Project Title: | Blind Creek Solar Farm |
| Project Number: | 22-319 |
| Project File Name: | 22-319 Blind Creek Solar Farm Submissions Report |

| Revision | Date | Prepared by | Reviewed by | Approved by |
|---|---|---|---|---|
| Draft.V1 | 18/07/2022 | Kyle Mercer<br>Isabel Verrall<br>Bishal Ghimire<br>Sarah Hillis | Brooke Marshall<br>Sarah Hillis | Brooke Marshall |
| Draft V1.1 | 9/09/2022 | Sarah Hillis<br>Kyle Mercer | Sarah Hillis | |
| Final V1 | 26/09/2022 | Sarah Hillis<br>Kyle Mercer | Sarah Hillis | Brooke Marshall |
| Final V1 | 18/10/2022 | Sarah Hillis (minor edits) | Sarah Hillis | Brooke Marshall |



**W.** www.nghconsulting.com.au

**E.** ngh@nghconsulting.com.au

**BEGA - ACT & SOUTH EAST NSW**
Suite 11, 89-91 Auckland Street
(PO Box 470) Bega NSW 2550
**T.** (02) 6492 8333

**NEWCASTLE - HUNTER & NORTH COAST**
Level 1, 31-33 Beaumont Street
Hamilton NSW 2303
**T.** (02) 4929 2301

**BRISBANE**
T3, Level 7, 348 Edward Street
Brisbane QLD 4000
**T.** (07) 3129 7633

**SYDNEY REGION**
Unit 17, 21 Mary Street
Surry Hills NSW 2010
**T.** (02) 8202 8333

**CANBERRA - NSW SE & ACT**
Unit 8, 27 Yallourn Street
(PO Box 62) Fyshwick ACT 2609
**T.** (02) 6280 5053

**WAGGA WAGGA - RIVERINA & WESTERN NSW**
35 Kincaid Street (PO Box 5464)
Wagga Wagga NSW 2650
**T.** (02) 6971 9696

**GOLD COAST**
2B 34 Tallebudgera Creek Road
Burleigh Heads QLD 4220
(PO Box 424 West Burleigh QLD 4219)
**T.** (07) 3129 7633

**WODONGA**
Unit 2, 83 Hume Street
(PO Box 506) Wodonga VIC 3690
**T.** (02) 6067 2533

**NSW • ACT • QLD • VIC**
**W.** www.nghconsulting.com.au
ABN 31 124 444 622 ACN 124 444 622

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# Acronyms and abbreviations

| | |
|---|---|
| AC | Alternating current |
| ACHA | Aboriginal Cultural Heritage Assessment |
| AHIMS | Aboriginal Heritage Information Management System |
| BC Act | *Biodiversity Conservation Act 2016* (NSW) |
| BCSF | Blind Creek Solar Farm |
| BESS | Battery Energy Storage System |
| BPL | Bushfire Prone Lane |
| CBSS | Community Benefit Sharing Scheme |
| CEMP | Construction environmental management plan |
| CHMP | Cultural Heritage Management Plan |
| CSES | Community and Stakeholder Engagement Strategy |
| Cth | Commonwealth |
| DC | Direct current |
| DECCW | (Former) Department of Environment, Climate Change and Water (NSW) (now DPIE) |
| DEMP | Decommissioning Environmental Management Plan |
| DPE | Department of Planning and Environment (NSW) (formerly DPIE) |
| EIA | Environmental impact assessment |
| EIS | Environmental impact statement |
| EPC contractor | Engineering, Procurement and Construction contractor |
| EPBC Act | *Environment Protection and Biodiversity Conservation Act 1999* (Cwth) |
| EP&A Act | *Environmental Planning and Assessment Act 1979* (NSW) |
| ESD | Ecologically Sustainable Development |
| GMC | Goulburn Mulwaree Council |
| ha | hectares |

| | |
|---|---|
| Heritage Act | *Heritage Act 1977* (NSW) |
| HVAS | Heavy Vehicle Access Study |
| ICHLZ | Indigenous Cultural and Heritage Learning Zone |
| km | kilometres |
| kV | Kilovolt |
| LGA | Local Government Area |
| LMP | Landscape Management Plan |
| m | metres |
| MW | Megawatt |
| NSW | New South Wales |
| NHVR | National Heavy Vehicle Regulator |
| OEH | (Former) Office of Environment and Heritage (NSW) (now EES) |
| OEMP | Operation Environmental Management Plan |
| OSOM | Over-size Over-mass |
| PV | Photovoltaic |
| RAP | Registered Aboriginal Party |
| SAII | Significant and Irreversible Impact |
| SSD | State Significant Development |
| TADPAI | Tarago and District Progress Association Inc |
| TIA | Traffic Impact Assessment |
| TfNSW | Transport for New South Wales |
| TL | Transmission line |
| VIA | Visual Impact Assessment |
| VPA | Voluntary Planning Agreement |
| VRZ | Vegetated Riparian Zone |

# Table of definitions

| | |
|---|---|
| **Applicant** | Blind Creek Solar Farm Pty Ltd (BCSF Pty Ltd) |
| **Project** | Blind Creek Solar Farm (BCSF) |
| **Subject Land** | All lots affected by the development |
| **Study area** | The area surveyed for the assessment, prior to identifying the constraints and exclusions. The area is 1, 225ha. Refer to Figure 1-1. |
| **Development site** | The Development site is the area where development is proposed and where landowner consent (freehold and Crown land) has been obtained. The area is 1,026ha. Refer to Figure 1-1. |
| **Development footprint** | The uppermost area of land that would be directly impacted by the Project including solar arrays, perimeter fence, access roads, transmission line footprint and areas used to store construction materials and manage environmental impacts (including all temporary and permanent impacts).<br>Approval is sought for this area, to enable micro-siting of infrastructure during post approval detailed design. The area is 682.5ha. Refer to Figure 1-1. |
| **Indicative infrastructure layout** | The Indicative infrastructure layout shows where key infrastructure components would be likely be located within the Development footprint. It most closely represents the area of actual impact required to construct and operate the solar farm. The final infrastructure layout will be subject to detailed design with appointed contractors. The area is approximately 475ha. Refer Figure 1-1. |
| **Exclusion zones** | Areas of high environmental value within the Study area that would not be impacted. The total exclusion area is approximately 654.90, which includes:<br>• 46.06ha of land with high biodiversity values<br>• 73.61 ha of waterways and their riparian buffers made up of Butmaroo Creek (57.20 ha), Wrights Creek (4.22 ha) and the associated overland flow path of Wrights Creek (12.19 ha – approximate and indicative only); a high catchment value.<br>• 479.6ha of land with high heritage values (Aboriginal Heritage and Non-Aboriginal Heritage)<br>• 33.86 ha of land to enhance habitat for the threatened White Fronted Chat<br>• 19.56 ha of visual offsetting (not an offset in accordance with BC act).<br>Additionally, no solar panel arrays would be placed within the approximately 8ha of existing electricity easement traversing the site nor within a flow path connecting Wrights Creek and the downstream wetland in accordance with *Guidelines for Riparian Corridors on Waterfront Land.* This treats the undefined part of the creek as a fourth order stream without banks, achieving an average exclusion of not less than 40m either side over the length of the Creek. A 40m buffer either side of Butmaroo Creek has also been established. This has been included in the high catchment value area above. |
| **Associated receivers** | These receivers are associated with the Project. While they are included in the assessment (i.e. noise, vibration and visual impacts) they are clearly denoted |

| | |
|---|---|
| | given their association with the project.<br>Associated receivers are those that will either host project infrastructure or have entered into negotiated agreements with the Applicant, accepting of all project impacts; six receivers will host infrastructure and three receivers have interests in the project and have entered into negotiated agreements. |
| **Non-associated receiver** | These receivers are not associated with the project and include neighbouring properties that may be impacted (i.e. by noise, vibration and visual impacts). A subset of this group is included in the Project's Community Benefit Sharing Scheme but have not been asked nor given any agreement with respect to accepting impacts or providing Project support. 36 non-associated receivers will receive benefits under the CBSS. |

# Executive summary

## Background

The Blind Creek Solar Farm is proposed within the Queanbeyan-Palerang Local Government Area (LGA); 30km northeast of Queanbeyan and 7km north of Bungendore, NSW, on the shores of Lake George. Accessed from Tarago Road, the site is an agricultural property with a long agricultural history of cropping, as well as sheep and cattle grazing. Nearby land uses include agriculture, residential development, two sand quarries, and Capital Wind Farm.

The Environmental Impact Statement (EIS) proposed the construction and operation of a solar photovoltaic (PV) energy generation facility with an estimated capacity of up to 350MWAC (420MWDC) including battery storage of nominally 300MW / 600MWh. The Project is classified as State Significant Development (SSD) under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The key environmental issues investigated in the EIS were visual amenity and glare, biodiversity, Aboriginal heritage, hydrology and flooding, noise and vibration, and traffic. The EIS was placed on public exhibition from Tuesday 7 June 2022 until Thursday 7 July 2022: www.planningportal.nsw.gov.au/major-projects/projects/blind-creek-solar-farm.

## Community and agency submissions to the EIS

During the public exhibition period, submissions from the public, public authorities and other interested parties in relation to the Project were invited. In total, the submissions showed a high level of local support for the project, citing issues such as compatibility with agricultural activities and contribution to emissions reduction and employment, and requesting additional detail most commonly in relation to visual amenity and traffic.

**Public and community group submissions:**

- 37 public submissions in support of the project
- 3 public submissions in objection to the project
- 1 public submission making a comment in relation to the project
- 4 letters of support from local organisations and businesses
- 2 objections from local organisations and businesses.

**Council and agency submissions:**

- 1 submission seeking clarifications from Queanbeyan-Palerang Council
- 1 submission seeking clarifications Goulburn Mulwaree Council
- 11 additional government agencies submissions seeking clarifications in relation to the project.

Table 1-1 Issues raised in public submissions, ranking those most prevalent[1] and noting letters of support versus letters of objection.

| Issue | Total submissions | Support | Comment | Object | *Ranking (by prevalence)* |
|---|---|---|---|---|---|
| **Agriculture** | **23** | 21 | 0 | 2 | *1* |
| **Emissions reductions** | **22** | 22 | 0 | 0 | *2* |
| **Employment** | **14** | 13 | 1 | 0 | *3* |
| **Consultation process** | **13** | 13 | 0 | 0 | *4* |
| **Energy security / prices** | **10** | 10 | 0 | 0 | *5* |
| **Environment (general)** | **7** | 6 | 0 | 1 | *6* |
| **Views** | **6** | 5 | 0 | 1 | *7* |
| **Aboriginal heritage** | **6** | 6 | 0 | 0 | *8* |
| **Traffic** | **3** | 2 | 0 | 1 | *9* |
| **Biodiversity** | **3** | 3 | 0 | 0 | *10* |
| **Glint and glare** | **2** | 2 | 0 | 0 | *11* |
| **EIS general** | **2** | 1 | 0 | 1 | *12* |
| **Connection to the gid** | **1** | 1 | 0 | 0 | *13* |
| **Justification** | **1** | 0 | 0 | 1 | *14* |

[1] Prevalence rankings: Issues raised most frequently (ranked #1) in submissions.

Table 1-2 Issues raised (and number of times raised), categorised by Department of Planning and Environment (DPE) guideline category.

| | | |
|---|---|---|
| **The Project itself:** | • EIS (general) (1)<br>• Justification (1) | |
| **Procedural concerns:** | • The consultation process (13) | |
| **Environmental, social and economic impacts:** | • Agriculture (23)<br>• Emission reduction (22)<br>• Employment (13)<br>• Energy security / prices (10)<br>• Environment (General) (7)<br>• Views (7) | • Aboriginal heritage (6)<br>• Traffic (3)<br>• Biodiversity (3)<br>• Glint and Glare (2)<br>• Connection to grid (1) |

## Key project outcomes in consideration of community and agency feedback

In response to the public and agency submissions, the Applicant has made minor refinements to the Project as originally described and assessed in the EIS. These reflect the Applicant's desire to respond to agency input as well as ensure social licence, responding to the local values identified as well as specific concerns raised by the community.

Specifically, the refinements now include:

1. A commitment to royalty-per-tonne cargo payments to two local Councils to address the use of local roads, in response to Council submissions
2. A commitment to a larger intersection treatment at the site access point, off Tarago Road, to improve safety
3. A commitment to exclude solar infrastructure within a corridor connecting the defined portion of Wrights Creek to the ephemeral wetland. The average exclusion will not be less than 40m each side of the creek bank (where defined) or nominal centreline where the bank is undefined. For the avoidance of doubt, cables and tracks may cross this exclusion provided they are designed not to impede flows
4. A commitment to offset potential habitat and breeding areas for the White Fronted Chat
5. Strengthening several mitigation measures which now specifically include the requirement for further agency or Council input in the detailed project planning, post approval
6. A reduction of estimated construction water requirements and further information in relation to sourcing water for construction
7. A commitment to exclude solar panels from elevated areas on or bordering Lot 17 DP535180 (above elevation 691m) to reduce visual impacts to receivers on Lake Road, and west of an established line of elm trees between Butmaroo Creek and the ephemeral wetland.

The amendments have not changed the expected impact area or the capacity of the Project (refer Figure 1-1).

Table 1-3 Comparison of refinements to the project in terms of key parameters

| | Scoping report | EIS Project | Amended Project | ***Difference between EIS and Amended Project*** |
|---|---|---|---|---|
| **Proposed infrastructure** | | | | |
| Capacity of solar generation | 350-400MW | Up to 350MW AC (420MW DC) | Up to 350MW AC (420MW DC) | ***0MW*** |
| Development footprint area | 1,183ha | 680 to 700ha | 682.5ha | ***-17.5ha*** |
| **Exclusion zones** | | | | |
| High biodiversity values | - | 46.06ha | 46.06ha | ***0ha*** |
| Waterways | - | 4.2ha | 57.2ha | ***53.0ha*** |
| High heritage values | - | 479.6ha | 479.6ha | ***0ha*** |
| White Fronted Chat | - | 0ha | 33.86ha | ***33.86ha*** |
| Wrights Creek overland section | - | - | 12.19ha | ***12.19ha*** |
| Visual offset | - | - | 19.56ha | ***19.56ha*** |
| **Water use requirements** | | | | |
| 150ML | - | 250ML | 150ML | **-100ML** |
| 200kL per year | - | 200kL per year | 200kL per year | **0KL** |

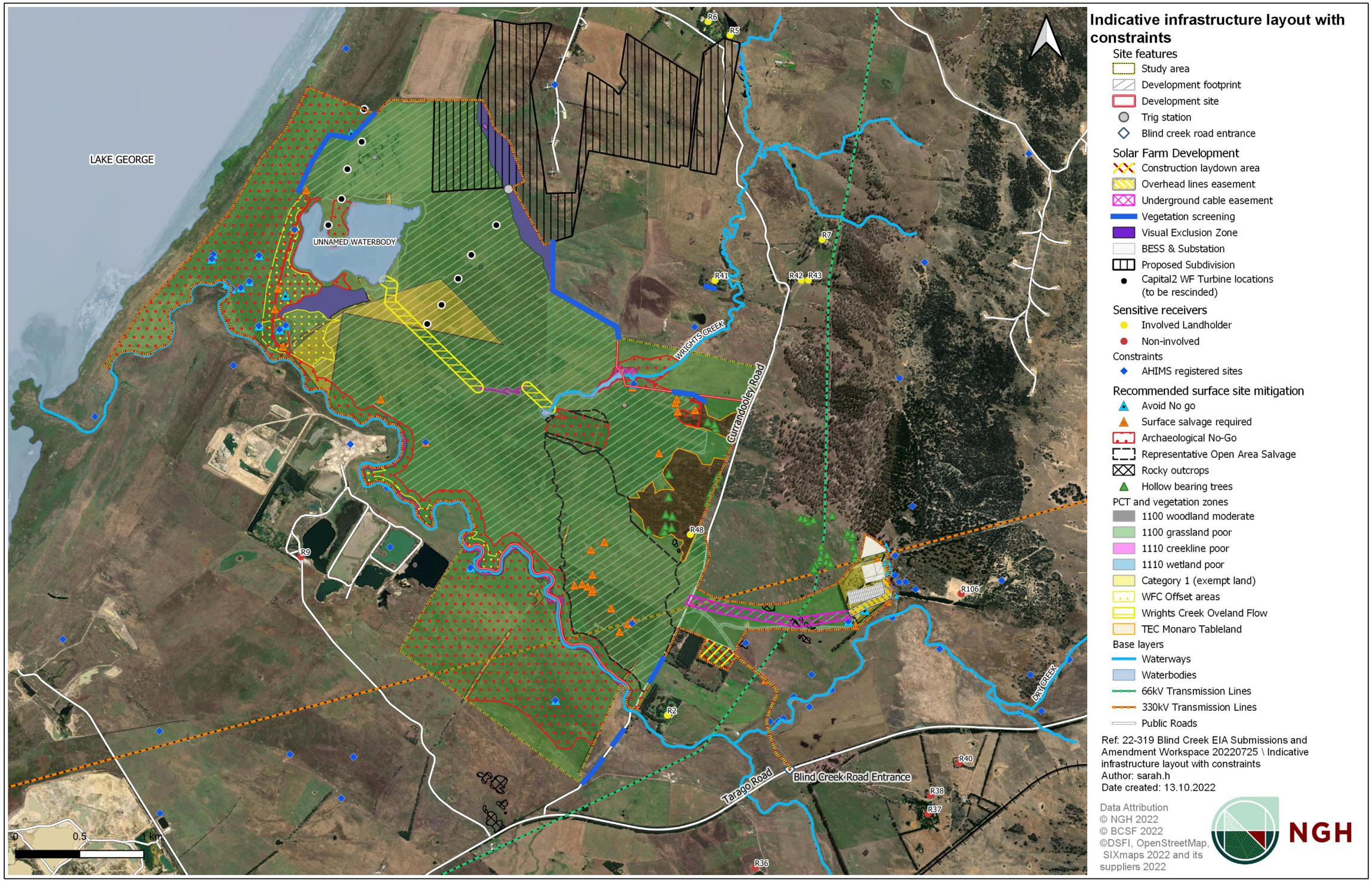



Figure 1-1 Indicative layout and site constraints

## Overall justification for the Project

The Blind Creek Solar Farm would:

- **Generate electricity from a low-cost renewable source**
- **Provide storage in order to deliver electricity at high demand times, when roof top solar is unavailable**
- **Address Federal, state and local policies as well as international agreements in relation to reducing greenhouse gas emissions, global warming and the transition to greater renewable energy generation**
- **Supply the equivalent of approximately 124,155 residential dwellings**
- **Co-exist and compliment intensive sheep grazing and regenerative agriculture practices that will continue on the site**
- **Respond to input from the community and environmental specialists in order to maximise the benefits to the local community and minimise adverse environmental impacts during construction, operation and decommissioning**
- **Address the principles of ecologically sustainable development.**

In consideration of the refinements made to respond to agency and community submissions, the Project demonstrates a commitment to:

- Address uncertainty, either with:
  - more detailed consideration where possible or if not,
  - with more conservativism, reducing Project risks.
- Increase the role of key stakeholders as the Project moves forward into the detailed design stage, post approval.
- Improve the rigour of environment mitigation commitments.

On balance this leads to a project that responds well not only to its environmental context but to its valued stakeholders in the local community, to which this project will generate a long-term positive contribution.

The Project has considered and addressed the principles of Ecologically Sustainable Development (ESD), which involves the effective integration of social, economic and environmental considerations in decision-making processes. Based on the likely costs and benefits of the proposed solar farm, the Project is considered to comply with the principles of ESD. ESD principles and their relationship to the design, construction and ongoing operations of the Project are identified in Table 1-4.

Table 1-4 Assessment of the Project against the principles of ESD

| Assessment of the Project against the principles of ESD |
|---|
| **Precautionary principle and evaluation to avoid**<br>The precautionary principle has been adopted in the assessment of impact of the Project; with first preference given to avoiding and minimising environmental impacts. The impacts of the construction of the solar farm at the site are likely to be reasonably predictable and carry low levels of uncertainty and risk. Based on field surveys and assessments, the works would be unlikely to result in irreversible environmental damage. The development would have an operational life of nominally 35 years or more |

| Assessment of the Project against the principles of ESD |
| --- |
| and would be highly reversible. A 'worst case' impact assessment has been undertaken to account for any uncertainty in the final impact footprint. |
| **Inter-generational equity**<br>The Project would not diminish long term ecological or agricultural productivity, biological resources or future land use options at the site. At the end of the operating life of the solar farm, the above-ground infrastructure would be removed (to a depth of 500mm or less) to restore former land use potential, agricultural productivity and land use and planning options at the site. Soil values would be restored with reference to the results of a pre-works baseline soil survey.<br>The Project would provide a significant environmental benefit by producing sustainable energy, reducing the reliance on fossil fuels which threatens the well-being of current and future generations through climate change. In contrast to non-renewable energy sources, the solar farm would not emit carbon dioxide, airborne particulates or other pollutants. At the end of its operational life, the Project would not require expensive and difficult land remediation or leave a legacy of toxic waste to be stabilised and stored. |
| **Conservation of biological diversity and ecological integrity**<br>Layout planning and mitigation measures have been adopted to avoid or mitigate any impacts which would affect the long-term viability of populations of all native species at and around the site, particularly threatened species and communities. These measures include avoiding and protecting natural areas and habitats on the site. It is noted that climate change is a key global threat to many species and communities, and that the Project would contribute to the abatement of carbon emissions from the electricity sector in Australia. |
| **Improved valuation, pricing and incentive mechanisms**<br>The Project would provide for the increased penetration of renewable energy into the energy market. The BESS would use the market to regulate the storage and release of energy based on prevailing demand. To date the environmental and social costs of electricity generation have not been fully measured or incorporated into wholesale or retail electricity pricing. The long-term external costs of carbon-intensive energy sources in terms of climate change in particular have not been factored into prices. For each kilowatt hour of electricity generated over the lifetime of a solar farm, it has an emissions footprint of 6 grams of CO2 equivalent (gCO2e/kWh). In contrast, coal has an emissions footprint of 109 gCO2e/kWh (Evans, 2017).<br>External costs are similarly not included in calculations of Levelised Cost of Electricity (LCOE) - the discounted lifetime cost of ownership and use of a generation asset expressed in cost per MWh.<br>In terms of life cycle energy consumption, the 'energy payback time' for polycrystalline PV modules has been estimated at one (1) year for a solar installation in Southern Europe. |

# 1. Introduction

## 1.1. Background to the Project

The proposed Blind Creek Solar Farm would be located within the Queanbeyan-Palerang Local Government Area (LGA); 30km northeast of Queanbeyan and 7km north of Bungendore, NSW, to the east of Lake George. Accessed from Tarago Road, the site is an agricultural property with a long agricultural history of cropping, sheep and cattle grazing. Nearby land uses include agriculture, residential development, two sand quarries, and the existing Capital Wind Farm.

The Environmental Impact Statement (EIS) proposed the construction and operation of a solar photovoltaic (PV) energy generation facility with an estimated capacity of up to 350MWAC (420MWDC). It includes associated infrastructure, including grid connection and battery storage of nominally up to 300MW / 600MWh. The Project requires development consent under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The Project is classified State Significant Development (SSD) under the EP&A Act as it is development for the purpose of electricity generating works with a capital investment value of greater than $30 million (Schedule 1 (20)(a) of the *State Environmental Planning Policy (Planning Systems) 2021).*

The Project (as approved) includes the following main infrastructure components:

- Approximately 850,000 PV single axis tracking solar modules (mounted on pile-driven foundations).
- Approximately 85 inverters and transformers.
- A Battery Energy Storage System (BESS) including nominally up to 300MW/600MWh of lithium-ion batteries with inverters.
- An onsite 330kV substation connected to the existing 330kV transmission line that passes through the site.
- Underground cabling to connect solar modules, combiner boxes, PCUs and batteries, data services and communications.
- Buildings to house a site office, switchgear, protection and control facilities, maintenance facilities, storage and staff amenities.
- A communications tower for high reliability grid operations.
- Internal tracks, new and upgraded sections totalling approximately 27km.
- Perimeter security fencing (if required), closed-circuit television (CCTV) and security lighting at the switching station, BESS and O&M building area, only.
- Stock fencing and water.
- Visual amenity plantings in specific locations[2].
- Site access intersection upgrades off Tarago Road.

Temporary construction facilities would include a laydown area with secure compound, construction site offices and amenities and car and bus parking areas for construction staff. The construction phase of the Project is expected to take approximately 12 to 18 months and the Project would have an operational life of nominally 35 years or more.

[2] The visual amenity plantings are sometimes in no go areas, but specific protocols have been developed to ensure they are appropriate to the values of these areas

The Blind Creek Solar Farm EIS was prepared in accordance with the Project-specific Secretary's Environmental Assessment Requirements (SEARs), issued on 11 February 2021. The key environmental issues investigated in the EIS were visual amenity and glare, biodiversity, Aboriginal heritage, hydrology and flooding, noise and vibration, and traffic. Detailed safeguards and mitigation measures were developed and included as commitments of the Project.

The EIS was placed on public exhibition from Tuesday 7 June 2022 until Thursday 7 July 2022: www.planningportal.nsw.gov.au/major-projects/projects/blind-creek-solar-farm.

## 1.2. Relationship to other activities

As detailed in the EIS, it is noted for context that the Project would be located adjacent to several existing operations and two approved but as yet undeveloped facilities. These are noted briefly below.

**Onsite and adjacent agricultural operations**

The Blind Creek Solar Farm has been designed with panel spacing and heights suitable for continued stock grazing. Additionally, the landholder intends to incorporate regenerative agriculture practices, a soil carbon project, biodiversity restoration and compost production both within and outside the solar array. These agricultural land use practices are compatible with Blind Creek Solar Farm and will maximise agricultural and land capability benefits alongside the operational solar farm. They are, however, separate operations. They do not form part of the Blind Creek Solar Farm Project.

**Overlapping solar and wind approvals**

Approval has been granted for the 50MW Capital Solar Farm (App. No. MP10_0121) on land neighbouring the Blind Creek Solar Farm Development site. There is also a legacy planning approval for nine wind turbines within the proposed Blind Creek Solar Farm project boundary, as part of Capital 2 Wind Farm (App. No. MP10_0135).

Since these projects were approved, technology and market conditions have changed. The Blind Creek Solar Farm is now considered by the Applicant to be a more appropriate and viable development and as such, if the Blind Creek Solar Farm is approved with acceptable conditions, the existing approvals for the as yet undeveloped Capital Solar Farm and those nine wind turbines, being a part of Capital 2 Wind Farm, would not be pursued.

**Adjacent quarrying activities**

Sand quarrying has been active in the area for over 70 years. Two sand quarries currently operate within 2km of the Development site, and several historical quarries (no longer active) are within the Subject land. The Project is not expected to have any impact on the operation of the quarries.


Figure 1-1 Existing approvals within the Blind Creek Solar Farm Development site (note that the approved turbine locations are to be rescinded on approval of the BCSF Project)

## 1.3. This report

This Submission Report has been prepared to analyse the issues raised in public and government agency submissions and explain what actions the applicant has taken since the EIS was publicly exhibited in relation to them. It includes a:

- Specific response to each issue raised in the public submissions,
- Specific response to each government agency issue raised.

The report is guided by the *State significant development guidelines – preparing a submissions report* (DPIE, 2021), and is structured as follows:

- Section 2 summarises the submissions received.
- Section 3 summarises the actions taken by the Applicant since public exhibition of the EIS to address issues raised by the submissions. This includes an overview of additional consultation and specialist assessments undertaken by the Applicant.
- Section 4 details the Applicant's responses to issues raised in public and government agency submissions.
- Section 5 provides an updated justification and evaluation of the Project.

### 1.3.1. Amendment Report

Concurrent with the preparation of this Submissions Report, an Amendment Report has been prepared to set out in full, and assess where required, changes made to the project since the exhibition of the EIS. Where relevant, the results of Amendment Report are referenced in this report.

Additional amendments to the Project that are not considered in this Submissions Response include:

- Increasing the number of inverter stations and transformers from 85 to 93
- Changing the requirement of the subdivision on Lot 17 DP 535180
- Decreasing the pitch/spacing of panels to minimum 5.25m.

These additional amendments are not a result of the submissions received on the EIS, rather a result of additional consultation and studies by the Applicant. As such, these amendments are covered in detail within the Amendment Report.

# 2. Analysis of submissions

## 2.1. Breakdown of submissions

The EIS was placed on public exhibition between the Tuesday 7th June 2022 until Thursday 7th July 2022.

The total number of submissions received for the Blind Creek Solar Farm by the end of the public exhibition period was 59. Submissions were received from agencies, council, several organisations and the general public as provided in Table 2-1. In total, the submissions showed a high level of local support for the project, citing issues such as compatibility with agricultural activities and contribution to emissions reduction and employment, and requesting additional detail most commonly in relation to visual amenity and traffic.

**Public and community group submissions:**

- 39 public submissions in support of the project
- 4 public submissions in objection to the project
- 1 public submission making a comment in relation to the project
- 4 letters of support from local organisations and businesses
- 2 objections from local organisations and businesses

**Council and agency submissions:**

- 1 submission seeking clarifications from Queanbeyan-Palerang Council
- 1 submission seeking clarifications Goulburn Mulwaree Council
- 12 additional government agencies submissions seeking clarifications in relation to the project.

Table 2-1 Submissions summary

| Category | Number of responses received |
|---|---|
| **Public;** 44 submissions received including: | • 39 letters of support<br>• 4 objections<br>• 1 comment |
| **Organisations;** 6 submissions in total, including from:<br>• Bungendore Rural Services Pty Ltd (support)<br>• Cleanseeds Pty Ltd (support)<br>• Ecowise Services (support)<br>• Denrith Pty Ltd (support)<br>• Tarago and District Progress Association Inc (objection)<br>• Fraish Consulting (objection) | • 4 letters of support<br>• 2 objections |
| **Public agencies;** 12 submissions received<br>• WaterNSW<br>• NSW Department of Planning and Environment (DPE) - | • Feedback provided and clarifications sought. |

| Category | Number of responses received |
|---|---|
| Mining, Exploration & Geoscience<br>• Department of Primary Industries (DPI) Fisheries<br>• DPE Water<br>• DPE Hazards<br>• EPA<br>• Fire and Rescue<br>• DPE Heritage NSW<br>• DPE Crown Lands<br>• DPI Agriculture<br>• Biodiversity, Conservation and Science Directorate<br>• TfNSW | |
| **Councils;** 2 submissions received<br>• Queanbeyan-Palerang Regional Council<br>• Goulburn Mulwaree Council | Feedback provided and clarifications sought. |
| **Total** | **64** |

## 2.2. Spatial distribution of public and organisation submissions

The majority of submissions were submitted by residents and organisations in the Queanbeyan-Palerang Regional LGA including (Bungendore, Bywong, Caroola, Mount Fairy, Tarago and Lake George areas; 84% of public and organisation submissions). Other public and organisation submissions received within the state included two from the Goulburn Mulwaree Council area (Goulburn and Lower Boro), one from City of Canterbury Bankstown/Strathfield Council area (Greenacre) and one from the City of Willoughby area (Castle Cove).

Two interstate submissions were received from Queensland (Paddington) and one from the Australian Capital Territory (Hume). Refer to Figure 2-1 below.

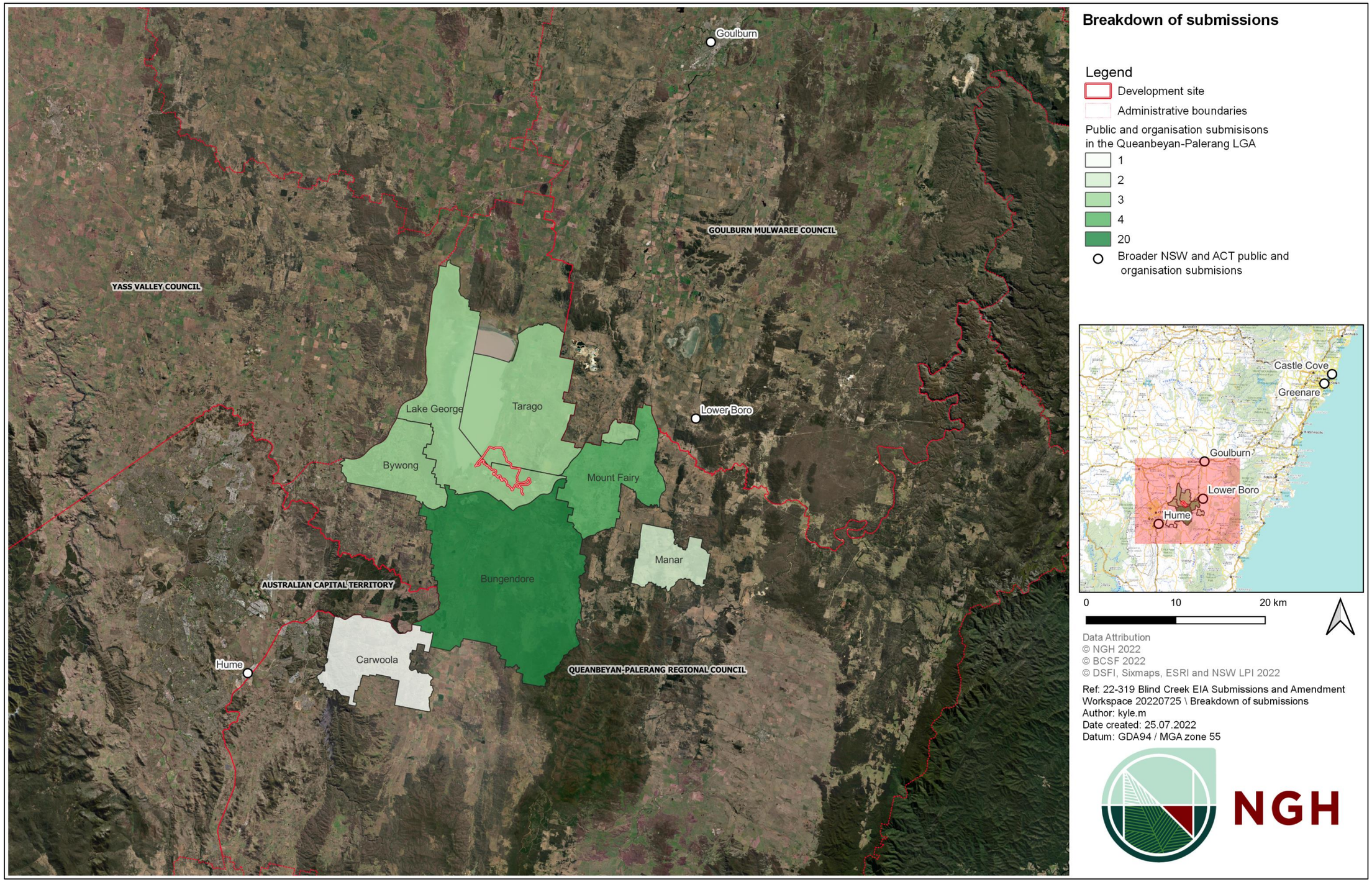



Figure 2-1 Spatial distribution of public and organisation submissions across NSW and ACT

## 2.3. Categorisation of issues raised

The issues raised in public submissions are shown in Figure 2-2. Interest in the continued agricultural activities onsite, the contribution of the project to emissions reduction, employment and energy security and the community consultation undertaken by the applicant were the issues raised most often in the submissions.

The number of submissions received that raised each issue is also ranked, noting letters of support and letters of objection, in Table 2-2. Overall, the number of letters of support for this Project has been substantial in comparison to objections raised.

Finally, the number of public submissions is categorised by the Department of Planning and Environment guideline category requirements in

Table 2-3; showing most submissions related to the potential benefits and impacts of the Project.

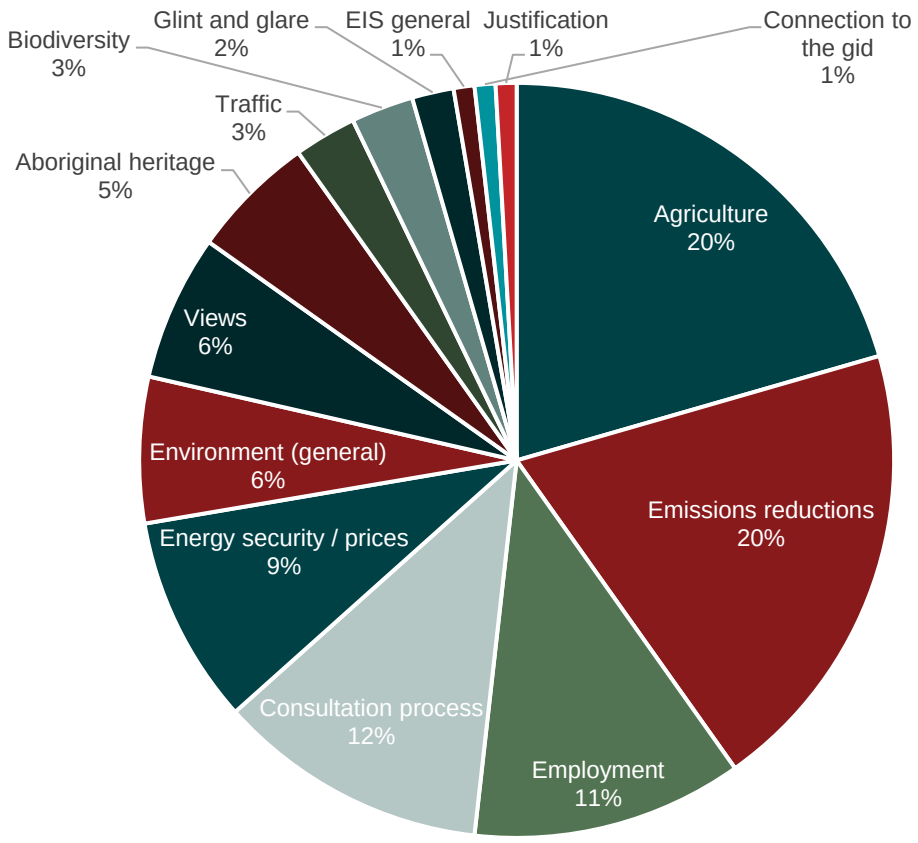



Figure 2-2 Issues raised most often in public submissions (supportive and objections both included).

Table 2-2 Issues raised in public submissions, ranking those most prevalent[3] and noting letters of support versus letters of objection.

| Issue | Total submissions | Support | Comment | Object | *Ranking (by prevalence)* |
|---|---|---|---|---|---|
| **Agriculture** | **23** | 21 | 0 | 2 | *1* |
| **Emissions reductions** | **22** | 22 | 0 | 0 | *2* |
| **Employment** | **13** | 13 | 1 | 0 | *3* |
| **Consultation process** | **13** | 13 | 0 | 0 | *4* |
| **Energy security / prices** | **10** | 10 | 0 | 0 | *5* |
| **Environment (general)** | **7** | 6 | 0 | 1 | *6* |
| **Views** | **7** | 6 | 0 | 1 | *7* |
| **Aboriginal heritage** | **6** | 6 | 0 | 0 | *8* |
| **Traffic** | **3** | 2 | 0 | 1 | *9* |
| **Biodiversity** | **3** | 3 | 0 | 0 | *10* |
| **Glint and glare** | **2** | 2 | 0 | 0 | *11* |
| **EIS general** | **1** | 1 | 0 | 1 | *12* |
| **Connection to the gid** | **1** | 1 | 0 | 0 | *13* |
| **Justification** | **1** | 0 | 0 | 1 | *14* |

Table 2-3 Issues raised (and prevalence), categorised by DPE guideline category.

| | | |
|---|---|---|
| **The Project itself:** | • EIS (general) (1)<br>• Justification (1) | |
| **Procedural concerns:** | • The consultation process (13) | |
| **Environmental, social and economic impacts:** | • Agriculture (23)<br>• Emission reduction (22)<br>• Employment (13)<br>• Energy security / prices (10)<br>• Environment (General) (7)<br>• Views (7) | • Aboriginal heritage (6)<br>• Traffic (3)<br>• Biodiversity (3)<br>• Glint and Glare (2)<br>• Connection to grid (1) |

[3] Prevalence rankings: Issues raised most frequently (ranked #1) in submissions.

# 3. Actions taken since exhibition

## 3.1. Amendments to Project

In response to the public and agency submissions, the Applicant has made minor amendments to the Project as originally described and assessed in the EIS. These reflect the Applicant's desire to respond to agency input as well as ensure social licence, responding to the local values identified as well as specific concerns raised by the community.

Specifically, the amendments now include:

1. A commitment to royalty-per-tonne cargo payments to local Councils to address the use of local roads, in response to both local Council submissions
2. A commitment to a larger intersection treatment at the site access point, off Tarago Road, to improve safety
3. A commitment to exclude solar infrastructure within a corridor connecting the defined portion of Wrights Creek to the ephemeral wetland. The average exclusion will not be less than 40m each side of the creek bank (where defined) or nominal centreline where the bank is undefined. For the avoidance of doubt, cables and tracks may cross this exclusion provided they are designed not to impede flows.
4. A commitment to offset potential habitat and breeding areas for the White Fronted Chat
5. Strengthening several mitigation measures which now specifically include the requirement for further agency or Council input.
6. A downward revision of construction water requirements and further information in relation to sourcing water for construction.
7. A commitment to exclude solar panels from elevated areas on or bordering Lot 17 DP535180 (above elevation 691m) to reduce visual impacts to receivers on Lake Road, and west of an established line of elm trees between Butmaroo Creek and the ephemeral wetland.

The amendments have not changed the expected impact area and capacity of the Project. Refer to Table 1-3 and Figure 1-1 above for a comparison of amendments to the Project and key site constraints.

## 3.2. Consultation

Consultation undertaken with community and agency stakeholders since public exhibition of the EIS is summarised below.

### 3.2.1. Agencies and stakeholders

During the EIS exhibition and the preparation of the response to submissions, the following consultation was undertaken with eight agency stakeholders.

Table 3-1 Outcomes of community consultation

| Agency stakeholder | Date | Consultation comments |
|---|---|---|
| **Crown Lands** | Letter sent: 26 | On 26 November 2021 the Applicant sent a letter to Crown Lands |

| Agency stakeholder | Date | Consultation comments |
|---|---|---|
| | November 2021<br>Response received:<br>28 March 2022 | requesting consent to lodge the Blind Creek Solar Farm EIS. The consent referenced two sections of crown land reserved under enclosure permits 486387 (within Lot 1 DP1154765 and Lot 1 DP45669 required for cables and construction laydown area) and 49717 (within Lot 2 DP1154765, required for construction of the solar array).<br>On 28 March 2022 Crown Lands provided a letter of Development Consent for Blind Creek Solar Farm EIS. This letter and its conditions are included in Appendix C. |
| **Biodiversity Conservation Division (BCD)** | Draft BMP sent to BCD on 29 August 2022<br>Amended draft BMP sent to BCD 01 September 2022<br>Response received 9 September 2022<br>Final BMP sent to BCD on 27 September 2022 | The draft Biodiversity Management Plan (BMP) was sent to BCD on 29 August 2022, with an amended version sent on 1 September 2022.<br>A response from BCD outlining deficiencies in the BMP was received on 9 September 2022.<br>NGH addressed comment from BCD, and sent the final BMP to DPE on 27 September 2022. See final BMP in Appendix E. |
| **Queanbeyan Palerang Regional Council (QPRC)** | Teams meeting 15 August 2022<br><br>Updated intersection treatment sent via email<br><br>Draft RTS sent via email1 September 2022<br><br>Response received 6 September 2022<br><br>Email sent regarding royalty payment 19 September 2022 | A TEAMs meeting between representatives from BCSF (the Applicant), Octopus, NGH and QPRC was conducted via team. The QPRC submission was discussed, point by point, with responses detailed in this RTS below. Discussions included:<br>• Details on panel height, orientation, direction, tracking, and difference in 1P and 2P<br>• Views from Weereewa Lookout for hang gliders<br>• Views from Andersen Lookout<br>• Views from the proposed Bungendore Estate<br>• Planting requirements for visual impacts<br>• Impacts of glare to the proposed Bungendore Estate<br>• Status of the airstrip<br>• Confirmation of night lighting<br>• Flooding<br>• Crossings over waterways<br>• Traffic data and public transport<br>• Intersection treatment<br>• Repair and management of public roads<br>• Social and economic considerations<br>• Employment and accommodation.<br>In addition, the Applicant offered to send the draft RTS to Council for their early consideration prior to formal lodgement and exhibition.<br>A copy of the proposed intersection treatment was followed shortly via email. |

| Agency stakeholder | Date | Consultation comments |
|---|---|---|
| | | The Draft RTS was then sent to QPRC on 1 September via email for their early consideration.<br>QPRC responded on 6 September, seeking clarification and correction of the location of the future investigation area for the Bungendore Structure Plan.<br>The Applicant sent an email to QPRC on 19 September to detail the proposed royalty payments for use of the roads, rather than completing a dilapidation report and road repair. |
| **DPE water** | Teams meeting 5 August 2022<br><br>Updated Project sent 30 August 2022<br><br>Response received 7 September 2022 | A teams meeting was held between representatives from BCSF (the Applicant), NGH and DPE Water. It was accepted in the meeting that there was a historical error in the watercourse mapping in relation to Wrights Creek and flow into Butmaroo Creek. DPE Water accepted the overland nature of flow in the site from Wrights Creek to the northern wetland.<br>However, DPE Water requested that the overland flow be treated like a 4th order stream in line with the Guidelines for Controlled Activities on Waterfront Lands and requested an 80m flow path from Wrights Creek to the wetland, free of all solar panels. It was noted on the day that this was not due to any geomorphological reasoning but purely administering the requirements of the guidelines. In response, the Applicant has drafted an alternative approach, noting that the "*recommendation offers meaningful protection of Wrights Creek and its riparian zone".* As an alternative to DPE Water's recommendation to preserve an 80m wide pathway through the solar array free from solar panels, the Proponent proposes that an 0.9 km section of Wrights Creek is fenced off to exclude livestock and is revegetated with native vegetation with the objective of improving the shape, stability (or geomorphic form) and ecological functions of the watercourse for the life of the project.<br>This recommendation was sent to DPE Water and DPIE via email on 30 August 2022.<br>A response was received on 7 September, stating the proposed alternative approach did not adequately address the recommendations for activities on waterfront land. DPE Water reiterated the requirement to provide an unobstructed flow path for Wrights Creek. |
| **RAPs** | Letter sent 1 September 2022<br><br>Addendum ACHAR sent 29 September 2022<br><br>Closing date for comments 27 October 2022 | A letter to each Registered Aboriginal Party (RAP) who registered their interest with the Blind Creek Solar Farm Project was sent a letter via email, notifying them of proposed changes to the Project.<br>An Addendum Aboriginal Cultural Heritage Assessment Report (ACHAR) was provided to the RAPs. The Addendum ACHAR (Appendix C of this report) details all amendments that were not included in the original ACHAR.<br>Consultation from some RAPs was received by the closing date. The RAPs that responded stated that they had no issues with the draft document and agreed with the recommendations. However requested they have the opportunity to gather resources that might be removed |

| Agency stakeholder | Date | Consultation comments |
|---|---|---|
| | | (i.e. soft bark eucalypts) from the development site.<br>Additional mitigation measures addressing potential heritage risk are now included as AH11, AH12, AH13 and AH14. |
| **Transport for NSW (TfNSW** | Email sent 14 September 2022<br><br>Responses received 23, 26 and 27 September | A draft response to TfNSW Submission was sent on 14 September.<br>TfNSW responded on 23 September, noting there was not enough information about the B-double or over size over mass (OSOM) vehicles to properly assess the state road network.<br>In response, NGH noted that the information required was something that would be known and provided once final technology had been selected and the design had been finalised. This would then be addressed as part of the Traffic and Haulage Management Plans.<br>On 27 September, TfNSW noted the comment and have committed to liaise with NGH, the Applicant and DPE accordingly. |
| **Heritage NSW** | Email sent 14 September 2022<br><br>Response received 20 September | A draft response to Heritage NSW Submission was sent on 14 September.<br>A response from Heritage NSW was received 20 September, stating that they would be providing additional advice on salvage around the elevated land body. |
| **Goulburn Mulwaree Council (GMC)** | Email sent regarding royalty payment 19 September 2022<br><br>Response received 23 September 2022 | The Applicant sent an email to GMC on 19 September to detail the proposed royalty payments for use of the roads, rather than completing a dilapidation report and committing to road repairs.<br>A response received from GMC on 23 September was receptive to the concept of royalty payments. This aligns with similar arrangements BCSF have proposed to with QPRC, although Council noted there will need to be an understanding of the road condition prior to construction commencing. |

### 3.2.2. Community consultation

During the EIS exhibition, the following additional consultation activities were undertaken.

Table 3-2 Outcomes of community consultation

| Stakeholder group | Date | Consultation methods and outcomes |
|---|---|---|
| Open Day / site inspection | During EIS exhibition - 25 June 2022. | An open day was held on Saturday 25 June 2022 between 10am - 3pm, to give the local community another opportunity to visit the Project site and to get up to date information about the Project. All stakeholder neighbours who are part of the CBSS were invited. The open day was advertised by BCSF on 8 June in the Regional Independent / local paper as well as a media release issued by BCSF which also ran on 8 June. This issue of the Regional Independent also included the QPRC exhibition notice. A teacher from the local Bungendore primary |

| Stakeholder group | Date | Consultation methods and outcomes |
|---|---|---|
| | | school asked if we could involve school children in the pre-construction heritage survey. BCSF supports this idea of cultural sharing and agreed to progress with Indigenous Elders if the project is approved. |
| Near neighbour meetings | | Three near neighbours (R36, R40, plus one property with no house) on the southern side of Tarago Road claim the project will impact on future rezoning and land values. Enquiries with QPRC indicate there are no plans to rezone this rural land. Refer Bungendore Structure Plan 2048.<br>Discussions were held with near neighbours regarding their concerns about land value impact. BCSF explained the project will have minimal visual impact on their properties and articulated the work done by the NSW Valuer General regarding the impact of wind farms on land values. |
| CBSS recipients | During EIS exhibition | Discussion and finalisation of 36 CBSS stakeholder agreements / Deed Polls. |
| Clean Energy Council 2022 Awards | During EIS exhibition | BCSF was the 2022 recipient of the Clean Energy Council's Community Engagement Award (Clean Energy Council Awards 2022 \| Clean Energy Council) for its<br>"***pioneering solar farm benefit sharing scheme and agrisolar initiatives***." |

REGIONAL INDEPENDENT 8 June 2022

Community News Page 8

# Blind Creek Solar Farm Agri-solar project open day: June 25

After 18 months of specialist studies and community consultation, Blind Creek Solar Farm (BCSF), a 350MW agri-solar project combining renewable energy, battery storage and sheep production, has now submitted its application for Development Approval and been placed on exhibition by the NSW Department of Planning and Environment (NSW DPE).

Project founder and local farmer, Dominic Osborne, said he wanted to thank the community for being so generous with their time and input:

"As long-term locals we have made a huge effort to be transparent, thorough, and genuine in our consultation with the community. Over the last year and a half, we have been so pleased at the extent of the interest in our project and the level of engagement of the community and neighbours in discussions with us, be it through attending site visits, open days, participating in online forums, presentations, meetings and telephone calls. These interactions have been instrumental in shaping the design of the project and has helped to determine how the estimated $3.5m community benefits sharing scheme will be spent over the life of the project, which includes $1.2m for the new Bungendore swimming pool and sports hub."

The project has been specifically designed to allow solar energy production to co-exist with agriculture - BCSF will support lambs, regenerative agriculture practices, a soil carbon-sequestration project, and biodiversity restoration. It is situated on the Currandooley Road, some 7km northeast of Bungendore township and between the Bungendore Sands Quarry and Capital Wind Farm.

The founders have recently joined forces with Octopus Investments Australia and the Clean Energy Finance Corporation (CEFC), whose investment and expertise will enable the project to move into the next stage of development and accelerate its ultimate delivery. Most importantly, the founders are confident that they are working with highly respected, socially conscious investors whose values are exceptionally well aligned with their own.

The founders, Octopus and the CEFC look forward to welcoming you to a project open day, from 10.00am - 3.00pm on 25 June. If you would like to attend, then please register at www.blindcreeksolarfarm.com.au so that we can keep you updated in case the event needs to be moved due to creek flooding.

To find out more about the project, visit our website or email admin@blindcreeksolarfarm.com.au if you have any questions.

REGIONAL INDEPENDENT 8 June 2022

## Community News



# NSW government bans lightweight single-use plastic bags

Taylor Ryan

The NSW government issued a ban on lightweight single-use plastic bags on June 1 to reduce the detrimental impact plastic has on the environment.

South Australia was the first state to introduce the single-use plastic bag ban in 2009, encouraging all other states and territories to adopt similar law reforms. NSW is now the last state to introduce the ban.

Minister for Environment James Griffin says this is the first of many plastic items to make their way out of circulation in NSW this year. He is hopeful that the decision will strengthen environmental conservation in Australia.

'Single-use plastic items and packaging make up 60 per cent of all litter in NSW. By stopping the supply of problematic plastic in the first place, we're helping prevent it from entering our environment as litter, or going into landfill', he said.

The new regulations outline that plastic bags 35 microns or less can no longer be supplied, including biodegradable bags, as they require specialised facilities to decompose. However, thicker reusable bags are still permitted. Further bans will be enforced on November 1, targeting the use of plastic cutlery and polystyrene containers. It is expected that the ban will prevent almost 2.7 million items of plastic litter from entering the environment in NSW over the next 20 years.

Due to the overwhelming production of plastic, tiny plastic particles referred to as microplastics have become a growing issue. Plastic does not readily break down and takes hundreds of thousands of years to decompose. Microplastics are in almost everything, and traces have been found in our food and water as standard water treatment facilities cannot remove all traces of them. Mr Griffin encourages people next time they are using a disposable plastic item to consider the process it needs to go through to be removed from waste sites.

'We each have the power to make positive environmental change at an individual level, and I encourage everyone to choose to go plastic-free as often as they can', insists Mr Griffin.

In partnership with the National Retail Association (NRA), the NSW government has developed a comprehensive retailer education campaign to ensure businesses can phase out single-use plastic bags. Minister for small business Eleni Petinos assures that he will support more than 40,000 businesses to adapt to these changes. The campaign will involve educating retailers on how to find alternatives to single-use plastic so they can comply with the new law reforms.

If you are a business, community organisation or consumer, find out more about the single-use plastic bag bans on the NRA free hotline (1800 844 946).

# QPRC Agenda: meeting June 8

The Ordinary Meeting of QPRC will be held at 5.30pm on Wednesday 8 June 2022 at Council Chambers, 253 Crawford Street, Queanbeyan Despite the easing of COVID restrictions, it should be noted that there is a limited number of public gallery seats available in the Chambers. Presentations can be made in writing or via Zoom.

*Reports To Council - Items for Determination*

- Request from Queanbeyan Respite Centre for Support with Development Application Fees
- Queanbeyan Showground Aboriginal Place Nomination
- Road Naming Proposal - North and South Poplars - Jerrabomberra
- Braidwood Heritage Centre - Construction Tender EOI
- Reconnecting Regional NSW - Community Events Program
- QPRC Community Strategic Plan
- Councillor Remuneration
- Renewal of Licence to Queanbeyan Players over 18 Barrow Place

*Reports To Council - Items for Information*

- Councillor Workshops

If you'd like to make a presentation on any of the matters on the agenda:

Written presentation - submit by midday on Wednesday

Zoom presentation - register by midday on Wednesday

You can register to make a presentation, view or download meeting documents for Council meetings at www.qprc.nsw.gov.au

Business papers and full agenda can be found at https://www.qprc.nsw.gov.au/Council/Council-Business/Minutes-Agendas The meeting can be viewed at webcast.qprc.nsw.gov.au

# Voting for People's Choice Awards finishes this Saturday

The Awards Exhibition is open until the 11th of June in the Q Performing Arts Centre, Queanbeyan exhibition space. It is the public's turn to judge the submissions as the $1000 Viewer's Choice Award is still up for grabs.

Voting for the People's Choice Award is open to all visitors until the close of the exhibition, with the announcement taking place the following week.

This event is the perfect opportunity to get involved in the community and support local artists.

The exhibition is open Tuesday to Saturday 10am to 4pm

A special thanks to the Braidwood and Bungendore Community Bank Branches of the Bendigo Bank for their generous financial contributions.

## Captains Flat Community Information Session

2-6.30pm, Wednesday 15 June 2022
Captains Flat Health Centre, Foxlow Street, Captains Flat

Local residents and community are invited to drop into the Captains Flat Health Centre , on Wednesday 15 June, to find out more about the progress being made by the multi-agency taskforce to manage lead levels on the Lake George Mine site and on public land in Captains Flat.

Representatives from the NSW EPA, NSW Health, Transport for NSW, Department of Regional NSW, Crown Lands, Local Land Services and the Queanbeyan-Palerang Regional Council will be available to answer questions.

**Enquiries:**

E info@regional.nsw.gov.au
W nsw.gov.au/regional-nsw/captainsflat

NSW GOVERNMENT

## Blind Creek Solar Farm

**OPEN DAY**
**SATURDAY 25 JUNE**
**10AM - 3PM**

Please join us to find out more about the 350MW Blind Creek agri-solar farm which is now on exhibition at the NSW Department of Planning & Environment.
The project site is on Currandooley Rd approximately 7km northeast of Bungendore between the Bungendore Sands and Capital Wind Farm.

Come along and find out more about the site, the environmental and heritage studies and the Community Benefit Sharing Scheme.

Please RSVP at www.blindcreeksolarfarm.com.au (so we can let you know if the creek is flooding and we need to move the event to another location)

**www.blindcreeksolarfarm.com.au**
**FREECALL: 1800 312 732**

# 4. Response to submissions

## 4.1. Applicant's response to public submissions

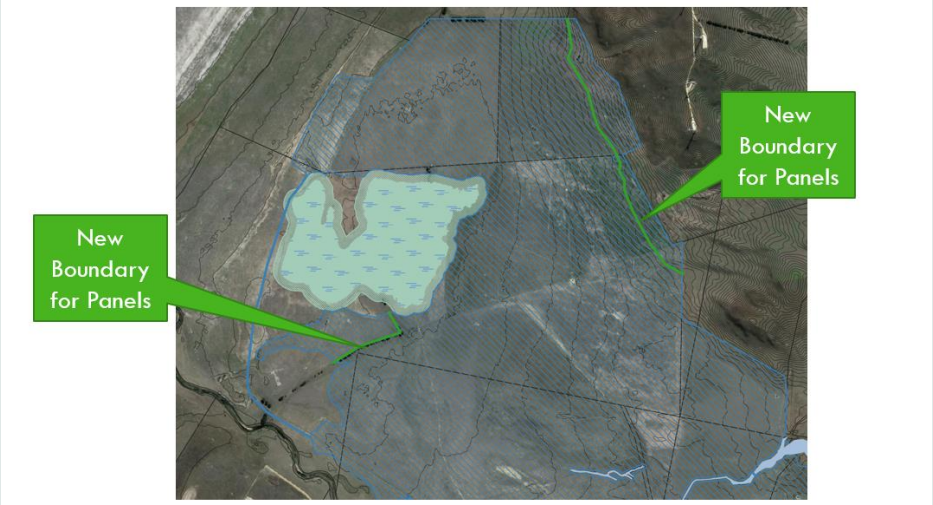
Each issue raised through public submissions is addressed below. Submission IDs are used to show the number of submissions that raised a particular issue. These issues are categorised as outlined in Section 2. Where consideration of the issue has led to further investigation or a change to the Project, this is summarised briefly. The detail of further investigations and Project amendments are included in the Blind Creek Solar Farm Amendment Report.

| Issue | Number of submissions | Detail of issue | Applicant response |
|---|---|---|---|
| **Agriculture** | 23 | **Support: 21**<br>Letters of support highlight that the area is located in an agricultural region. Submissions have noted that the co-design of the Project with the fat lamb operation adds credibility that grazing sheep is a genuine dual use of the land for agriculture and energy production.<br><br>**Objections: 2**<br>Objection states that the BCSF would take land away from farming. | **Support response**<br>The founders of the BCSF note that the solar farm would be part of a broader program to increase the resilience of this property while enhancing its livestock carrying capacity and addressing climate change. They note that it makes sense to use degraded country to become renewable energy farmers. The solar farm will co-exist with lamb production, regenerative agriculture, a soil carbon project, a green-waste humus compost facility and restoration works to improve the biodiversity and water-holding capacity of the catchment.<br>The site is primarily located within land that has low to moderate capacity for agriculture. Recent evidence from a solar farm near Dubbo has shown that grazing sheep around solar panels can improve the quality and quantity of wool, and overall better living conditions for the animals. The panels have been shown to provide shade and protection from the elements for sheep, which along with condensation dripping from panels prevents soils from drying out and assists in the growth of grasses and pasture. In addition, security fencing (if used) offers protection from predators such as foxes and wild dogs. The Project will take advantage of these benefits to provide a sensible agricultural return.<br>**Objection response**<br>The Project has gone to lengths to ensure that agriculture is not removed from the Development site. This is described above, and it is shown in the 23 letters of support received that commend the agrisolar approach taken by the Applicant. While it is noted that the solar farm would result in the alteration 682.5ha of agricultural land for the life of the solar farm, losses to agriculture are being mitigated by grazing sheep on the site. The design of the solar panels has been altered from a traditional panel layout to allow for 5-9m spacing. There will be no loss to agriculture due to livestock grazing being more intensive than currently exists. The benefits of the proposed Project are expected to exceed those of the current land use. |
| **Emissions reductions** | 22 | **Support: 22**<br>The letters support the Project's contribution to a transition away from fossil fuel-based energy production. | The high level of community support given to the BCSF in relation to emissions reductions is a positive step for the renewable energy sector, whose successful roll out is important to long term climate mitigation. This is an important part of the strategic context for the Project. It aligns with global, national, state-wide and local initiatives to address climate change. The Project will save approximately 521,000 $tCO_2e$/yr in comparison to a similar capacity brown |

| Issue | Number of submissions | Detail of issue | Applicant response |
|---|---|---|---|
| | | | coal power generation facility. |
| **Employment** | 13 | **Support: 13**<br>Submissions raised appreciation for the Project's consideration of job opportunities in construction and ongoing through operation.<br>**Comment: 1**<br>One comment was raised; that that the panels should be Australian made. | **Support response**<br>Employment in the renewables sector is rising and could reach 44,000 nationwide jobs by 2025 (AEMO, 2022). Recent Labor party climate policy released in December 2021 claims that investment in climate mitigation could create 604,000 extra jobs by 2030 (ALP, 2021).<br>An important part of the development of the Project has been in relation to spreading its benefits to the locality and region. Employment is a central part of this discussion. Specifically, the BCSF will generate:<br>• Approximately 300 direct construction jobs and up to 480 additional indirect jobs with an anticipated 50% local workforce contribution. A total of approximately 780 jobs (300 direct jobs and 480 indirect jobs) are therefore expected to be generated by the Project during the construction phase<br>• Approximately 6 jobs (5 direct and 1 indirect) are expected to be generated by the Project in the LGA with a further 9 indirect jobs outside of this area during operation. These jobs would be ongoing throughout the expected 35-year lifespan of the solar farm.<br>• Increased and more intensive agriculture use of the site will create one job in addition to the existing level of employment to service the balance of the land. **No agriculture-related jobs would be lost as a result of the Project**.<br>Further details regarding employment commitments of the project will be included in the Local Industry Participation Plan, Local Procurement Policy and Employment and Accommodation Strategy highlighted in Section 9.6.4 of the EIS (NGH , 2022)**.** As part of the Plan, it will be a requirement of the EPC contractor to host a Local Contractor Day, giving local contractors the opportunity to register their interest and participate in the Project. Updated mitigation has been included in S2 (Appendix B).<br>**Comment response**<br>The material sources would be determined in the final stages of Project delivery. The Applicant has noted that bulk materials will be sourced from local quarries but the extent to which panels can be Australian sourced is not currently known. |

| Issue | Number of submissions | Detail of issue | Applicant response |
|---|---|---|---|
| **Consultation Process** | 13 | **Support:13**<br>Submissions applaud the open and consultative approach taken by the Applicant. | The engagement philosophy was considered early and allowed the Project to be proactive to issues raised by the community. The consultation team for the Project was made up of the founders of BCSF, who are the majority landholders, and live on the Development site. They are part of the local community, and as such committed to early and considerate community engagement, which is a key message in the DPE Social Impact Assessment Guideline for State Significant Projects.<br>BCSF offered a host of consultation opportunities including:<br>• Face to face meetings and presentations<br>• On site visits, presentations and discussion sessions<br>• Emails, texts, telephone calls<br>• BCSF project website<br>• Dedicated freecall number<br>• Dedicated email address<br>• Media releases<br>• Online Community Information Sessions<br>• Open Days<br>• Specific stakeholder group on site meetings and discussion sessions.<br>BCSF provided updates to their website, which are ongoing at www.blindcreeksolarfarm.com.au<br>The proactive response highlighted the positive parts of the Project as well as portions of the Project that concerned stakeholders. This lead to specific initiatives taken which are highlighted in Table 6-3 of the EIS. These initiatives include changes such as improved vegetation screening, elimination of panels on elevated sections and specific considerations that will be included in the final Community Benefits Sharing Scheme (CBSS). |
| **Energy security / prices** | 10 | **Support: 10**<br>Submissions acknowledge the importance of local renewable energy and energy storage and note the potential these projects | The Project would improve energy security primarily through the inclusion of the BESS. The BESS will provide firmed energy (energy available on demand) to the grid which is a key consideration that mitigates the risk of variable energy sources such as solar.<br>With the right policy framework, solar power generation is expected to reduce the overall wholesale cost of energy that will flow down to the consumer (AEMO, 2022). With energy |

| Issue | Number of submissions | Detail of issue | Applicant response |
|---|---|---|---|
| | | have to secure energy sources and lead to lower electricity prices for consumers. | prices rising rapidly in early and mid-2022 the Australian Energy Markey Operator (AEMO) has noted the cost of electricity is a matter that requires urgent attention. Investment in low-cost renewable energy and essential transmission (and this includes storage along transmission) is the best strategy to protect against higher prices as stated by the AEMO in the 2022 Integrated System Plan (ISP) (AEMO, 2022). |
| **Environment (general)** | 7 | **Support: 6**<br>Appreciation of the overall environmentally conscience design of the Project noted.<br>**Object: 1**<br>States that there is no use constructing the solar farm without a battery onsite. | **Support response**<br>The founders of the BCSF commenced the project with a high appreciation of the environmental values of the site and local area. As local land owners they are interested in a wholistic approach to development that makes sense to use degraded country for renewable energy while excluding areas of native habitat and riparian areas contributing to catchment values early in the project's design. The solar farm will co-exist with lamb production, regenerative agriculture, a soil carbon project, a green-waste humus compost facility and restoration works to improve the biodiversity and water-holding capacity of the catchment.<br>**Object response**<br>Battery Energy Storage is proposed and has been described in the EIS (NGH , 2022). The BESS proposed would have a nominal capacity of up to 300MW/600MWh. Battery storage is considered to add significant value to the BCSF project. |
| **Views** | 7 | **Support: 6**<br>Submissions were generally happy with the Project's inclusion of vegetation screening. These comments predominantly come from nearby landowners, who in some cases would have direct views of the turbines of the nearby Capital Wind Farm.<br>**Object: 1**<br>One objection outlines the solar farm would negatively impact views | **Support response**<br>The feedback from the local community has been vital to developing effective visual mitigation strategies for the project. Underpinned by the specialist assessment and consultation undertaken in the Landscape Visual Impact Assessment by Moir Architecture Pty Ltd (Moir Landscape Arcitecture , 2022) the Applicant is confident that visual impacts can be effectively managed.<br>**Object response**<br>The Technical Supplement – Landscape and Visual Impact Assessment for Large Scale Solar Energy Guidelines (2022) - states that dwellings in excess of 4km do not require assessment. However, at the commencement of the project the Applicant determined that extensive individual community consultation would be carried out with residents with a potential view of the project up to 6km away. To the south-east of the project the consultation line was drawn at |

| Issue | Number of submissions | Detail of issue | Applicant response |
|---|---|---|---|
| | | from their property, which overlooks the Lake George and surrounds. | the Kings Highway. The respondent's property was not considered within the scope of works of the Project due to resident's location being over 6km from the nearest panels.<br>In addition, the extent of their horizontal view of the Project (based on a desktop assessment alone i.e. not taking into account any vegetation) is less than 20º of their entire view, which is minimal. Although the project may be visible, it is unlikely to result in an unacceptable level of impact.<br>The Applicant has also made a commitment to reduce potential visual impacts from Lake Road (which overlooks the lake), by avoiding placing panels above the 691m contour line in areas within or bordering Lot 17//535180 and west of the stablished Elms between the wetland and Butmaroo Creek. Refer to Figure 4-1 below.<br>  <br><br>Figure 4-1 Reduction of panels |
| **Aboriginal heritage** | 6 | **Support: 6**<br>Submissions have noted the Project's inclusion of First Nations school students and residents in | The Applicant wishes to thank all the local Indigenous Elders and Indigenous representatives that have been involved in the Project since discussions begun in December 2020.<br>BCSF will continue to work with the Aboriginal community stakeholders and agencies in developing the Cultural Heritage Management Plan (CHMP) and in creating the Indigenous |

| Issue | Number of submissions | Detail of issue | Applicant response |
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| | | the artefact salvage works. It is noted in one letter of support that caution should be taken in regard to potential impacts to Aboriginal cultural heritage that may not be clearly understood in the present time. | Cultural and Heritage and Learning Zone (ICHLZ) if the Project proceeds. It is noted the CHMP must be endorsed by NSW Heritage and DPE.<br>BCSF will continue to work with RAPs when designing habitat restoration / revegetation / visual screening projects along Butmaroo Creek, the White Fronted Chat exclusion area and any other area within the ICHLZ |
| **Traffic** | 3 | **Support: 2**<br>The submissions note that the Applicant may wish to explore alternative access routes for materials delivery to manage the traffic generation load through the local road network. An access route via the Federal Highway through Bungendore was suggested. It is also noted that the road impacts are considered minor when compared to the rapid nature of nearby housing developments.<br>**Object: 1**<br>Objections related to increased traffic that would affect established housing along Buckingham Estate, Lake Road and surrounds. The submission cites that the road quality is already poor in the area and that any additional traffic would significantly impact the local community. | **Support response**<br>The preferred haulage route has been considered via the Hume Highway, Braidwood Road and Tarago Road as shown in Figure 9-1 of the EIS (NGH , 2022). This route is direct and provides good access from ports in Sydney. It also avoids additional heavy vehicle noise and traffic impacts through Bungendore that would occur if the Federal Highway were chosen as an access route.<br>It is acknowledged that the road pavement is poor and has been highlighted as part of an extensive programmed Council maintenance works, which are currently ongoing. Stage 1 works includes a 2km section from south of Mount Fairy Road north, and will be completed early 2023. This is particularly relevant to sections of Tarago Road. While the Traffic Impact Assessment (TIA) has determined the level of service is sufficient, in response to agency and community concerns regarding traffic, the applicant now commits to providing a royalty payment based on construction traffic volumes on Tarago Road to address road pavement issues specifically (AT5, Appendix B).<br>**Object response**<br>As stated above, the primary haulage route would be via the Hume highway, and, as such, there would be minimal impact to local roads such as Lake Road and around Buckingham Estate. Increased traffic would be experienced in the local area but it would be limited to light vehicles and regional deliveries such as concrete trucks and water trucks. The TIA noted that the increase of 53-71 vehicles per hour during peak morning and evening periods during peak construction would still allow the Tarago Road to provide a good level of service in line with the RTA Guide to Traffic Generating Developments. The peak is a relatively short time frame over months 5-7 of the construction program. Refer to Figure 4-17 which shows these movements |

| Issue | Number of submissions | Detail of issue | Applicant response |
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| | | | are overwhelmingly attributable to light vehicles.<br>It is noted however that the road is currently in poor repair in sections and in discussion with the Councils, royalty payments are now proposed to assist in the local road upgrade program. |
| **Biodiversity** | 3 | **Support: 3**<br>Support for the project's avoidance of biodiversity values where possible, and emphasis on biodiversity restoration. | As local land owners, the Applicant and founders are interested in a wholistic approach to development that uses the degraded country for renewable energy while excluding, protecting and enhancing areas of native habitat and riparian areas contributing to catchment values. This was undertaken early in the project's design and supported by the detailed biodiversity and hydrological studies undertaken by NGH 2022 and Footprint 2022 in the EIS.<br>In addition, the Applicant has committed to developing a BMP in consultation with BCD (Appendix E), which aims to restore at least an equivalent amount of White Fronted Chat breeding habitat within the Development Site around Butmaroo Creek and the perimeter of the northern wetland. |
| **Glint and Glare** | 2 | **Support: 2**<br>While in support, these letters note glint and glare was initially of concern but is now not considered likely to be an issue.<br>The residence located on the western side of Lake George raised concerns with the Applicant that the Reflective Glare Assessment indicated their property may experience some glare during construction. The resident contacted BCSF Pty Ltd to raised the concern. BCSF Pty Ltd then reissued an amended Glare Assessment which outlined mitigation that would be taken to | In relation to these submissions, the Applicant consulted specifically, providing further information and mitigation. |

| Issue | Number of submissions | Detail of issue | Applicant response |
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| | | avoid impacts to this resident. | |
| **EIS (general)** | 1 | **Objections: 1**<br>The objection states that with the current weather patterns the EIS is out of date as the current water storage on Lake George is at an all-time high and the records contained in the EIS needs to be updated to include the flora and fauna impacts that will occur if this major development is to be approved. | **Objection response**<br>Hydrological modelling is based on the catchment's morphological characteristics as well as the flood data recorded over multiple years and is considered robust to the conditions at the time of the assessment.<br>Similarly, the Biodiversity Assessment Method used to assess the project stipulates specific seasonal windows and minimum survey effort required to conclude that species to not require further assessment or offsetting. NGH has worked closely with BCS including undertaking site inspections with BCS in order to ensure the survey methods and conclusions are appropriate to the site. In general, the areas to be developed for the BCSF are highly modified pastures within the areas containing more intact habitat avoided and protected, as part of the Project's commitments. |
| **Connection to the Grid** | 1 | **Support: 1**<br>Submissions note the Project is well situated nearby a 330kV transmission line. | This was a key consideration of the Project to limit any need for extensive transmission work to connect the Project to the grid. |
| **Justification** | 1 | **Objections: 1**<br>Submission questions the Project justification, noting a number of associated projects proposed by the Applicant that have been approved and not started due lack of economic gain (Capital Wind Farm extension, Capital Solar Farm for example). | The Applicant is not associated nor has had any affiliation with any other SSD projects in the area. The Applicant has every intention of moving forward with this project. It is worth acknowledging that there are many variables that affect whether a project goes ahead and the timing when it does, such as equipment pricing, exchange rates, electricity market conditions and economic downturns. These variables are constantly changing. BCSF is a project located in a strong part of the grid, in the State with the greatest energy demand in Australia (NSW) and is being developed at a time when many of the large generators (namely coal-fired power stations) are starting to retire. These factors are all positive for BCSF going ahead within the timescales indicated in the EIS.<br>Approval has been granted for the 50MW Capital Solar Farm on land neighbouring the Blind Creek Solar Farm Development site. There is also a legacy planning approval for nine wind turbines within the proposed Blind Creek Solar Farm project boundary, as part of Capital 2 |

| Issue | Number of submissions | Detail of issue | Applicant response |
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| | | | Wind Farm.<br>Since these projects were approved, technology and market conditions have changed. The Blind Creek Solar Farm is now considered by the Applicant to be a more appropriate and viable development and as such, if the Blind Creek Solar Farm is approved with satisfactory conditions to enable Blind Creek Solar Farm to proceed, the existing approvals for the as yet undeveloped Capital Solar Farm and those nine wind turbines, being a part of Capital 2 Wind Farm, would not be pursued. |

## 4.2. Applicant's response to organisations

Issues raised in the five organisation submissions are summarised and answered below. The key from each organisation have been summarised and answered. Where consideration of the issue has led to further investigation or a change to the Project, this is summarised briefly.

| Name | Issue | Detail of issue | Applicant response |
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| Tarago and District Progress Association Inc (TADPAI)<br>(Object) | Green waste and agriculture response | TADPAI notes that the Applicant proposes dual use of the land (solar farm and sheep grazing). The Applicant also advises: "*Additionally, the landholder is separately pursuing approval for a green-waste humus compost facility*" (Reference B, Page 11). TADPAI could not find on the maps and diagrams within Reference A the location of the ancillary equipment and facilities for sheep farming, nor the proposed location of the green-waste composting facility. | The *green-waste humus compost facility* has development approval from QPRC (ref DA.2019.1301 20 Jan 2021). The green waste compost facility is not within the BCSF project site.<br>There will be no permanent sheep farming equipment housed within the Development footprint. Existing sheep yards, shearing shed etc. are located offsite. |
| | Electricity prices response | The proposed Blind Creek Solar Farm, the proposed Gundary Solar Farm and all future solar farms should have a regulated pricing per MW based on initial investment, annual operating cost, decommissioning costs and reasonable return on investment, taking into account all Government investments and rebates. All | All SSD projects must report their Capital Investment Value (CIV) in their assessment which is determined through a quantity surveyor's report. While it is not specifically required that energy generation projects include a detailed pricing per MW, the CIV and the output of the Project are taken into |

| Name | Issue | Detail of issue | Applicant response |
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| | | of which are reasonably known across the facility's usable life upfront for the type of technology being used. At no stage should the pricing of electricity from this or any solar farm be linked to and calculated on market demand. It is not just renewable energy that is being sought, but these types of projects should be able to also provide long-term stable and consistent pricing. | consideration when DPE make their final determination. |
| | TADPAI is not satisfied with traffic assessment conducted by Amber consultants for this project. | TADPAI believes that the Amber consultants reached the wrong findings and recommendations for the following reasons:<br>1. Amber consultants did not consult with the TADPAI or the Goulburn Mulwaree Council (GMC).<br>2. Amber has been selective in its description of the Tarago Road (Section 2.2) – the Tarago-Bungendore Road has narrow sections that are not designed and are poorly maintained for the heavy vehicles that use the road now, which now results in many near misses;<br>3. Amber assumes that given the current use of the Tarago-Bungendore Road by heavy vehicles that it is therefore appropriate to allow more heavy vehicles - this road is not designed for use by modern heavy vehicles - case in point Hi Quality SSD licences forbid its heavy vehicles from using the Tarago-Bungendore Road;<br>4. Amber used outdated 2008 vehicle data (Section 2.3) as its baseline data which does not take into account the changed nature of Veolia's Woodlawn operations and aspirations to increase regional waste volumes from 130,000 tpa to 200,000 tpa, and that in 2008 the tonnage of waste and gravel/sand being moved by road was minimal compared to today;<br>a. in 2008, the road between the Canberra Region and the NSW South Coast (Nowra region) was | Due to the number of comments made by TADPAI, each dot pointed comment in the submission has been numbered in the left-hand column. The responses below relate to the corresponding numbered item from TADPAI:<br>1. Tarago Road is a Regional Road and not located within the GMC LGA. GMC LGA was not consulted with specifically as the TIA (Amber, 2022) did not specify any required upgrades to Tarago Road in the GMC LGA. Consultation is underway with GMC to discuss royalty payments along Tarago Road that may be split between QPR council and GMC. TADPAI is not a public agency or roads authority for Tarago Road and as such they were not required to be consulted with as a part of the Project.<br>2. The TIA (Amber, 2022) has provided a review of Tarago Road within the vicinity of the site and a crash search along the road which indicates the road is operating in a relatively safe manner.<br>3. Tarago Road is the only access option for the Project, while it is not a TfNSW approved B-Double route this is standard for most regional roads. B-Double and heavier movements would all be subject to road permits in the post approval stage of the Project. |

| Name | Issue | Detail of issue | Applicant response |
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| | | gravel in many parts, today it is sealed all the way and the primary route between Canberra and Nowra;<br>5. Amber's description of road use is wrong - morning traffic is heavy because of gravel trucks and waste trucks movements, and it is not uncommon to encounter up to 8 waste trucks and 8 gravel trucks on the Tarago-Bungendore Road in a journey before sunrise - a safety matter that the Veolia Community Liaison Committee has raised with Veolia.<br>6. Amber identification that there is no public transport services (Section 2.4) is wrong - there are several school bus routes along the Tarago-Bungendore and Braidwood Roads, and there is a poorly sited bus stop on the corner of Braidwood Road and Wallace Street within Tarago;<br>7. Notwithstanding that some bureaucrat has approved an articulated vehicle route through Tarago, the reality is that no articulated vehicle can turn legally and safely off Braidwood Road into Wallace Street, and vice versa;<br>8. Incidentally a new roundabout has been built on the Tarago-Bungendore Road at Elmsgrove that may prevent large oversize and B-double vehicles from accessing the site proposed for the Blind Creek Solar Farm from Bungendore;<br>9. Amber has not identified the hill climb between Crisps Creek Intermodal and Collector Road on the Tarago-Bungendore Roads and associated issues and challenges;<br>10. Amber does not appear to have identified all the accidents (Section 2.6) that have occurred on the Tarago-Bungendore and Braidwood Roads, and on the corner of Braidwood Road and Wallace Street; | 4. Please refer to QPR Council response; an updated traffic count has been completed based on field observations from Monday 1 August 2022 to Sunday 7 August 2022. The traffic count recorded the following:<br>• An average traffic volume of 1,363 vehicles per day;<br>• The morning peak hour recorded an average of 117 vehicles per hour; and<br>• The evening peak hour recorded an average of 120 vehicles per hour.<br>The survey results indicate Tarago Road currently accommodates a low level of traffic. The site is expected to generate in the order of 57 vehicle movements in the peak hour during peak construction.<br>5. The description of Tarago Road in the TIA is not considered to be incorrect or inaccurate. Section 3.3 of the TIA (NGH , 2022) notes the sand quarry that is serviced by Tarago Road, and the gravel/waste trucks were appropriately included in existing traffic estimates.<br>6. Bus services have now been identified in response to the QPR Council response:<br>Bungendore Bus and Coach has a minibus that leaves the bus depot at 6:25am that travels to Mount Fairy Road and then returns to Bungendore by 7:15am. A large bus leaves Bungendore at 7:50am and travels to Taylors Creek Road and travels back to Bungendore by 9:00am. The large bus leaves Bungendore Primary School at 3:10pm and travels to Taylors Creek Road and returns by 4:15pm. The minibus leaves Bungendore at 4:35pm to Mount Fairy Road and is back at Bungendore by 5:25pm.<br>It is recommended that heavy vehicle movements occur |

| Name | Issue | Detail of issue | Applicant response |
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| | | 11. Section 3.1.1 is a throw away section - the reality based on first hand experience is that logistic trucks will seek to be on site at the start of days operations and therefore will travel to site outside of normal operating hours - this two way heavy vehicle pre-dawn traffic will increase the risk of accidents occurring during construction;<br>12. oversize loads may need trees trimmed to allow travel along parts of the Tarago-Bungendore Road and within the village of Lake Bathurst;<br>13. there are bridges with weight limits not addressed;<br>14. Section 3.3 does not provide an accurate assessment on the condition of the Tarago-Bungendore Road;<br>15. Section 3.4 is wrong - depending on EIS approvals and Develops mine site reconstruction, it is possible that there will be three major constructions occurring and being supported by logistics delivered along Braidwood and Tarago-Bungendore Roads;<br>16. Route Assessment (Section 4) is based on Blind Creek Solar Farm own needs, and with the potential for 13 plus SSD in the area, consideration should be given to Hume Highway and an on and off ramps to Windellama Road and the diverting of heavy traffic away from through Goulburn;<br>17. Section 5 does not address vehicle turning on or off Braidwood Road within the village of Tarago;<br>18. Section 5 does not address the frustration of faster light vehicles being stuck behind slow heavy vehicles climbing uphill from Crisps Creek Intermodal on the Tarago-Bungendore Road;<br>19. Amber does not identify Veolia's $3m contribution to the maintenance/upgrade of Tarago-Bungendore Road that is only now being started and the possible damage that | outside of times when school buses will be present on Tarago Road.<br>7. The route through Tarago has been administered and approved by TfNSW. As such, cannot be addressed in this RTS.<br>8. A review of the route will be provided by for larger trucks. This will be undertaken with the National Heavy Vehicle Regulator (NHVR).<br>9. The hill between Crisps Creek Intermodal and Collector Road is not expected to present significant issues for vehicle traffic. It is not considered an issue requiring reassessment.<br>10. The crash search has provided the relevant crash data provided by TfNSW.<br>11. The proposed traffic volumes and timing remain consistent with the TIA (Amber, 2022). The TIA does note allowance for construction outside of work hours but this would be up to the appointed construction contractor and subject to approval from the relevant authorities. Travel to site outside of normal operating hours is not expected to increase accident risk considering this would generally avoid peak traffic periods.<br>12. A review of the route will be provided by the appointed contractor as part of the relevant permits for larger trucks. This will include any recommendations for tree pruning.<br>13. A review of the route will be provided by the appointed contractor as part of the relevant permits for larger |

| Name | Issue | Detail of issue | Applicant response |
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| | | its construction vehicles could do to the new road segment - who pays for any corrective work?; | trucks. This will include an assessment of all bridge loading along the access route.<br>14. The TIA provides a review of the capacity of the road network and not a detailed assessment of the current road surface which is the responsibility of the relevant Council as a roads authority to maintain. A consideration of royalty payments to QPR Council and Goulburn Mulwaree Council is in progress and is now a commitment in the RTS.<br>15. The Applicant is not aware of other project construction schedules. However, potential cumulative impacts with other major construction and consultation with the other relevant developments will be addressed in the TMP to reduce any traffic impacts.<br>16. Noted: this comment is out of scope for the current project and should be referred to TfNSW.<br>17. This intersection is within an approved B-Double route. A review of the OSOM vehicle route will be provided by the appointed contractor as part of the relevant permits for larger trucks.<br>18. The section of Bungendore Road in question is approximately 2.2km in length. Due to this short length any potentially slow vehicles are not expected to cause significant delays.<br>19. Noted, however as stated above, Council royalty payments are now a commitment of the Project. |
| Bungendore Rural | The submission supports the | Bungendore Rural Services Pty Ltd highlights the project's benefits towards reliable and sustainable power generation. | The BCSF is committed to delivering a project which would be beneficial to the local area. |

| Name | Issue | Detail of issue | Applicant response |
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| Services Pty Ltd<br>(Support) | clean energy production and sustainability proposed by the project along with the project benefits. | The company appreciates that the project will create local jobs, bring infrastructure to the locality and support it brings towards community organizations.<br>The company appreciated that the Applicant has a plan in place to pass part of the project earnings to the local community via Bungendore Rural Services Pty Ltd.<br>The company appreciates the design considerations proposed to minimize impact on surrounding landowners. | The Project would support approximately 300 direct jobs over the construction period, with up to 50% of employment opportunities coming from the local or regional area. It would employ approximately 5 full-time equivalent service and maintenance jobs during operation and development of new skilled labour in the region within the growing renewable energy industry.<br>Through its Community Benefit Sharing Scheme (CBSS), the Project is sharing the financial benefits of the Project with relevant community stakeholder groups, equivalent to approximately $330/MW per year. As part of this scheme, the Proponent and Queanbeyan-Palerang Regional Council have agreed a form of Voluntary Planning Agreement (VPA), through which the Proponent will provide a 'development contribution' of $1.25m over 20 years to Council. This contribution will be used for installing, maintaining and operating a swimming pool in Bungendore and/or other facilities within the planned Bungendore sports precinct.<br>The Project has been sited to minimise adverse impacts on water quality and local catchments by setting back from creeks, Lake George and applying sensitive design within the Wrights Creek flood plain, including by minimally crowned tracks, aligning tracks with the flows and crossing in lower impact areas. All woodland vegetation has been avoided. |
| Cleanseeds Pty Ltd<br>(Support) | Supports the overall projects and appreciates its contribution to slow down climate change. | Cleanseeds supports renewable energy production.<br>It appreciates Applicant's initiative to allow agricultural production under solar farms and strongly believes that this will be fruitful.<br>It believes that the surroundings will have minimum impact based on the location of the project and the passing of TransGrid | The Applicant would like to thank Cleanseeds Pty Ltd for their support in this burgeoning agricultural opportunity and would like to emphasize on following plans to maintain agricultural production within development site under the solar panels:<br>• Design of panel height and spacing to allow commercial levels of sheep grazing within the Development site. |

| Name | Issue | Detail of issue | Applicant response |
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| | | transmission line through the project area. | • Ground cover management plan to ensure adequate groundcover would be maintained to protect soil and water values and retain productive pastures. |
| Denrith Pty Ltd<br>(Support) | Supports overall project and appreciates the project contribution towards sustainable Agri-solar. | Denrith supports the project as it helps reduce greenhouse emissions.<br>It supports Applicant's initiative to contribute $330 per MW per year to a community benefit sharing scheme.<br>It acknowledges the job creation and its direct and indirect benefits for the community.<br>Denrith also strongly agrees that solar panels will create a favourable environment under them to improve soil quality. | The Applicant would like to thank Denrith Pty Ltd for their support. The Project directly and indirectly supports locals and local economy while our proposed mitigation measures along with the design considerations will help to minimize any potential impact to the surrounding areas.<br>It is anticipated that in this landscape the solar panels will provide a microclimate effect beneath the panels, reducing temperature extremes and increasing soil moisture which will benefit soil conditions and associated fertility. |
| Ecowise Services<br>(Support) | Supports employment and opportunity to boost local skills during operation and maintenance. | Ecowise believes that this project will help upgrade skills of local workforce by providing employment opportunity during operation and maintenance. | The Applicant would like to thank Ecowise Services for their support and acknowledgement that the project will support local jobs which will help upskill the local labour market.<br>As above, it is anticipated up to 50% of employment opportunities of the BCSF would taken up from the local or regional area. |
| Fraish Consulting<br>(11 signatories)<br>(Object) | Organisation and associated signatories from residents object to the visual impact assessment undertaken in | With respect to the visual impact of the Project, it is requested that prior to further assessment of this Development Application that the Applicant be asked to provide a revised visual impact assessment that includes:-<br>• 3d modelling of the existing terrain (NSW 1m Lidar is available) and the development structures at their full height extension be carried out.<br>• Views of these models be provided from important locations on surrounding properties demonstrating the | The submission states that the Visual Impact Assessment (VIA) *'does not provide any 3d modelling, elevations or photos that accurately depict views of the proposed infrastructure from surrounding properties'*, this statement is not considered genuine with reference to the modelling example shown in Figure 4-2.<br>The VIA (updated and included in Appendix F) included 3D modelling based on a Digital Terrain model to create a Zone of Visual Influence (ZVI) map. This ZVI model used a modelled |

| Name | Issue | Detail of issue | Applicant response |
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| | the EIS. | visual impact.<br>• These views be produced with modelling superimposed on photographs.<br>• Consult with surrounding landowners to establish their important locations on their property where there is concern over visual impact.<br>• Identify where the panels obstruct water views of the lake.<br>• Provide detailed simulated data on the angles of the arrays and the resulting daily and seasonal glare that will result from the surrounding properties.<br>The submission makes specific reference to the following receiver and viewpoint locations, which have not had sufficient consideration of visual impact, according to their assessment:<br>• VP04 (800 Tarago Road)<br>• VP05 (Tarago Road)<br>• VP06 (4586 Kings Highway)<br>• VP15 92 (The Forest Road)<br>• VP16 449 (Lake Road)<br>• VP17 68 (The Forest Road)<br>The following receivers are noted as having potential views within 2km of the Development footprint but did not have photographs of their viewpoints provided and further evidence is required to determine their impact;<br>• R37 (886 Tarago Road)<br>• R38 (886 Tarago Road)<br>• R40 (996 Tarago Road)<br>*Note: An Example is provided of the viewpoint from VP04 (800 Tarago Road) in the submission (refer to Figure 4-2). This image appears to be elevated about the property and not representative* | panel height of 5m, which are the tallest infrastructure components onsite. The ZVI map is shown in Figure 4 of the VIA (Moir Landscape Arcitecture , 2022).<br>The figure provided by the submitter shows an example of views from VP04 (800 Tarago Road), however the photograph seems to be taken from an elevated location that is not representative of the typical view from the residence at VP04. The image also uses a red colour to indicate the location of the solar farm which is not indicative of the colours of vegetation and solar arrays that would be present on site. In addition, panels have been overlaid on areas that are not considered as part of the Project. The figure provided is more in line with that presented in the Scoping Report before the development was refined through the EIS process.<br>The image provided in the VIA for VP04 has been included below as Figure 4-3. This shows a more realistic view from ground level at the property in question. It should be noted that 3D modelling is included in the image however it is not easily viewed from VP04 and views of the Development site are fleeting from ground level (Moir Landscape Arcitecture , 2022). A clearer view of the 3D modelling in the VIA is provided for VP14 which has been provided below as Figure 4-4 for reference.<br>The assessment of receivers R37, R38 and R40 did not include photographs due to the properties lack of elevated views and significant vegetation screening. This is shown in the VIA in Figure 7 (Moir Landscape Arcitecture , 2022).<br>A summary of the details for each signatory is detailed in the table below. Refer to Figure 4-5, showing the location of signatories in the Fraish submission |

| Name | Issue | Detail of issue | Applicant response |
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| | | *of the views from the dwelling at 800 Tarago Road which was provided at ground level in the Landcape and Visual Assessment* (Moir Landscape Arcitecture , 2022). | |

Figure 4-2 View from VP 04, 800 Tarago Road of Project area as provided by Fraish Consulting

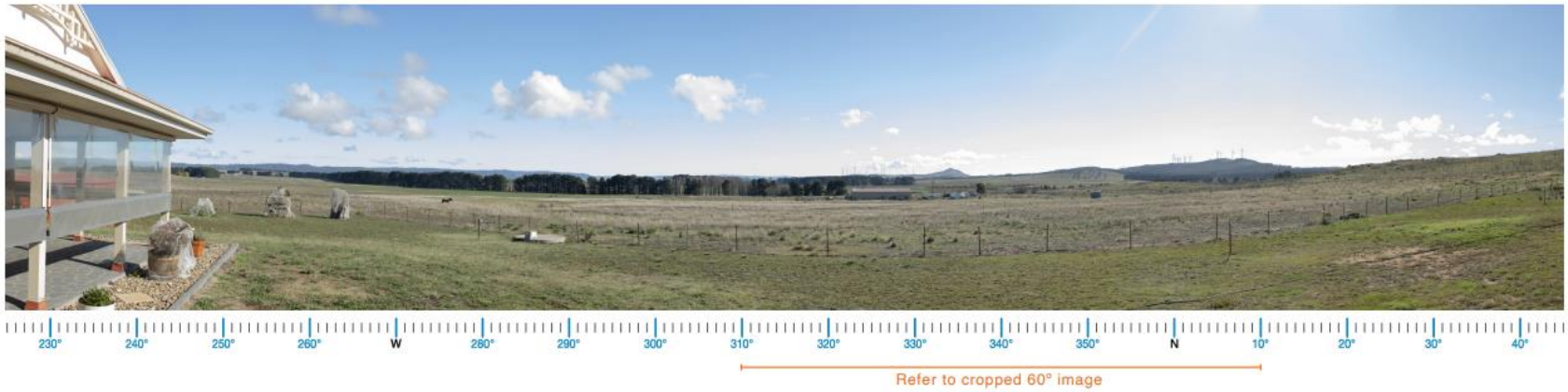
| Name | Issue | Detail of issue | Applicant response |
|---|---|---|---|
| | 180° Proposed View   | | |

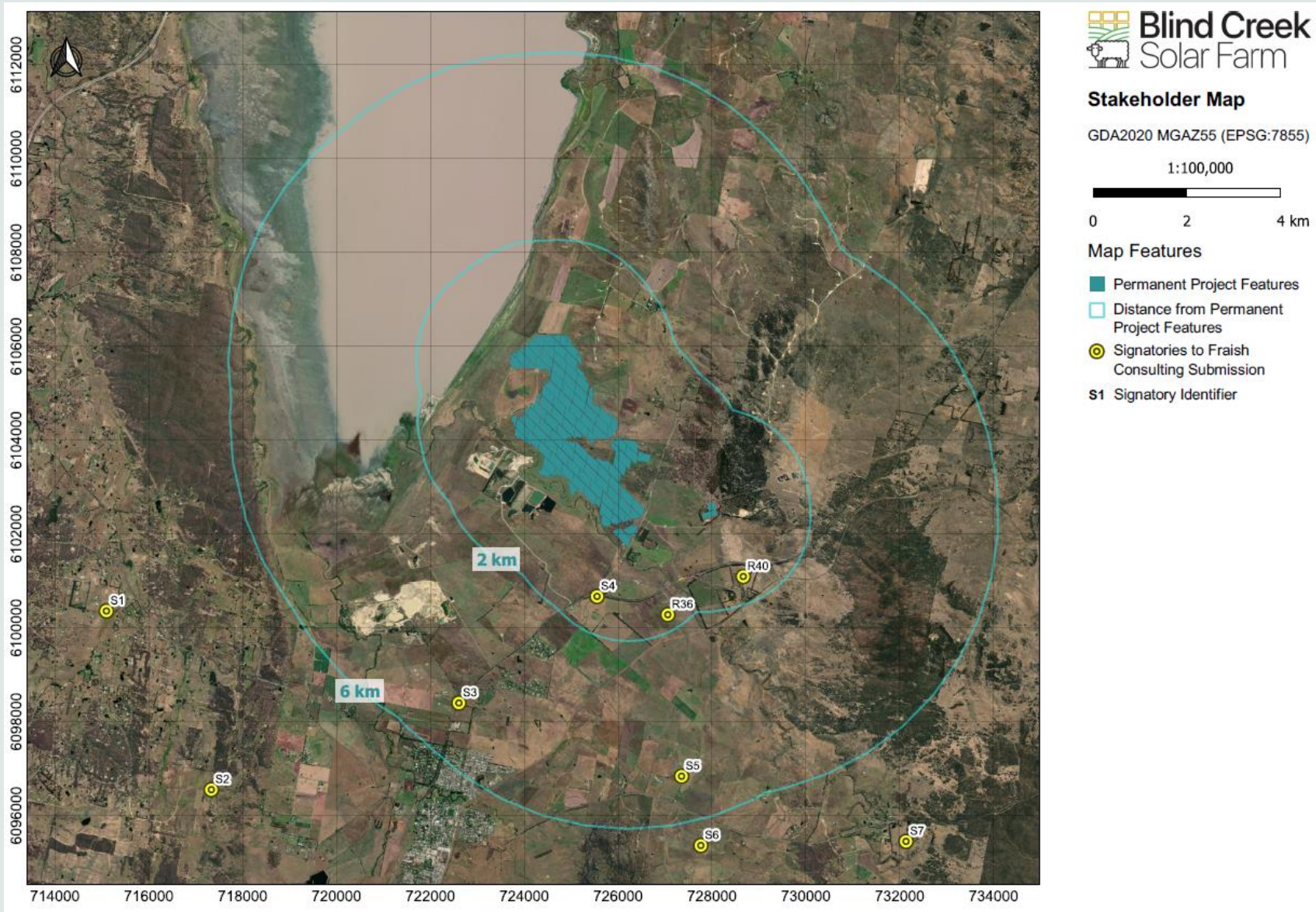

Figure 4-3 Photomontage 03 as provided in the Visual Impact Assessment for VP04 (Moir Landscape Arcitecture , 2022).


Figure 4-4 Crop of photomontage 01 (solar infrastructure and proposed vegetation modelling shown in view) (Moir Landscape Arcitecture , 2022)

| Address | Map ID / Number | Residence distance to BCSF | Assessment |
|---|---|---|---|

| Name | Issue | Detail of issue | | Applicant response |
|---|---|---|---|---|
| | **800 Tarago Road, Bungendore** | R36 (VP04, Photo montage 3 in the VIA) | 1.7km from solar array, 2.2km from BESS and substation | Property assessed as 'Negligible' in the VIA. Considered in Reflective Glare study but excluded from the 'project assessment receivers' due to views blocked by existing vegetation and topography. Included in Community Benefit Sharing Scheme and fully consulted with prior to EIS lodgement |
| | **61 Warramunga Close, Wamboin** | S1 | 10 km from solar array | Not considered in VIA or Reflective Glare Study due to distance and no view. |
| | **3775 Kings Highway, Bungendore** | S7 | 8.7 km from solar array | Not considered in VIA or Reflective Glare Study due to distance and no view. |
| | **656 Tarago Road, Bungendore** | S4 (VP05 in the VIA) | No residence | Property assessed as 'Negligible' in the VIA. Stakeholder requested VP05 photo to be taken from highest point on land as no residence on property. Also provided with a photomontage depicting negligible view of solar array. Included in Community Benefit Sharing Scheme and fully consulted with prior to EIS lodgement. |
| | **656 Tarago Road, Bungendore** | S4 | No residence | Included in Community Benefit Sharing Property assessed as 'Negligible' in the VIA. Stakeholder requested VP05 photo to be taken from highest point on land as no residence on property. Also provided with a photomontage depicting negligible view of solar array. Included in Community Benefit Sharing Scheme and fully consulted with prior to EIS lodgement. |
| | **23 Greenhill Lane, Bungendore** | S6 | 6.5 from solar array | Not considered in VIA or Reflective Glare Study due to distance. |
| | **10 Harrowfield Road, Bungendore** | S5 | 5.3km from solar array | Not considered in VIA or Reflective Glare Study due to no view. 300m south of R56 which was considered outside the 'Zone of Visual Influence' in the VIA |
| | **362 Joe Rocks Road, Bungendore** | S2 | 10 km from solar array | Not considered in VIA or Reflective Glare Study due to distance and no view. |

| Name | Issue | Detail of issue | | Applicant response |
|---|---|---|---|---|
| | **996 Tarago Road, Bungendore** | R40 | 1.5km from BESS and substation. 2.5km from solar array | Considered in VIA as outside the 'Zone of Visual Influence', due to topography. This property is close (approx. 400m south-east) to VP19. Existing vegetation between residence and VP19 further blocks any view of the solar farm, resulting in receiver not being assessed in the Reflective Glare study as a 'project assessment receiver'. Property owner consulted at beginning of project. |
| | **266 Tarago Road, Bungendore** | S3 | No residence | Property has no residence and thus was not allocated a receiver number. Entrance to property 5km from solar array. Northern boundary 1.9km from solar array. Southern boundary is 5km from solar array. Property is approx. 400ha surrounding Buckingham Estate on southern, eastern and northern sides. Property can be assessed in 2 parts. (1) Southern portion of property is included in Bungendore Structure Plan 2048 (approx. 100ha, of which the closest boundary to BCSF is 4.3km from solar array). Refer to response from Moir re VIA & memo from SLR re Reflective Glare study. (2) Northern balance of property (approx. 300ha) adjoins Buckingham Estate and has similar visual impact characteristics to Buckingham Estate, ref VP07 in VIA |


Blind Creek Solar Farm
Stakeholder Map
GDA2020 MGAZ55 (EPSG:7855)
1:100,000
0
2
4 km
Map Features
Permanent Project Features
Distance from Permanent Project Features
Signatories to Fraish Consulting Submission
S1 Signatory Identifier
2 km
6 km
S1
S2
S3
S4
S5
S6
S7
R36
R40
6112000
6110000
6108000
6106000
6104000
6102000
6100000
6098000
6096000
714000
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718000
720000
722000
724000
726000
728000
730000
732000
734000

| Name | Issue | Detail of issue | Applicant response |
|---|---|---|---|
| | Figure 4-5 Location of signatories to the Fraish submission | | |
| | Property value | The views from these properties are seen as being one of their most valuable assets. In many instances that was one of the main reasons they chose to purchase these properties. It is therefore understandable that the visual impact of the Project be clearly defined and demonstrated so that owners and residents can establish the visual impact that the Project may have on their individual properties. | The VIA (Appendix F) identified dwellings within close proximity of the development having a moderate – low inherent visual impact from the development. The visual mitigation measures will assist in bringing the residual visual impact to low. The VIA clearly defines and demonstrated the potential visual impact from multiple viewpoints surrounding the Project.<br>In addition, the Applicant has been in close consultation with all potentially affected receivers surrounding the site. Receivers deemed to have a moderate to low visual impact were provided a visual montage of the proposed development from their dwelling or a representative viewpoint.<br>There are no studies available in Australia that supports the view that land value is affected by large-scale solar development. However, existing studies in relation to wind farms (which are usually larger renewable energy developments, with taller structures which are generally more visually intrusive on the landscape than a solar plant, but which have the same reversible impacts on agricultural productivity after decommissioning), have found no conclusive evidence to support the claim that wind farms devalue nearby property on the basis of visual impacts (e.g. refer Henderson & Horning Pty Ltd 2006 *Land Value Impact of Wind Farm Development – Crookwell New South Wales* and *OEH 2016 Review of the Impact of Wind Farms on Property Values (Urbis, 2016)*).<br>Capital gain, increase in median home price and profit all occurred after the Capitol Wind Farm was built, which further supports the findings of the Urbis report.<br>It is understood that in the Bungendore area that land value is |

| Name | Issue | Detail of issue | Applicant response |
|---|---|---|---|
| | | | largely governed by land availability and sales, commodity prices, and access to transport infrastructure.<br>Investment data for Bungendore (SMA, 2022) suggests a stronger investment performance in contrast to other Australian suburbs in terms of appreciation of property value.<br>Average median house prices in NSW have risen as a whole, pulling Bungendore values up and netting property investors a capital gain of 24.67% for the past year. Investors saw the median home price rise to $938,055, and profits due to an upward trend in home prices in the suburb averaged 12.99% per annum over a 3-year period.<br>The Project will not diminish the key drivers in that the land's agricultural capacity will not be removed and the Project will not affect adjacent agricultural operations. |
| | Organisational and signatories object to the bushfire assessment included in the EIS. | The submission note in regard to bushfire:<br>"A check of the 114 Currandooley Road, Bungendore on the NSW Rural Fire Service online bush fire prone land has identified the site as being contained within bushfire land. The Project has not included a Bushfire Assessment for the development. Of particular concern is the potential for fire from the development or adjacent woodland to spread to surrounding properties.<br>With respect to the potential bushfire impact of the Project, it is requested that prior to further assessment of this Development Application that the Applicant be asked to provide a Bushfire Impact Assessment." | While no standalone assessment was appended, a Bushfire impact assessment was included in the exhibited in the EIS, in Section 9.7 (NGH , 2022).<br>The Bushfire impact assessment in the EIS includes a figure (Figure 9-20) that shows the 95% of the Development site is mapped as category 3 Bushfire Prone Land (BPL), with the remaining 5% mapped as category 1 BPL.<br>The bushfire impact assessment makes specific reference to the Planning for Bushfire Protection (PBP) 2019 guidelines. Using the guidelines, best practice mitigation measures were included in the exhibited EIS in Section 9.7.5 and note that the final Bushfire Emergency Management and Operations Plan would be developed in consultation with NSW RFS and Fire and Rescue NSW (refer to mitigation measure BF3 in Appendix B) prior to construction of the Project. This addresses the requirements of the RFS and no further assessment is |

| Name | Issue | Detail of issue | Applicant response |
|---|---|---|---|
| | | | considered warranted or has been requested by the RFS. |

## 4.3. Applicant's response to agency submissions

| Issue | Detail of issue | Applicant response |
|---|---|---|
| **Crown Lands** | | |
| **Crown land** | Crown roads/waterways are contained within the project footprint. Crown land/road lots/waterways adjoin the project footprint, to the north and west. Part of Lot 7308 DP 1154506, Lot 20 DP 754891 and Lot 7300 DP 1141093 are Crown Reserves. If the Project requires the use of these Crown Reserves in order to implement the Blind Creek Solar Farm Project, the land will need to be acquired under the *Land Acquisition (Just Terms Compensation) Act 1991* (LAJTC Act). | Part of Lot 7308 DP 1154506, Lot 20 DP 754891 and Lot 7300 DP 1141093 are not required for this Project. |
| **Crown land** | As per Table 4.2 of the EIS Report, Crown Lands notes that there are numerous Crown roads within the project area. These roads may provide legal access to the development but may not provide practical access.<br>The Department advises that these roads should not be relied upon for practical access to the project site. It is also proposed, in Table 4.2 that solar arrays and ancillary infrastructure as well as a substation and battery will be located within the Crown Road Reserve.<br>Figure 4-9 indicates the placement of transmission lines and underground cables within, under or over Crown roads.<br>The Department will need to be referenced, prior to any use or occupation of any Crown roads, during the assessment phase.<br>Authority to use, traverse, access or build infrastructure on Crown land and roads is required under the *Crown Land* | The Crown Lands comments are addressed in full below and included in section 5 Table 5-2 and Appendix C.4.8 of the Project EIS.<br>In accordance with Part 3 of the *Crown Land Management Act 2016,* land must be assessed prior to any allocation action (reservation, dedication, sale, lease, licence or permit), considering capabilities and suitable uses.<br>Consultation with Crown Lands has revealed that two segments of Crown land are located within the Development footprint. The Applicant has received consent from Crown Lands to lodge the EIS and acknowledgment of receipt of an application purchase/close the isolated Crown Road and undertaking works over other Crown land (refer to Appendix C.<br>The Applicant wishes to purchase the Crown Lands enclosure permit 49717 within Lot 2 DP1154765, but not enclosure permit 486387 within Lot 1 DP1154765 & Lot 1 DP456698. Enclosure permit 49717 would be purchased from Crown Lands for the purpose of permanent siting of the Solar Array. The purchase of this permit would be completed when the final Project layout is provided to Crown Lands following development consent. The land under |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | *Management Act 2016* and/or the *Roads Act 1993*. It is recommended that the Applicant contact Crown Lands as early as possible to discuss and initiate the processes required to authorise the use of and/or access to Crown land and roads. | enclosure permit 486387 would only be required for underground cables and a temporary laydown area. For this land the Applicant would apply for an easement across the road reserve for the cables to be laid, and if required, a licence to occupy the land for the lay down area. |
| **Crown land** | If infrastructure needs to be built on Crown land or roads, the consent of the Minister for Water as authority to access or use Crown roads is required prior to the commencement of any works or access, and to avoid any delays for the Project, a tenure may be required in the interim. More information regarding Crown roads and Enclosure permits can be found at the following links: https://www.industry.nsw.gov.au/lands/access/roads and https://www.industry.nsw.gov.au/lands/use/enclosure-permits<br>There are Crown roads with enclosure permits, both within and adjoining the proposed development area. Please refer to the attached map, where Crown roads are shown with grey hatching and Crown roads with enclosure permits are shown in Green. Any Crown road required for access to the development/Project, will need to be transferred to Council, or application made to close and purchase the roads. | Refer to previous response above and refer to Appendix C. |
| **Crown roads** | Lineal Infrastructure (e.g. Pipelines and/or Electricity Transmission lines) traversing Crown land/roads<br>If lineal infrastructure (such as pipelines and/or electricity transmission lines) are expected to traverse Crown roads and/or waterways, an easement over said Crown land, roads and/or waterways will be required for protection of the infrastructure. To discuss easement requirements, please contact the Acquisitions team at the earliest | This response is covered in the responses above. Easement for running cables through Crown Land within Lot 1 DP 456698 would be applied for when final designs are approved following development consent.<br>The need for this easement was noted in Section 9.2.3 of the EIS (NGH , 2022) |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | opportunity at: cl.acquisitions@crownland.nsw.gov.au.<br>In order for transmission lines to traverse Crown land and/or roads, the Applicant will need to apply for easements.<br>Information regarding the easement process is available at the below link:<br>https://www.industry.nsw.gov.au/lands/use/easements<br>As the easement process may be lengthy, it is also recommended that the Applicant apply for a licence for each Crown road and Crown land lot as soon as possible. A licence will temporarily authorise use and access for the infrastructure to traverse Crown roads and Crown land whilst the easement applications are being processed.<br>Details on how to apply for a licence are available at the below link:<br>https://www.industry.nsw.gov.au/lands/use/licences<br>The Department may also need to consider the transfer of the affected Crown roads to the local Council.<br>It is important to note that licences or easements must be in place before infrastructure can traverse Crown land or roads.<br>It is important to note that authority must be in place before Crown land or roads can be used, traversed, accessed or infrastructure can be built. | |
| **Biodiversity / environmental** | Crown Lands notes that the Project has identified the potential for the construction earthworks to cause sedimentation of the Crown Waterways as well as low ongoing management and maintenance for Crown land | Noted – All land within the Development footprint including areas of Crown land will be managed in accordance with the mitigations measures in Appendix B. All areas within the Development footprint will be monitored for compliance and appropriate environmental management via the CEMP, Operation |

| Issue | Detail of issue | Applicant response |
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| | involved in the project area, and the consequences if mismanaged, however long-term management and maintenance strategies were not specified for when the Crown land is no longer required for the Project. Can this please be addressed by the Applicant. | Environmental Management Plan (OEMP) and finally the Decommissioning Environmental Management Plan (DEMP). An Erosion and Sediment Control Plan will form part of the requirement for all EMPs, which will assist in the management and prevention of any potential sedimentation.<br>Any crown land that falls outside of the Development footprint is not forecasted to be managed by the Applicant. |

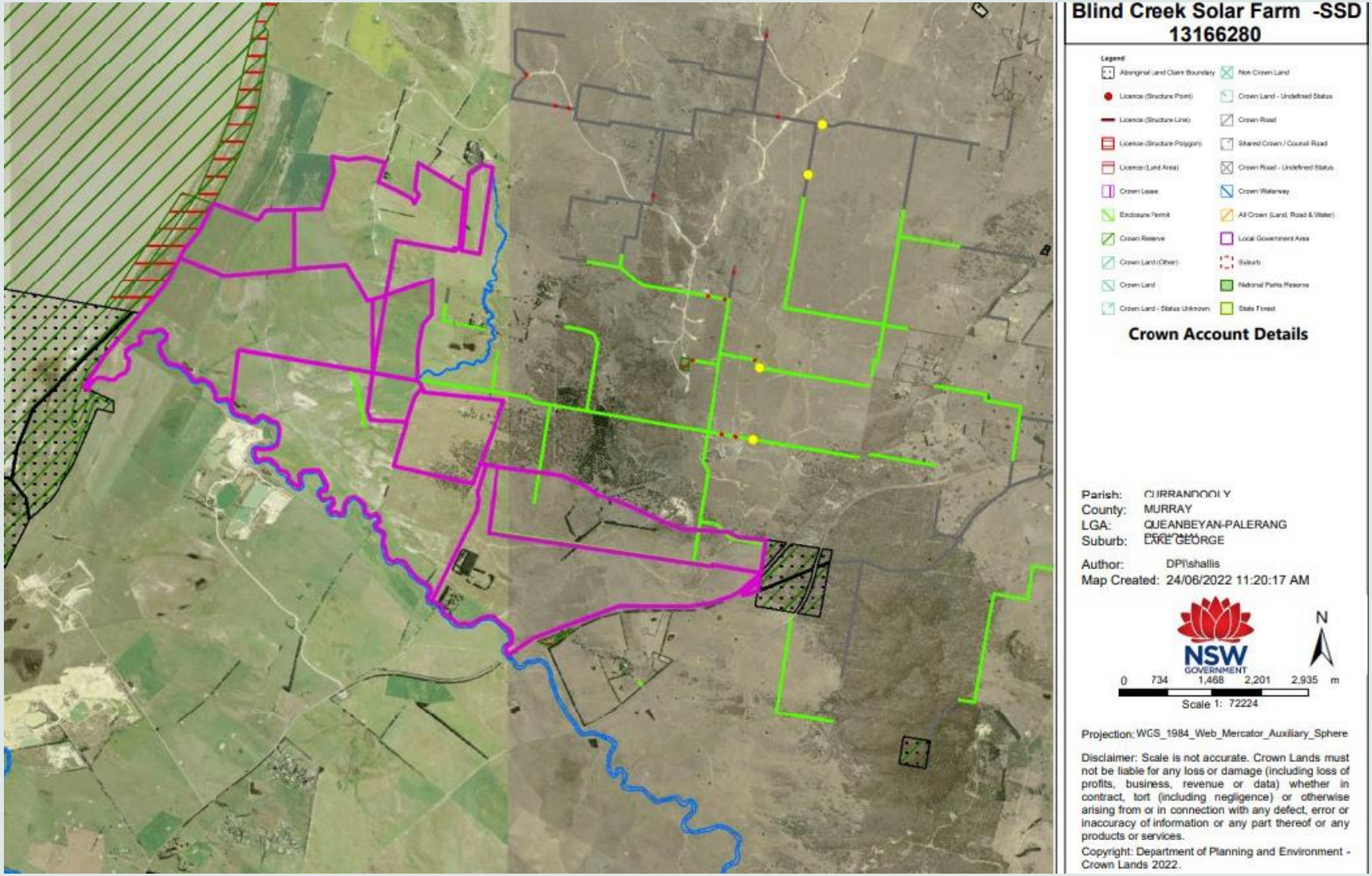



Figure 4-6 Crown land easement map provided in Crown Lands response

| Issue | Detail of issue | Applicant response |
|---|---|---|
| **Department of Primary Industries (DPI) Fisheries** | | |
| **Fish habitat / waterways** | DPI Fisheries has reviewed the EIS for this Project and considers that these works will have minimal impact on the aquatic environment, however some design changes to the proposed waterway crossings may be required to ensure maintenance of fish passage in these waterways. We commend the inclusion of riparian buffer zones widths in accordance with the Guidelines for Riparian Corridors on Waterfront Land (DPI Water, 2012).<br>Additional requirements:<br>1. The use of best practice erosion and sediment control mitigation measures in accordance with the Blue Book.<br>2. Protection of buffer zone widths in accordance with the Guidelines for Riparian Corridors on Waterfront Land (DPI Water, 2012).<br>3. Restoration of active erosion on the site. To reduce erosion and sedimentation impacts on adjacent key fish habitat.<br>4. That the waterway crossings incorporate best practice designs features to maintain fish passage in accordance with both the Guidelines for Watercourse Crossings on Waterfront Land (Office of Water) and DPI Fisheries Policy and Guidelines for Fish Friendly Water Crossings ((2004) and Why DO Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (2004). Both of these guidelines state that box culverts are preferred over piped culverts. DPI Fisheries requests the opportunity to review detailed plans of the waterway crossings prior to construction. These plans will need to demonstrate that the culverts included in the crossing are | The *Guidelines for Riparian Corridors on Waterfront Land* (DPI Office of Water, 2012) have been considered in the design of all infrastructure. This is an existing mitigation measure included as H12 in the EIS Section 8.5.4 (NGH , 2022).<br>As detailed within the Hydrology Report within the EIS (Appendix I), Wrights Creek has been mapped as a tributary of Butmaroo Creek with a confluence within the Project Site. Ground truthing and hydrological modelling shows that there is no direct discharge into Butmaroo Creek and there is no defined watercourse past the existing dam as suggested. However, on the request of DPE Water the Applicant will exclude solar infrastructure within the Wrights Creek overland flow path, creating a corridor unimpeded by solar panels in line with the *Guidelines for Riparian Corridors on Waterfront Land*. An indicative flow path is shown in the Constraints Map (Figure 1-1) above. The final flow path and layout will be provided as part of the final design, in consultation with DPE Water.<br>Regarding additional requirements 1-3, existing mitigation measures reference the Blue Book (Landcom 2004), Guidelines for Watercourse Crossings on Waterfront Land (DPI Office of Water, 2012),<br>Regarding point 4, mitigation measure H14 will be revised to include specific reference to:<br>• DPI Fisheries Policy and Guidelines for Fish Friendly Water Crossings (NSW Fisheries, 2004)<br>• Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Fairfull & Witheridge, 2003)<br>The amended measure H14 will also include a commitment to send crossing designs to DPI Fisheries for review prior to construction. |

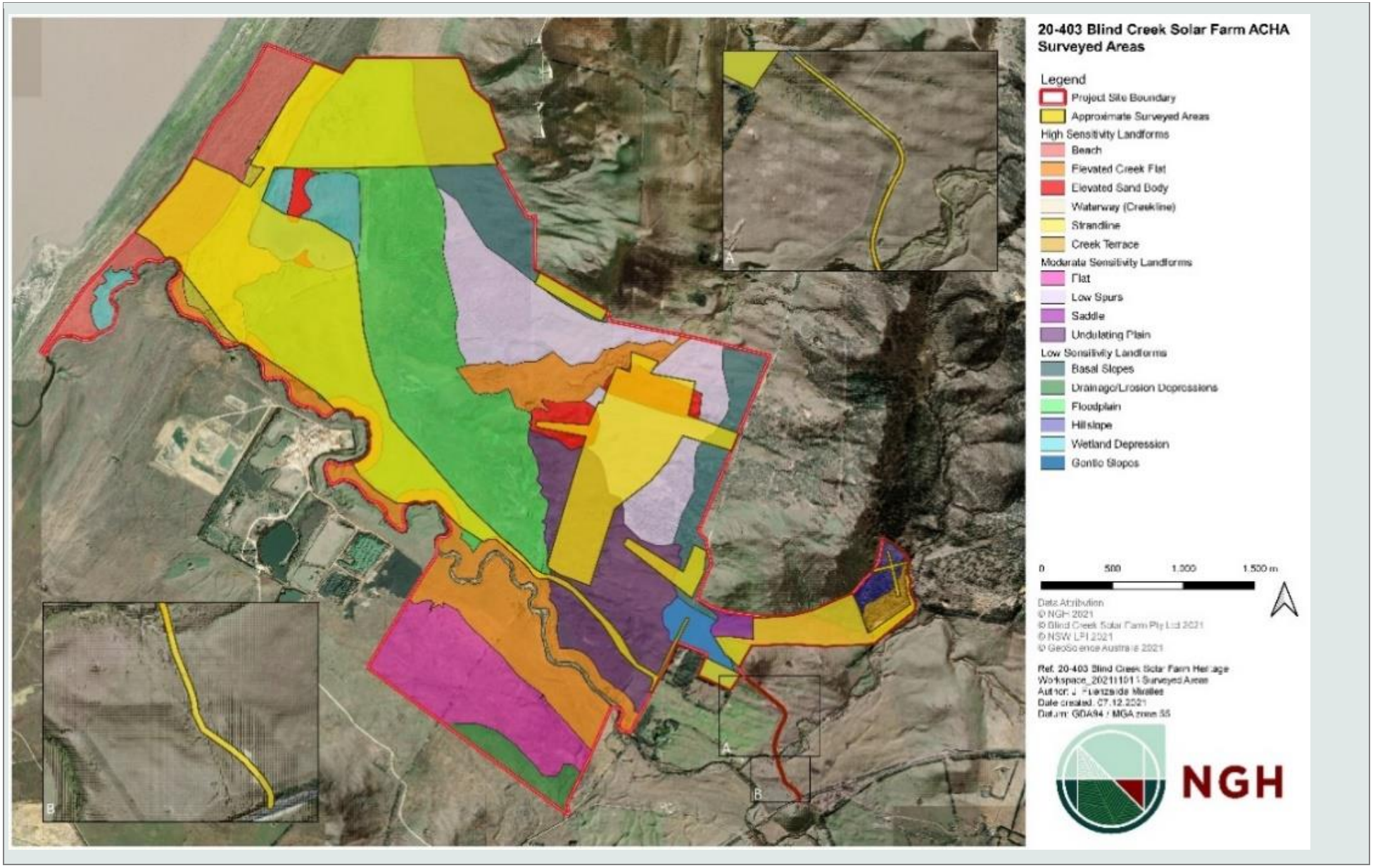
<table>
<tr><th>Issue</th><th>Detail of issue</th><th>Applicant response</th></tr>
<tr><td></td><td>embedded at least 150mm into the base of the waterway.</td><td></td></tr>
<tr><td colspan="3">Department of Primary Industries (DPI) Agriculture</td></tr>
<tr><td>Agricultural use</td><td>There is a commitment in the EIS for the site to be used for continuing agricultural purposes (sheep grazing) as part of its management (p13). In particular integrating sheep grazing with solar production and incorporating regenerative agriculture practices, a soil carbon project, biodiversity restoration and compost production is proposed and fully supported by NSW DPI.</td><td>The Landowner has entered into a formal agreement with the Applicant to carry out grazing of sheep and inter row forage cropping within the solar array area.<br>The Landowner currently practices regenerative agriculture and has commenced the process of registering a soil carbon project with the Australian Government’s Clean Energy Regulator. It is the intention of the Landowner that the soil carbon project will include the solar array area following construction of the solar farm.<br>The Landowner has recently carried out biodiversity restoration projects with Greening Australia and Local Land Services on land adjacent to the Development site. The Landowner is also a participant in the Australian Holistic Management Co-operative's ‘Ecological Outcome Verification’ program and the NSW Government’s ‘Land For Wildlife’ program.<br>The Landowner has also received development approval to construct a green waste compost facility on land adjacent to the Development site. Humus compost from the facility will be used to rehabilitate and fertilise soil throughout the solar array area and adjacent farm land controlled by the Landowner.</td></tr>
<tr><td></td><td>There is however no commitment in the EIS as to the height of the panels to enable the sheep to graze underneath them. The article quoted in the EIS (table 9-6, p258) by the Clean Energy Council (Australian Guide to Agrisolar for Large-scale Solar: For Applicants and farmers) states that the height of panels to enable sheep to graze beneath them should be between 2.5m and 5m. A commitment to the panel height should be made to ensure the project outcomes can be achieved.</td><td>There is still a level of uncertainty around the final choice of technology, design and panel height. A final commitment cannot be made in the RTS, but will be made in the final design and presented to DPE.<br>Below details a worst case scenario for panel height for a 1P and a 2P arrangement, allowing for flood mitigation:
<table>
<tr><th rowspan="2"></th><th colspan="2">1P</th><th colspan="2">2P</th></tr>
<tr><td>No flood</td><td>Max flood</td><td>No flood</td><td>Max flood</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Issue</th><th>Detail of issue</th><th>Applicant response</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Height of top of panel when at maximum tilt (mm)</td><td>2381</td><td>2881</td><td>4262</td><td>4762</td></tr>
<tr><td>Height of bottom of panel when at maximum tilt (mm)</td><td>500</td><td>1000</td><td>500</td><td>1000</td></tr>
<tr><td>Height of panel when horizontal (mm)</td><td>1441</td><td>1941</td><td>2381</td><td>2881</td></tr>
<tr><td>Average hours per day when bottom height of panel is less than 1m height</td><td>19</td><td>0</td><td>5.8</td><td>0</td></tr>
</table>
A sheep can also pass under the panel when at maximum tilt (500mm). No panel tilt scenarios impede views at sheep eye level.
</td></tr>
<tr><td>Soil surveys</td><td>The EIS has provided a commitment to undertake a soil survey for baseline data upon approval (p265). This will provide information on the soil and land condition targets for the final land rehabilitation upon cessation of the solar farm. The information will also provide useful evidence of the change in soil condition as a result of undertaking regenerative and other agricultural practices proposed on the farm.</td><td>Noted; the soil survey information is committed to in existing measures and forms an important part of construction and operational management plans to manage the impacts of the works.</td></tr>
<tr><td>Groundcover management</td><td>The proposed management of groundcover will also need to be addressed as part of the commitment to the site being used for continuing agricultural land use (sheep grazing). The development of a ground cover management plan in the areas of the solar array will assist in managing the perennial pasture as stated in the EIS (p278).</td><td>Noted; the ground cover management plan is intended to be developed in relation to the existing pasture composition and management proposed (ie grazed or not grazed).</td></tr>
<tr><td>Management plans</td><td>NSW DPI notes the commitment to a range of plans including for battery fire response, bushfire emergency</td><td>Noted; the management plans would be endorsed by DPE prior to implementation and subject to monitoring and adaptive management where</td></tr>
</table>

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | management and operations, biosecurity, weed management, landscape management, soil and water management and an environmental management plan (EMP). This is fully supported by NSW DPI. | required to improve their effectiveness. |
| **Decommissioning objectives** | We also note the commitment to the removal of all below ground infrastructure to a depth of 500mm on final closure. This will assist the reintroduction of agricultural land uses, and the potential for cropping should this take place. | Noted. |
| **NSW Environmental Protection Agency (EPA)** | | |
| **Licensing** | Not a scheduled activity under the POEO Act. No regulatory role | Noted. |
| **Transport for NSW (TfNSW)** | | |
| **Road upgrades** | The length of the BAR treatment should be extended to comply with Figure A 28 of Austroads Guide to Road Design Part 4. The length for the turning path (X) should be added and the tapers should be designed for a design speed of 110kph. | It is understood that detailed design drawings will be prepared for the proposed upgrades to the intersection of the site access and Tarago Road. The draft plan presented as part of the RTS has been updated according to Figure A 28 of Austroads Guide to Road Design Part 4. The updated proposed intersection design has been completed by PHL surveyors and included in Appendix A.<br>The proposed intersection upgrades are entirely within the historically disturbed road footprint. The Applicant has drafted a discussion paper on the historical disturbance of the intersection which will be provided as an attachment to the Amendment Report.<br>In addition, consultation with the Registered Aboriginal Parties (RAPs) has been closed our, notifying them of future works. |
| **Road upgrades** | The table drains on both sides of Tarago Road will have to be reinstated. Cross sections will be required to confirm the roadworks can be contained within the road reserve. | Refer to the cross sections of the design (Appendix E). |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| **Road upgrades** | TfNSW notes only the section shown in Attachment 3 is approved as a B-double route but the intention is to use B-doubles during construction and deliveries. Clarification is required as to how the applicant intends to utilise B-doubles noting the above. | The use of sections of road that are not rated to accommodate B-Doubles is typically subject to specific permit application process that occurs following approval of the planning permit. As such, it is understood that this matter will be addressed prior to construction as part of the permit process. |
| **Oversized and B-Double vehicles:** | Insufficient details have been provided on the use of oversize or overmass (OSOM) and B-Double vehicles during the construction stage (e.g. for transformers, substations, etc). Details are required on any B-Double and OSOM movements associated with the Project as well as details on the route these vehicles will take and any changes to the road network required to cater for B-Double and OSOM movements (e.g. removal of infrastructure, widening works, vegetation removal, etc). For example the required works (if any) for B-Double and OSOM vehicles to travel to the site through the intersection of Braidwood Road and Wallace Street and also if travelling via Bungendore Road. | Two OSOM vehicles will be required to deliver two transformers. The vehicles will be subject to road permits issued by the National Heavy Vehicle Regulator (NVHR) that will be applied for by the contractor once the dimensions of the load and the specific delivery vehicle are known. As this information is unknown at this early stage, a detailed assessment of the route is unable to be provided.<br>B-doubles would use the route as detailed within the TIA. Prior to construction and any movement of vehicles, the EPC Contractor will be required to complete a Heavy Vehicle Access Study (HVAS) which will detail if any additional road works (such as removal of infrastructure, widening works, vegetation removal etc.) will be required. This has been detailed as a new mitigation measure AT6. |
| **Strategic/Concept Design:** | Should it be identified that mitigation measures are required that will impact a state/classified road then a concept design for the proposed works will need to be prepared and submitted as part of the State Significant Development (SSD) assessment process/before SSD determination. | Given the above comments, the assessment of the B-Double and OSOM vehicle route is proposed to be undertaken prior to construction once the Engineering, Procurement and Construction (EPC) contractor is awarded, final technology is selected, and final design has been developed. Any road upgrades will be assessed as part of these permits through the HVAS, and the Traffic and Haulage Management Plans. These Plans will be completed in consultation with local council and TfNSW, and to the satisfaction of the Secretary. |
| **Heritage NSW – Aboriginal cultural heritage (ACH)** | | |
| **SEARs** | The ACHAR was prepared in accordance with the SEARs | The Aboriginal Cultural Heritage Assessment (ACHA) was prepared by qualified |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | issued on 11 February 2021 and generally in accordance the agency specific SEARs Heritage NSW issued on 10 February 2021 (refer to DOC 21/49171-3).<br>A considerable amount of assessment of Aboriginal cultural heritage and landform mapping has been presented in the ACHAR. The ACHAR presents the results of field survey and test excavation conducted in ccordance with the 'Code of Practice for Archaeological Investigation of Aboriginal Object in New South Wales' (DECCW 2010) that was referred to in the DOC 21/49171- 3 by Heritage NSW.<br>Heritage NSW generally supports the measures proposed to protect, conserve, manage and mitigate Aboriginal cultural heritage in the ACHAR.<br>Some areas of cultural and archaeological sensitivity, particularly mapped landform areas of high sensitivity have been removed from the project footprint to avoid harm to Aboriginal cultural heritage sites and values<br>Maps on pages 75 and 91 of the confidential version of the ACHAR are truncated and there is no heading or key. | archaeologists and included extensive consultation with the Registered Aboriginal Parties (RAPs) for the project. The methodology and approach were discussed with representatives from Heritage NSW prior to implementation, and NGH received agreement of the approach and in particular the delineation of landforms and the sampling employed for the testing programme.<br>The map on page 75 of the version assessed was inserted in that page in error. The correct map was on page 88 (Figure 5-1) and has the relevant key and heading. The map is included below for clarity.<br>The figure on page 91 was inserted accidentally. The correct figures for the survey results are shown in pages 100-103, (Figures 5-2 to 5-5). |


20-403 Blind Creek Solar Farm ACHA
Surveyed Areas
Legend
Project Site Boundary
Approximate Surveyed Areas
High Sensitivity Landforms
Beach
Elevated Creek Flat
Elevated Sand Body
Waterway (Creekline)
Strandline
Creek Terrace
Moderate Sensitivity Landforms
Flat
Low Spurs
Saddle
Undulating Plain
Low Sensitivity Landforms
Basal Slopes
Drainage/Erosion Depressions
Floodplain
Hillslope
Wetland Depression
Gentle Slopes
0
500
1,000
1,500 m
Data Attribution
© NGH 2021
© Blind Creek Solar Farm Pty Ltd 2021
© NSW LPI 2021
© GeoScience Australia 2021
Ref. 20-403 Blind Creek Solar Farm Heritage
Workspace_20211101 \ Surveyed Areas
Author: J. Fenzside Mirallas
Date created: 07.12.2021
Datum: GDA94 / MGA zone 55
NGH
A
B
A
B

| Issue | Detail of issue | Applicant response |
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| **Salvage commitments** | What is the area in m2 of the three landforms proposed for archaeological salvage excavation (elevated sand body, creek terrace and undulating plain) that will be impacted from the solar farm Project? | The approximate areas of impact for the landforms are:<br>Elevated Sand Body – 15.481 Ha according to the 'project footprint' or 7.24 Ha within solar arrays. A further 16.382 Ha is avoided by the development.<br>Creek Terrace – 5.706 Ha according to the project footprint. A further 3.677 Ha is avoided.<br>Undulating plain – 110.674 Ha according to the project footprint and 93.674 within solar arrays and 2.432 Ha is avoided. |
| **Salvage commitments** | What percentage of the three landforms (elevated sand body, creek terrace and undulating plain) that will be impacted from the solar farm is proposed to be subject to archaeological salvage excavation? | The ACHA report provides indicative salvage areas within each landform. The relative percentages of these areas in relation to the project footprint impact are:<br>Elevated sand body – 5-10m$^2$ or 0.003% - 0.006%<br>Creek Terrace – 10-30m$^2$ or 0.18% - 0.53%<br>Undulating plain – 20-50m$^2$ or 0.002%-0.005% |
| **Salvage commitments** | Test excavation results found the elevated sand body landform had an average of 43 artefacts/m2 and the creek terrace landform 20 artefacts/m2. We note that the ACHAR proposes archaeological salvage excavation of 5-10m2 of the elevated sand body landform and 15-30m2 of the creek terrace landform. Our agency specific SEARs recommended where impact are unavoidable, consideration be given to full-scale salvage activities. We recommend the Applicant consider a greater area of salvage of these two landforms as mitigation against harm to Aboriginal cultural heritage from the solar farm Project. | The elevated sand body landform was identified as containing the highest artefact density and as a consequence, 16.382 ha has been excised from the development footprint, representing 50.7% of this landform. Those areas that are subject to impact from the development are areas that have been subject to previous sand mining activity (4.546 ha or 14.3% of the landform) or areas on the edge and periphery (approximately 7 ha or 21.97%) of this land form and therefore have significantly less archaeological potential. We estimate that approximately 9.516 ha of the impacted landform is relatively less disturbed. The salvage proposed for this landform would be focussed in such less disturbed areas and therefore more accurately represents 0.005-0.01%. Although this may seem a very small amount, the excavations would be targeted in the very small areas that have not been disturbed or are not on the basal/interface with adjoining landforms. Based on this, we believe that the area of up to 10m$^2$ in excavation is sufficient. If it was considered that even a 1% salvage excavation area of impacted area within this landform would equate to 950 m$^2$, total salvage of these areas is not feasible or warranted and neither is a |

| Issue | Detail of issue | Applicant response |
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| | | 0.1% equating to 95m$^2$. We suggest that increasing the salvage area to 10-20m$^2$ would be the maximum, given that most of the landform impacted is peripheral to the actual areas of highest sensitivity which are excluded from development.<br>The Creek Terrace landform similarly has been subject to previous disturbances through sand extraction and use as a pine plantation, including deep ripping. Portions of this landform, 3.677 Ha or 39.2% is outside the development footprint, while the remainder is virtually all disturbed. While some moderate density of artefacts was recorded, the context was disturbed, thus reducing the scientific value of the cultural material. The purpose for undertaking salvage excavation in this area would be to retrieve a sample of artefacts and to compare them with artefacts from other parts of the project area, and if at all possible, to date the cultural deposits given they may represent occupation from a time when the lake was much higher. NGH believe that based on the level of disturbance, salvage excavation of up to 30m$^2$ would be suitable.<br>The Undulating plain landform is the largest of the three, comprising 114.3 Ha, of which 110.674 or 96.9% is impacted by the Project footprint. The majority of the impact is from the installation of the piles to support the arrays, along with some trenching and internal roads. As identified in the ACHA however, the arrays have a very small impact footprint. The proportion of salvage area for this landform is consistent with the elevated sand body. NGH considers that up to 50m$^2$ is considerable and likely to yield sufficient information to answer the research questions. It may be that expansion of the excavation could be undertaken if the results proved worthwhile or that higher densities were uncovered or unusual or interesting archaeological features and therefore NGH propose that some flexibility in terms of excavation area is incorporated into the final methodology. |
| **Management plan** | Heritage NSW recommends a detailed archaeological salvage excavation and community collection methodology be presented including maps showing the | The ACHA report recommended that a Cultural Heritage Management Plan be completed and NGH considers that the salvage methodology should be part of this. The location of salvage areas will ultimately be determined through |

| Issue | Detail of issue | Applicant response |
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| | location of the Project salvage areas. Heritage NSW recommends that Blind Creek Solar Farm Pty Ltd and NGH continue to consult with the Registered Aboriginal Parties and Heritage NSW for the project including during the development of the Cultural Heritage Management Plan and proposed salvage activities post approval. | consideration of the final design and highest impact areas. As identified by NGH in the ACHA, the target for salvage excavation would be those areas with highest disturbance from the construction of the solar farm such as open trenches, roads and other infrastructure and where they overlap with relatively undisturbed areas of the identified landforms that have the highest chance of intersecting archaeological material. We contend therefore that it is not yet possible to accurately map where these areas would be, further design refinement and on ground surveying would be the next step to allow the best archaeological locations for salvage to be identified.<br>The installation of the piles to support the solar arrays by comparison have much less of a disturbance footprint and these areas may not be as useful as a salvage location. As such, the idea of identifying specific locations for the salvage excavations is difficult without the final design and approval. Once this has been identified, NGH would work with the proponent to target those high impact areas where salvage excavation would be most rewarding in terms of obtaining scientific information.<br>It is the full intention of the Applicant that Aboriginal consultation continues to be undertaken with the registered Aboriginal parties. NGH also intends to continue consultation in relation to the preparation of a CHMP, the location of areas to salvage, considering the points outlined above, and the timing and conduct of the salvage. To date, the Blind Creek Solar Farm project heritage assessment has had excellent consultation with the RAPs who have been heavily involved in the conduct of the assessment. |
| **DPE Water** | | |
| **Water use** | Quantify the maximum annual volume of water take due to aquifer interference activities required for the project and demonstrate sufficient entitlement can be acquired in the relevant water source unless an exemption applies.<br>Explanation:<br>Insufficient information has been provided to quantify the | The Applicant has reconsidered the construction water requirements that were included in the EIS. Total construction water required has been revised from 250ML to 150ML over the 12-18month construction period.<br>The Applicant has discussed the feasibility of sourcing water from the Bungendore alluvial aquifer for the project with a licence holder that currently operates in the area. The licence holder confirmed availability of water under |

| Issue | Detail of issue | Applicant response |
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| | maximum annual volume of water take due to aquifer interference activities required for the project and to demonstrate sufficient entitlement can be acquired in the relevant water source unless an exemption applies. It is mentioned in the EIS that groundwater interception is possible in deeper excavations, but no estimates have been provided. There is an exemption for take less than 3ML, Clause 7 Schedule 4 of the *Water Management (General) Regulation 2018* but it is unclear if this will apply. More information on this exemption can be found at https://water.dpie.nsw.gov.au/licensing-and-trade/licensing/groundwater-wal-exemptions | their licence and are willing to provide water on commercial terms. The commercial provider has indicated that sufficient entitlement for construction could be supplied.<br>The maximum extraction from aquifer interference would be 150ML, if the aquifer is the only option used for water sourcing. A second water source has also been investigated. This water source is a dam owned by the Applicant which has 40ML of capacity and located at -35.1365, 149.4770. |
| **Water use** | Provide details of where water will be sourced to meet site water demand and provide evidence this can be obtained.<br>Explanation:<br>The EIS notes that 250ML of water will be required for the 12-18 month construction and ongoing water demand of 70ML. Insufficient evidence has been provided on the ability to obtain water for these requirements. If this is planned to be sourced by licensable methods, please provide evidence these can be obtained. If it is by trucks or potable supply, please provide evidence that these suppliers can provide these volumes | Details of construction water sourcing have been provided in the answer above.<br>Ongoing water demand during the Operation of BCSF would require approximately 200 kL per year of non-potable water. This would be sourced from a rainwater tank attached to the O&M building. Water may be required to be sourced commercially in periods of drought. |
| **Water use** | Provide an impact assessment of the proposed water supply work construction and operation to access water supply for the project. This needs to assess impacts and to address the relevant trading and access rules in the Water Sharing Plan.<br>Explanation:<br>Page 89 of the EIS notes a bore is to be constructed for | The Applicant has revised water sourcing for the Project as described above. The proposed construction water intake does not exceed the entitlements of the water licence. As such, no additional impact assessment is required. The Project will no longer consider the establishment of a new bore to access water. |

| Issue | Detail of issue | Applicant response |
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| | water supply but no details have been provided. To be exempt from requiring a water supply work approval the works must be assessed as a part of the State Significant Development approval. The Applicant should provide an impact assessment of the proposed water supply work construction and operation to access water supply for the project. This needs to assess impacts and to address the relevant trading and access rules in the Water Sharing Plan. | |
| **Water use** | Recommendation – Post Approval The Applicant should ensure sufficient entitlements to account for all water take are held prior to the take occurring. | Noted, sufficient water entitlements are available as noted in answers above. |
| **Hydrology** | Provide a flow path for Wrights Creek which does not contain solar arrays.<br>DPE Water acknowledge that Wrights Creek is a defined creek upstream of the site but does not have a defined channel (bed/banks or vegetation changes) through the site. The site serves as a broad drainage path to Butmaroo Creek/Lake George. DPE Water recommends that a designated flow path which does not contain solar arrays be provided through the site to allow for a path of flow downstream that is unimpeded by solar panels. The width of the flow path should give due consideration to the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018) as well as site merits. | BCSF appreciates that DPE Water has accepted this historical error and has acknowledged the overland nature of the flows within the site.<br>The Applicant has committed to the following within the detail design phase prior to construction:<br>• Provide a flow path for Wrights Creek, through the solar arrays to the identified wetland and beyond, which does not contain solar panels. This flow path is to be based on hydrology assessments to ensure the natural flow path is maintained in accordance with the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018).<br>• The detailed design will take into consideration the Non-riparian corridor works and activities averaging rule, thereby 50% of the outer riparian zone would be used for development with an equivalent area connected to the riparian corridor fully offset. The inner 50% of the riparian zone will be offset.<br>• Subsurface access across the overland flow path will form a requirement of the Project.<br>An indicative flow path is shown in the Constraints Map (Figure 1-1) above. |

| Issue | Detail of issue | Applicant response |
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| | | As discussed in recent consultation, the hydrology assessment and design of the overland flow path will be finalised in consultation with DPE Water through the detailed design process, prior to any construction. These requirements have been included as Mitigation Measure **H12** (Appendix B). |
| **Hydrology** | Confirm setbacks have been planned in accordance with the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018).<br>All works on waterfront land should be in accordance with the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018). The Guidelines are mentioned in Appendix I – Hydrological and Hydraulic Analysis in regard to setbacks and offsetting but this has not been demonstrated to be in accordance with these. Confirmation is requested of setbacks from watercourses and offsetting if required. This includes Butmaroo Creek, Lake George and Bridge Creek. | The EIS referred to the Guidelines for Riparian Corridors on Waterfront Land (DPI Office of Water, 2012). Table 1 of these guidelines provide a list of setbacks which is consistent with table 1 of the Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018). The setbacks are worked into the Hydrology mitigation measure "H12" (refer to Appendix B). |
| **Hydrology** | 2.2 Recommendation – Post Approval All works on waterfront land should be in accordance with the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018). | Noted – Mitigation measures H12 and H14 are now amended to include reference to the Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018). |
| **Fire and Rescue** | | |
| **Emergency protocols** | That a comprehensive Fire Safety Study (FSS) is developed. The FSS is to be developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper (HIPAP) No.2 and is to meet the requirements of FRNSW. That the development of the FSS considers 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. That the development of a FSS | As detailed within the EIS, Mitigation Measure BF15, the Applicant has committed to the following:<br>*"A Fire Safety Study (FSS) will be undertaken and developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper No. 2 (HIPAP No.2) and consultation with FRNSW prior to commencement of construction. The FSS will consider the limited operational capacity of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety dependence."* |

| Issue | Detail of issue | Applicant response |
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| | be a condition of consent. | As such, the Applicant supports the requirement of a FSS being a condition of consent for this Project. |
| **Emergency protocols** | That a comprehensive ERP is developed for the site in accordance with HIPAP No.1. | As detailed within the EIS, Mitigation Measure BF13, the Applicant has committed to the following:<br>*"Prior to operation of the solar farm, an Emergency Response Plan (ERP) would be prepared in consultation with NSW RFS and Fire and Rescue NSW. This plan must include but not be limited to:*<br>• *Specifically addresses foreseeable on site and off site fire events and other emergency incidents.*<br>• *Risk control measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the PV system (either in its entirety or partially, as determined by risk assessment).*<br>• *Outline other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site.*<br>• *Two copies of the ERP are stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.*<br>*Once constructed and prior to operation, the operator of the facility would contact the relevant local emergency management committee (LEMC)."*<br>This Mitigation Measure has been updated to include the requirements of HIPAP No. 1. Refer to the updated Mitigation Measures in Appendix B. |
| **Emergency protocols** | That an Emergency Services Information Package (ESIP) be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans. | The requirements of the ESPI has been included as a new Mitigation Measure, BF17. Refer to the updated Mitigation Measures in Appendix B. |

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| **TransGrid** | | |
| **Connection to grid** | Providing this project becomes a customer project, Property will provide the relevant advice to Lumea when required. | Noted. A Connection Process Agreement has been executed. |
| **Connection to grid** | The customer will need to engage TransGrid via executing a Connection Processes Agreement to finalise the connection to Transgrid's network. | The Applicant and TransGrid executed a Connection Process Agreement on 11 August 2022. A kick-off meeting was held between the parties on 23 August 2022 and we have agreed on monthly meetings to progress the Project through design and GP negotiation. |
| **Connection to grid** | The EIS will need to include all connection assets including the new transmission line cut in to the existing transmission line, a new transmission line/substation and access roads for the new infrastructure assets. | The Applicant can confirm that the EIS includes all connection infrastructure up to and including the cut-in. Connection to the network will be via a cut-in directly into the existing 330kV transmission line (Line 6) which runs across the Project site. All connection assets will be on the Project site itself and access to the future owner of the connection assets will be through the Project site. |
| **Biodiversity Conservation Division (BCD)** | | |
| **Protection of areas not being impacted** | It would be beneficial for the long-term maintenance of these values if some form of permanent formal protection is put in place for areas avoided:<br>• *Monaro Tablelands Cool Temperate Grassy Woodlands* at the eastern end of the Subject Land<br>• hollow bearing trees<br>• the wetland area at the north western end of the Development Site<br>• Butmaroo Creek running along the southwestern boundary of the Subject Land. | In response to BCDs comments on long-term maintenance and protection of these areas, the mitigation measures within the BDAR (Appendix E) and Mitigation Measure **B11** has been updated to state the following:<br>*Preparation of a Vegetation Management Plan to regulate activity in vegetation and habitat adjacent to the proposed Development:*<br>• *Preparation of a management plan that would include protocols for:*<br>• *Protection of native vegetation to be retained, particularly within the following areas:*<br>○ *Remnant Monaro Tablelands Cool Temperate Grassy Woodlands at the eastern end of the Subject Land*<br>○ *HBT's*<br>○ *The wetland area at the north-western end of the Development Site*<br>○ *The setback area from Butmaroo Creek* |

| Issue | Detail of issue | Applicant response |
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| | | • *The installation of permanent fencing around areas of native vegetation to be retained*<br>• *Best practice removal and disposal of vegetation cleared*<br>• *Weed management*<br>• *Unexpected threatened species finds*<br>• *Exclusion of vehicles from sensitive areas*<br>• *Rehabilitation of disturbed areas* |
| **White fronted chat** | We have previously recommended undertaking targeted survey of WFC during the breeding season to determine if it is being used as breeding habitat and if so, how far it extends within the Subject Land.<br>However, according to BCD experts, breeding commences from September and continues through to March. Any survey prior to this would be of limited value in determining the true extent of breeding habitat, if present (pers comm. Dr Damon Oliver 3 June 2022).<br>Given that this timing for targeted survey would conflict with critical construction time frames, an alternative approach would be to –<br>1. Undertake immediate survey for the extent of Scotch Thistle within the Subject Land. This could be undertaken on foot, in vehicle or using a Remotely Piloted Aircraft System (RPAS) to maximise speed of survey.<br>2. Assume that all areas of Scotch Thistle are WFC breeding habitat<br>3. Develop a costed Biodiversity Management Plan (BMP) which aims to restore at least an equivalent amount of White Fronted Chat breeding habitat within the Development Site but outside the Subject Land in the avoided areas such as –<br>• Butmaroo and Wright Creek riparian set back area,<br>• the remnant woodland (PCT 1100) at the eastern | Due to critical construction timeframes, completing further targeted surveys for the White-fronted Chat during the breeding season (September to March), to determine if the areas of Scotch Thistle are being used as breeding habitat, was not feasible. As recommended in the Submissions from BCD, surveys for the extent of Scotch Thistle within the Subject Land were undertaken instead. All areas of Scotch Thistle was assumed as breeding habitat for the Chat.<br>The preliminary survey took place on 03/12/2021, starting at 8:00 am, with the survey of areas containing Scotch Thistle taking place on 13/07/2022. The surveys were completed by an NGH ecologist on foot and by vehicle using GPS tracking.<br>Due to accessibility, the survey of Scotch Thistle along northern boundary was conducted from a distance (>500m) away with binoculars. This was achieved by observing from high points in the landscape and using landmarks to navigate-map outbreaks.<br>A BMP was then developed in consultation with BCD (Appendix E), which aimed to restore at least an equivalent amount of White Fronted Chat breeding habitat within the Development Site but outside the Subject Land in the avoided areas around Butmaroo Creek and the perimeter of the northern wetland. |

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| | end of the Subject Land,<br>• the perimeter of the northern wetland and further north until the shore of Lake George.<br>The BMP should be developed in collaboration with BCD and preferably submitted prior to consent as a part of the Response to Submissions. The BMP would then be able to form an appendix to the BDAR and be referred to in the conditions of consent. | |
| **BDAR updates** | The BDAR identified a credit liability for the Southern Myotis (*Myotis macropus*). However, this is likely to be a misidentification<br>The following vegetation zones should be renamed to reflect their highly degraded non-native status –<br>• Zone 1 – 1110_grassland_poor<br>• Zone 2 – 1100_grassland_poor<br>For instance –<br>• *Zone 1 – 1110_non-nativegrassland_poor*<br>• *Zone 2 – 1100_ non-nativegrassland_poor*<br>The SAII assessment for *Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands* is not necessary because it is not being impacted<br>The 38 ha area of avoided woodland in the east of the Development Site that does meet the criteria in the Scientific Determination for *Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands* should be included as a management zone in BMP and subject to management actions to improve its condition and minimise the likelihood of indirect impacts from increased weed transport | The BDAR (Appendix E) has been updated to reflect the comments from BCD, including:<br>• Updating the vegetation zones 1 and 2 to reflect their highly degraded non-native status<br>• The SAII assessment for the *Monaro Tableland Cool Temperate Grassy Woodland* has been removed.<br>• The avoided woodland has been included in the BMP as a management zone and is subject to management actions to improve condition and minimise direct impacts. |

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| **Human made structure** | The historic Trigonometrical Station, which is a human made structure that potentially forms habitat for threatened bat species. If this structure is going to be removed an acoustic detector needs to be deployed at the entrance to determine if it is suitable breeding or roosting habitat. | The Applicant has confirmed that the Trigonometrical Station is not being removed and that it will be protected from impacts. |
| **Mining Exploration and Geoscience** | | |
| **Sand quarry** | MEG-GSNSW note that the project site is located within an area that has been producing construction sand supplying the Canberra market over a long period of time. The EIS acknowledges Bungendore Sands Quarry is located approximately 250m south-west of the project site and the Paragalli Sands Quarry is approximately 500m east of the site. MEG-GSNSW recommends ongoing consultation with the quarry operators throughout the life of the project to minimise the impacts to their operations. | Bungendore Sands Quarry are considered a key stakeholder in the project and will be included in future engagement activities, throughout the life of the project to minimise the impacts to their operations. This mitigation measure has been included as SE5 (Appendix B). |
| **Biodiversity offsets** | MEG would appreciate the opportunity for early consultation in relation to the proposed location of any biodiversity offset areas (should they be required) or any supplementary biodiversity measures to ensure there is no consequent reduction in access to prospective land for mineral exploration, or potential for sterilisation of mineral or extractive resources. | As all native vegetation that would generate biodiversity offsets has been removed, no Biodiversity Stewardship site is required to meet the offset obligation for the project. However, several areas will be managed to enhance WFC habitat.<br>The following targets have been established in the BMP for management of the WFC habitat:<br>• Improve the condition of vegetation in management zone 2 throughout construction, operation and decommissioning of the project.<br>• Establish dense plantings (>80% cover) of indigenous flora species which support WFC breeding. Shrubs and groundcovers that would provide protection for this and other small birds.<br>• WFC are observed utilising the vegetation in zone 2.<br>• Exclusion or suppression of feral pest species such as foxes, rabbits, |

<table>
<tr><th>Issue</th><th>Detail of issue</th><th>Applicant response</th></tr>
<tr><td></td><td></td><td>cats, noisy miners and hares.</td></tr>
<tr><td colspan="3">Water NSW</td></tr>
<tr><td>Water NSW assets</td><td>The Project is not located near any WaterNSW land, assets or infrastructure, therefore we have no particular comments or requirements regarding the Project.</td><td>Noted.</td></tr>
<tr><td colspan="3">QPR Council</td></tr>
<tr><td>Views</td><td>The assumed panel height of 5m is referenced on page 14. However, the plans do not provide a good representation of the proposed panel arrangement, section or layout.<br>Further detail should be included in the EIS, including what the panel looks like in its various operational angles.</td><td>Refer to the diagram below in Figure 4-7. The diagram shows what panels would look like in its various operational angles.<br>The final panel design and layout has not been confirmed. This will be presented to both DPE and Council through the detailed design process, prior to construction. However, it is known that:<ul><li>Panels will be east-west single-axis tracking</li><li>The below image depicts worst case scenario for a 2P arrangement in a maximum flood zone</li><li>The difference between 1P and 2P arrangement is as follows:<ul><li>1P is 1 panel in portrait</li><li>2P is a wider table with 2 panels in portrait that requires less piles.</li></ul></li></ul>Table 4-1 below details the maximum height of a 1P and 2p arrangement in differing flood zones.<br>Table 4-1 Relative height of panels at a 1P and 2P arrangement in response to flood<table><tr><th rowspan="2"></th><th colspan="2">1P</th><th colspan="2">2P</th></tr><tr><th>No flood</th><th>Max flood</th><th>No flood</th><th>Max flood</th></tr></table></td></tr>
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| Issue | Detail of issue | Applicant response |
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| Height of top of panel when at maximum tilt | 2381 | 2881 | 4262 | 4762 |
| Height of bottom of panel when at maximum tilt | 500 | 1000 | 500 | 1000 |
| Height of panel when horizontal | 1441 | 1941 | 2381 | 2881 |
| Average hours per day when bottom height of panel is less than 1m height | 19 | 0 | 5.8 | 0 |

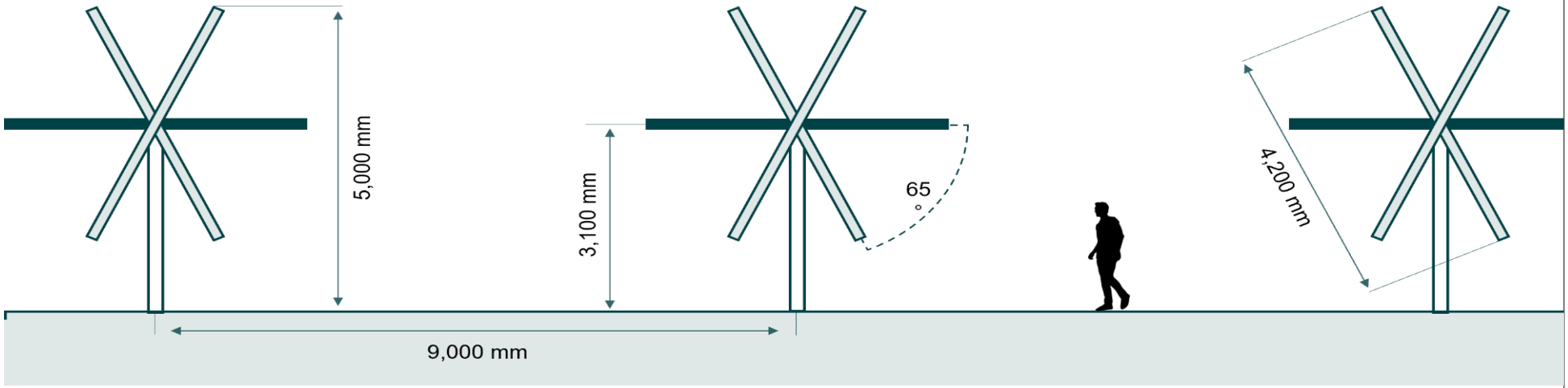


*Figure 4-7 Schematic of a mounted PV module. Dimensions shown are indicative only and are for the larger 2P configuration;* extract EIS Section 4.

| | | |
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| **Views** | Visual impact has not considered the use of the land above the Weereewa Look out for hang gliding. Impact on hang gliding participants launching from this location and when gliding on the updraft of escarpment of Lake George should be considered (pages 15 and 26). | Land used for hang gliding is approximately greater than 10 km northeast of the site. Impacts are considered negligible due to this distance from the Project. The Project will have negligible visual impact on hang gliding participants launching from this location and when gliding on the updraft of escarpment of Lake George due to the distance to the Project.<br>The Project site is currently and will under the approved project be accessed |

| Issue | Detail of issue | Applicant response |
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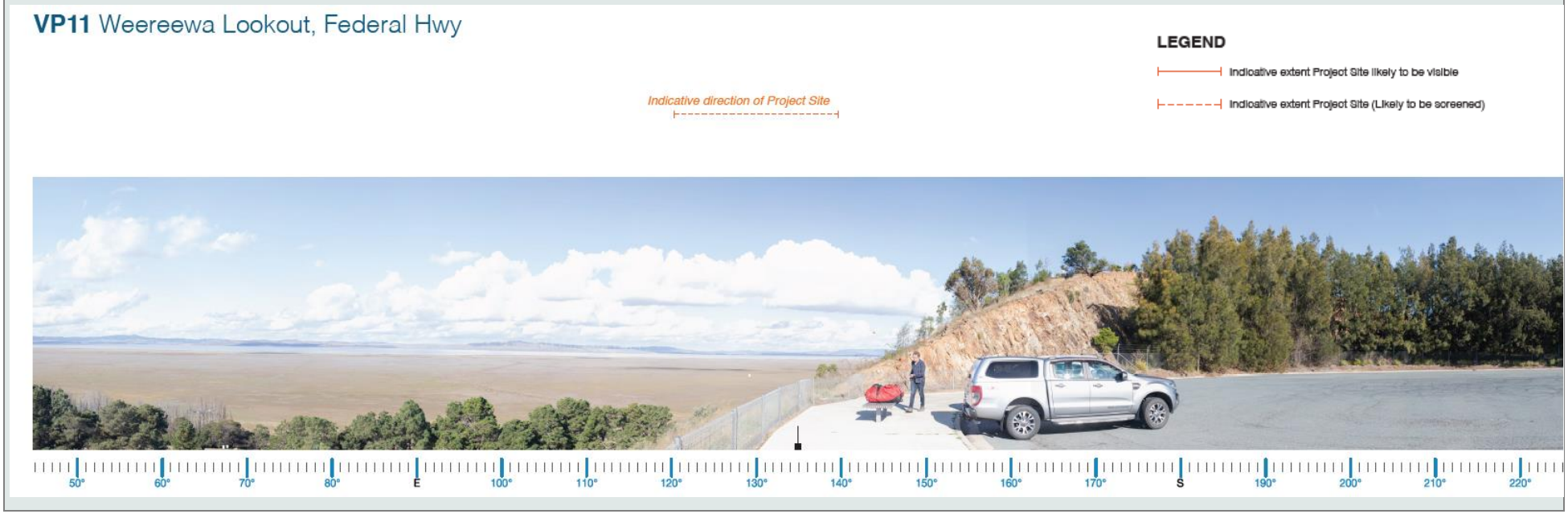
| | | only with prior permission. |
| **Views** | The Andersen VC rest area and the Weereewa Lookout have similar outlooks but the lookout is significantly higher. Therefore, it is unclear why the panorama for Weereewa suggests that no part of the site is likely to be visible when there are sections that are identified as visible from the Andersen VC rest area (page 26). This should be clarified. | The illustrated extent of the Project is noted as 'indicative, likely to be screened' from Weereewa and Andersen view points, and is not predicted to be visible from either location. The legend clarifies what is *predicted* to be visible (dashed line) versus what is *likely* to be screened (solid line).<br>The visual impact from this has been assessed as negligible due to the distance of the Project (approximately 10 km). |



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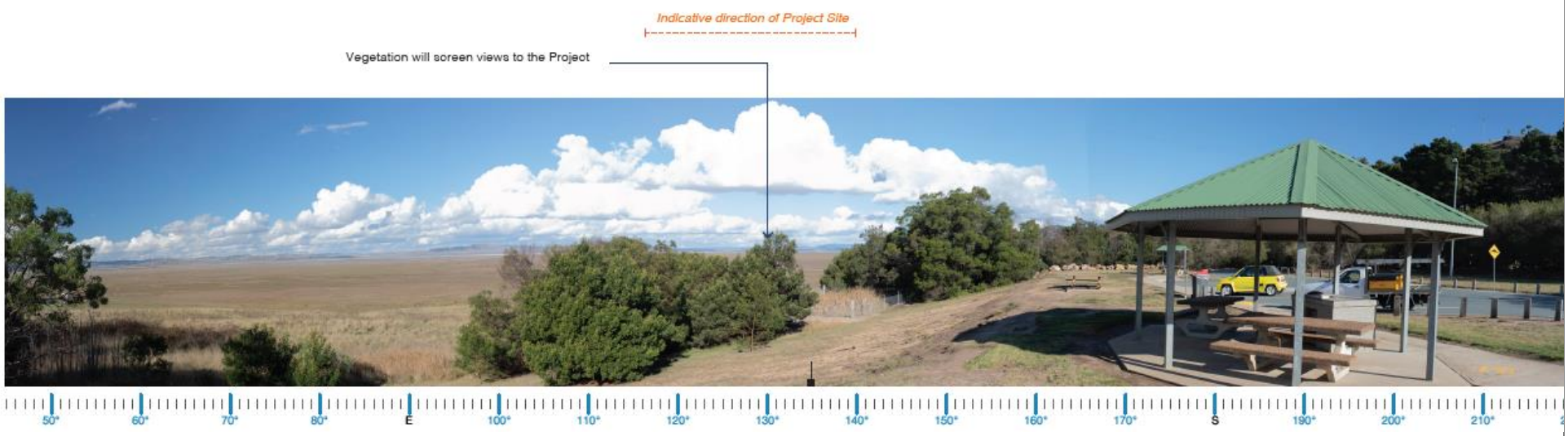
|  | | |
| **Views** | Given the timeframe for the Project, consideration should be given to the potential future impact on the areas identified in the Bungendore Structure Plan 2048 for future investigation for residential development on the northern side of Bungendore. | Based on Map 1 of the Bungendore Structure Plan 2048 (which shows potential future investigation areas), the closest viewpoints would likely be VP02, VP07 (which shows existing vegetation in the far distance along Tarago Road) and VP01. Refer to Figure 4-8below. |

| Issue | Detail of issue | Applicant response |
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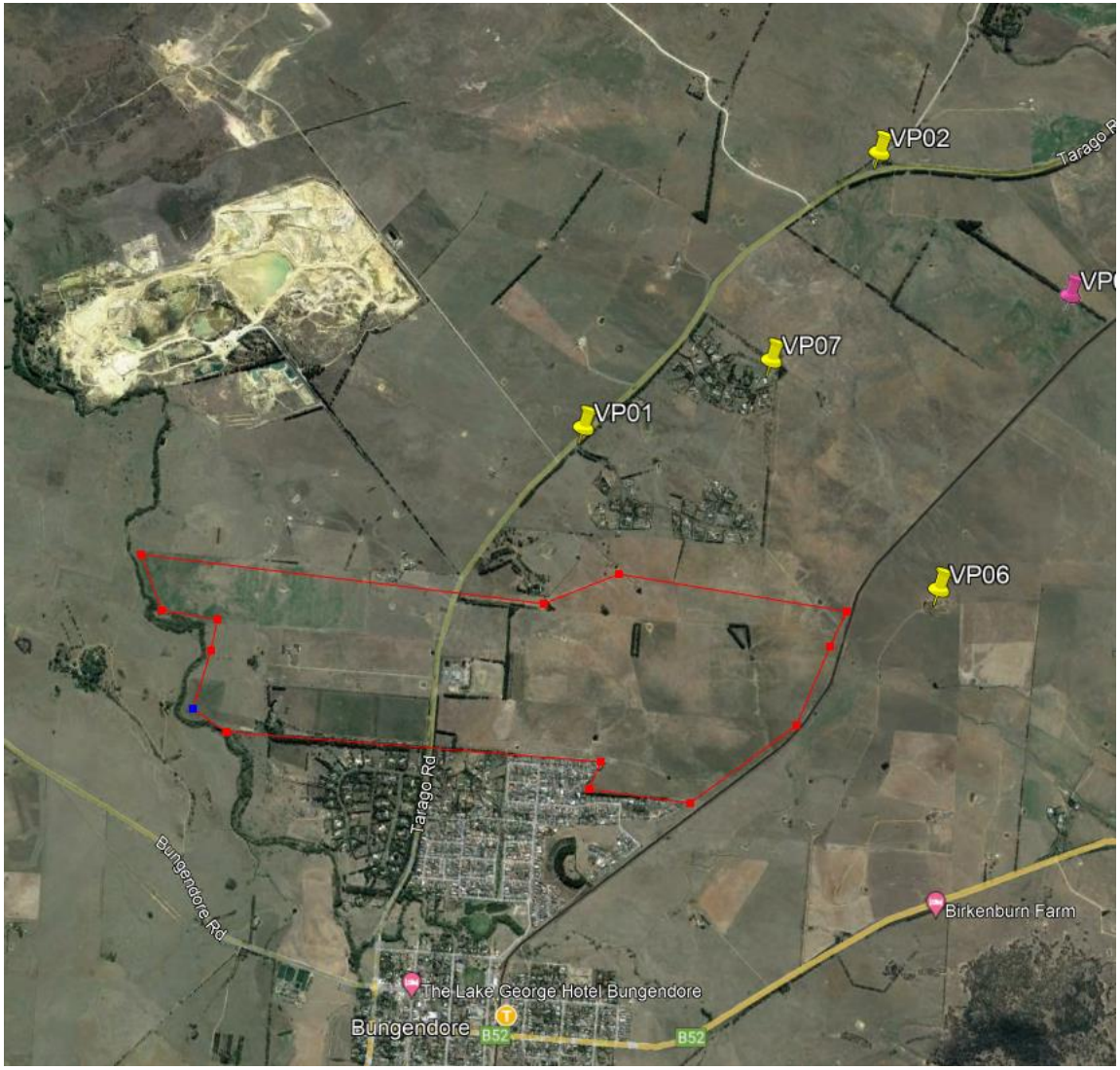
| |  <br>Figure 4-8 Viewpoints in relation to the Bungendore Structure Plan | |

| Issue | Detail of issue | Applicant response |
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| | | Existing vegetation along Tarago Road and the Potential Investigation Area north of the waste depot were captured as part of the investigations for the LVIA. Refer to Figure 4-9 and Figure 4-10 below. Intervening vegetation and distance from the Project would likely make view of the Project indiscernible from this location.<br>In addition, there is existing vegetation along McDonnell Drive which would also break any potential views of the Project. Refer to Figure 4-11 below. |
| |  <br>Figure 4-9 Vegetation along Tarago Road | |

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Figure 4-10 Vegetation near the Potential Investigation Area north of the waste depot

Figure 4-11 Existing vegetation along McDonnell Drive

| Issue | Detail of issue | Applicant response |
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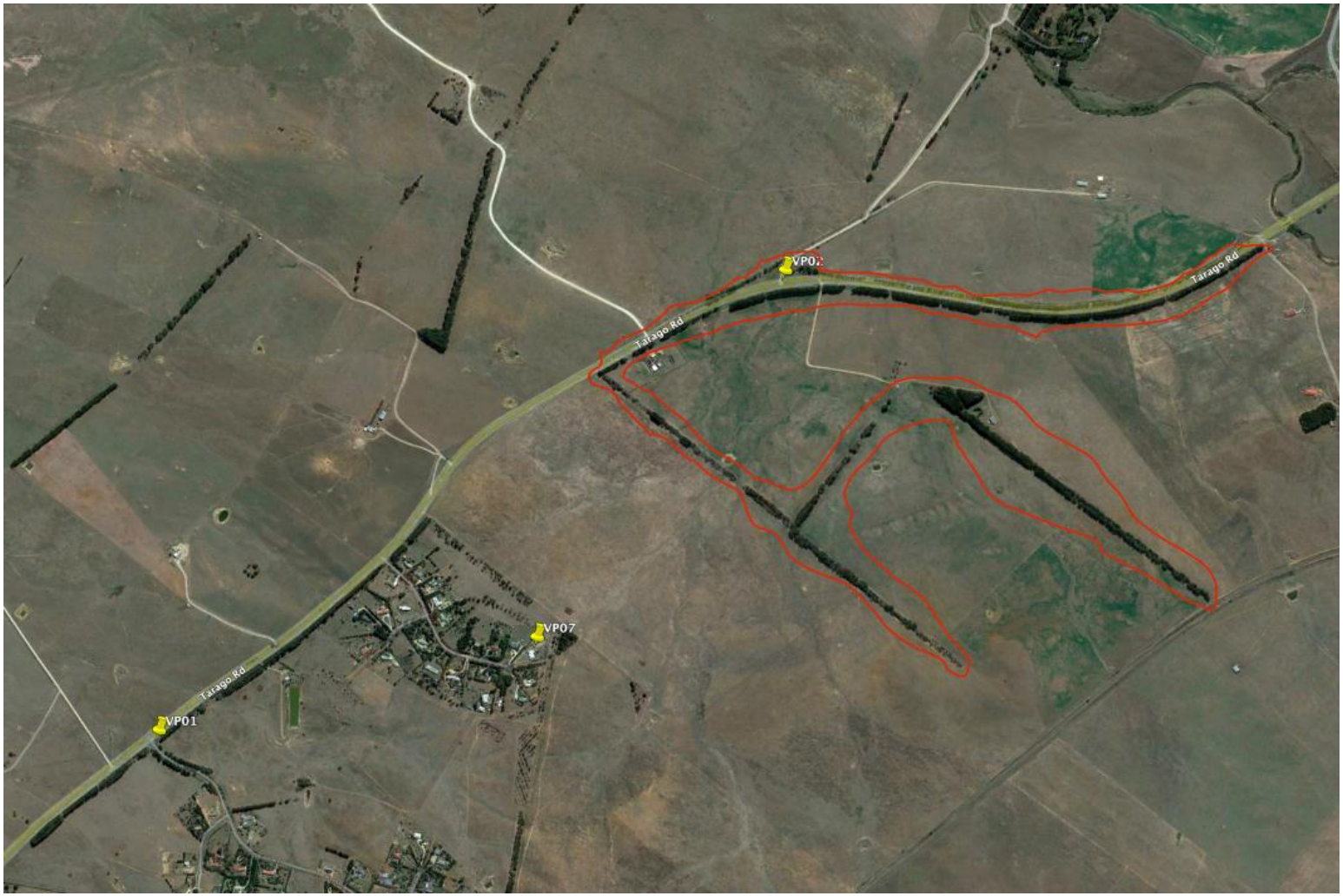
| | | A 180 degree panorama along Tarago Road south of VP02 also shows the degree of existing vegetation screening. Refer to Figure 4-12 below.<br>All views towards the Project from the proposed Bungendore Estate would likely be filtered by roadside vegetation, as shown in Figure 4-13below.<br>Moreover, screening proposed in the Landscape Plan around the Project within the Site boundary would further minimise opportunities to experience visual impact from the Project. |
| |  <br>Figure 4-12 Panorama along Tarago Road south of VP02 | |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| |  <br>Figure 4-13 Views towards the Project from the proposed Bungendore Estate | |
| | | A VP was not established west of Tarago Road near the Potential |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | | Investigation Area. However, existing screening in the form of vegetation along property fence lines and around the sand quarry would likely filter view of the Project as shown in Figure 4-14 below.<br>View towards the Site with intervening vegetation associated with Bungendore Sands Quarry. Refer to figure below. |

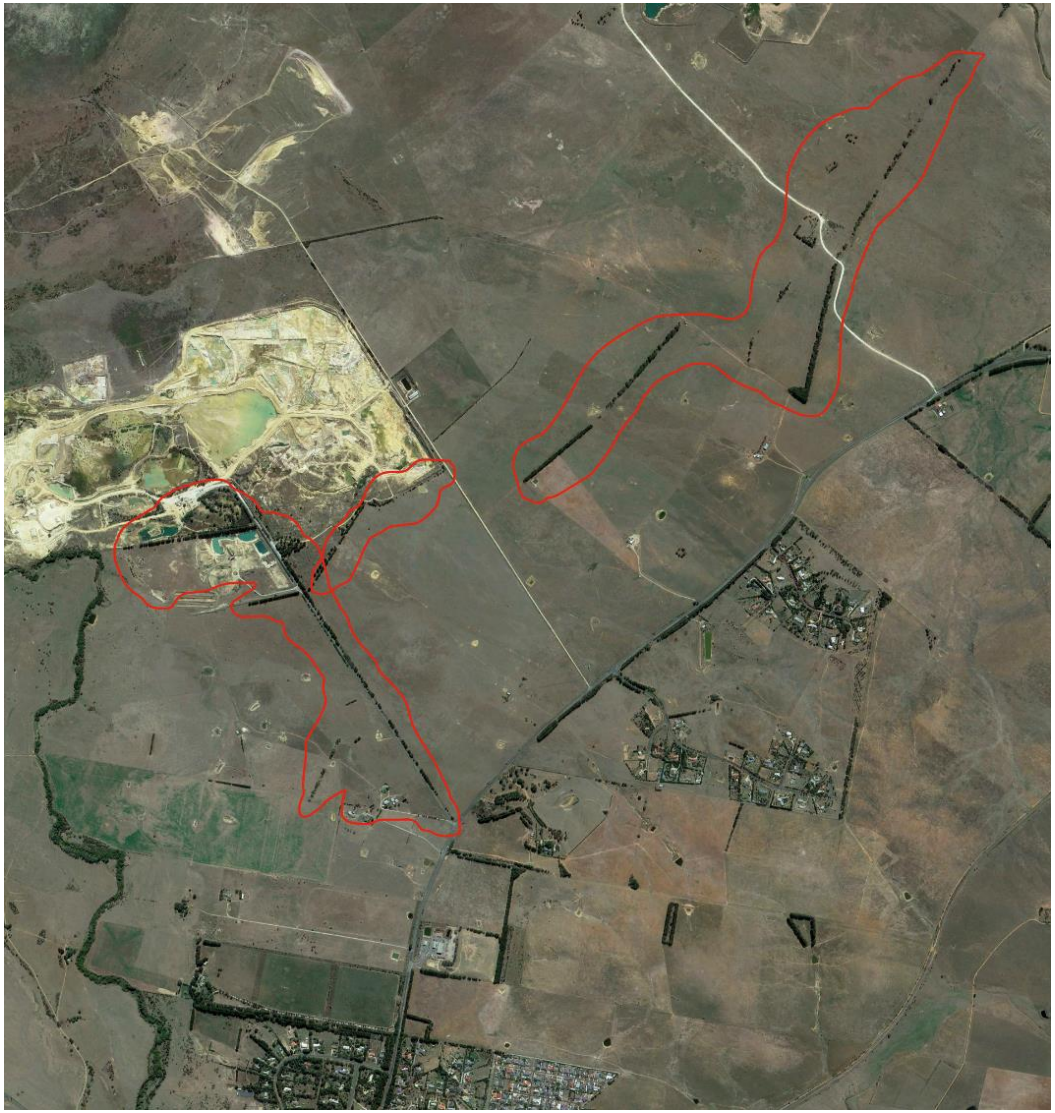
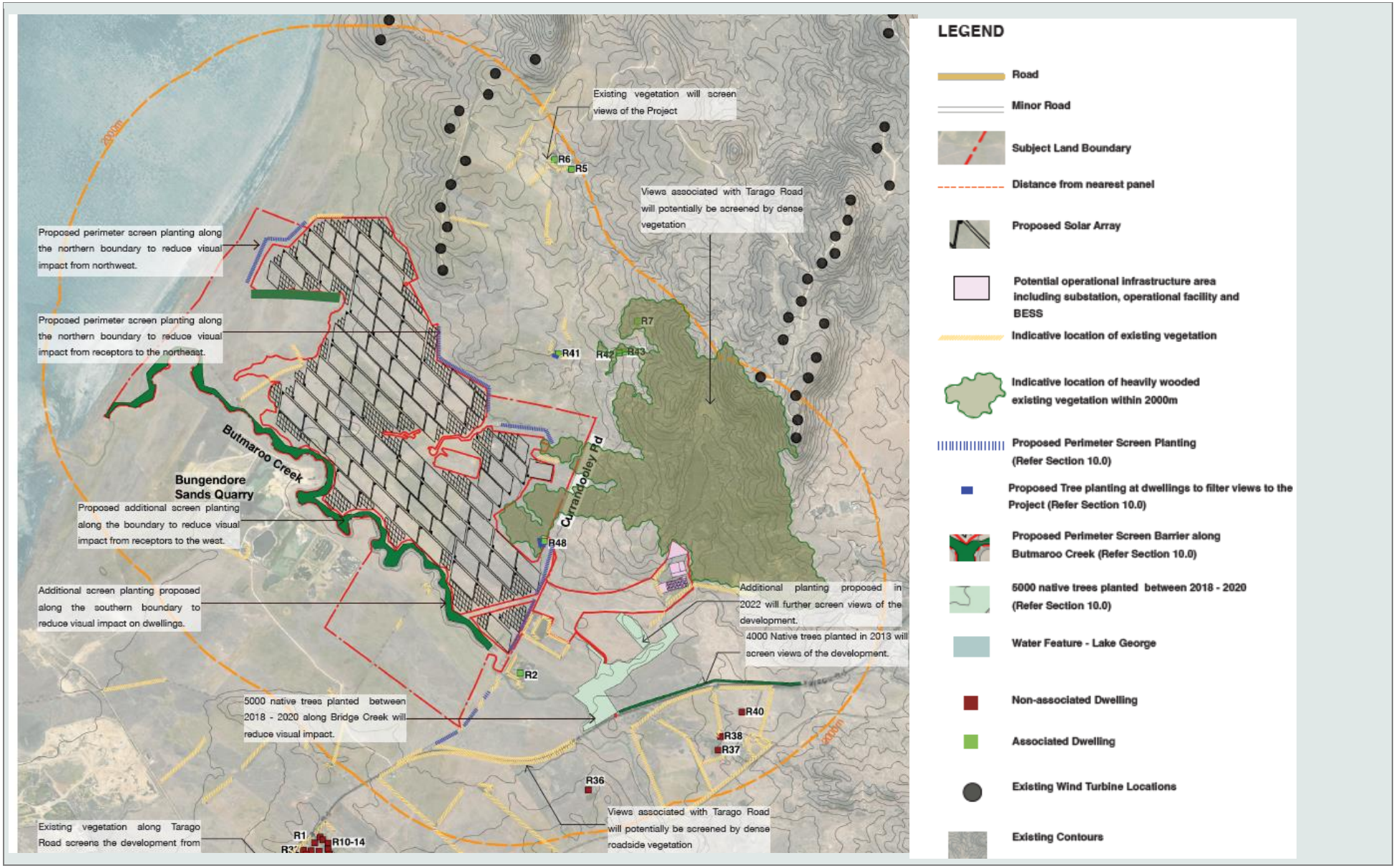


Figure 4-14 Existing screening around the sand quarry

| Issue | Detail of issue | Applicant response |
|---|---|---|
| |  <br>Figure 4-15 View towards the Site with intervening vegetation associated with Bungendore Sands Quarry | |
| | | In closing, the western section of Tarago Road as indicated in the BSP is located approximately 5.5 km from the development footprint. Based on a desktop assessment alone (Not taking into account any vegetation) the horizontal field of view from this area is less than 20º of the view. Moreover, a combination of distance and vegetation -along the road leading to Bungendore Sands Quarry or vegetation associated with other residences between the |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | | development and the Proposed Long term Growth Area west of Tarago Road - will likely filter views towards the development.<br>It is agreed that the elevated positions to the east of Tarago Road within the long term growth options will have views towards the development. However, proposed mitigation measure over time would likely fragment views of the Project from these locations. |
| **Views** | Much of the planting referenced on page 38 is located off site on land that is not in the control of the Applicant or land holder. The EIS should describe how screen plantings on land outside the applicants control will be facilitated. | All planting has been confirmed on being on land owned by the applicant.<br>LVIA map on page 38 has been amended to include the Subject Land, and better distinguish existing planting. |


Existing vegetation will screen views of the Project
Views associated with Tarago Road will potentially be screened by dense vegetation
Proposed perimeter screen planting along the northern boundary to reduce visual impact from northwest.
Proposed perimeter screen planting along the northern boundary to reduce visual impact from receptors to the northeast.
Butmaroo Creek
Bungendore Sands Quarry
Proposed additional screen planting along the boundary to reduce visual impact from receptors to the west.
Additional screen planting proposed along the southern boundary to reduce visual impact on dwellings.
Additional planting proposed in 2022 will further screen views of the development.
4000 Native trees planted in 2013 will screen views of the development.
5000 native trees planted between 2018 - 2020 along Bridge Creek will reduce visual impact.
Existing vegetation along Tarago Road screens the development from
Views associated with Tarago Road will potentially be screened by dense roadside vegetation
Curranbobley Rd
R1
R10-14
R2
R5
R6
R7
R36
R37
R38
R40
R41
R42
R43
R48
2000m
LEGEND
Road
Minor Road
Subject Land Boundary
Distance from nearest panel
Proposed Solar Array
Potential operational infrastructure area including substation, operational facility and BESS
Indicative location of existing vegetation
Indicative location of heavily wooded existing vegetation within 2000m
Proposed Perimeter Screen Planting (Refer Section 10.0)
Proposed Tree planting at dwellings to filter views to the Project (Refer Section 10.0)
Proposed Perimeter Screen Barrier along Butmaroo Creek (Refer Section 10.0)
5000 native trees planted between 2018 - 2020 (Refer Section 10.0)
Water Feature - Lake George
Non-associated Dwelling
Associated Dwelling
Existing Wind Turbine Locations
Existing Contours

| Issue | Detail of issue | Applicant response |
|---|---|---|
| **Glare** | Residential nuisance glare section 6 (pages 31 – 41) should also reference the future residential areas of Bungendore as identified in the Bungendore Structure Plan 2018-2048. | The context of the residential areas of interest is shown in Figure 4-16, showing:<br>• The proposed facility's maximum envelope outline;<br>• The 15 "assessment" receivers selected for detailed analysis in SLR's previous glare study; and<br>• The northern-most perimeter line of future residential areas described in BSP2048.<br>• The nearest future potential BSP2048 residential areas of interest are over 3 km south of the nearest boundary of the proposed facility.<br>Regarding future residential areas of Bungendore, SLR's Glare Study noted:<br>• Residents where reflections from the proposed facility may be visible (ie not necessarily constituting a "glare" condition) generally lie to the east or west to southwest of the facility – eg Residence 41 (refer Figure 4-16 below).<br>• This arises because the visibility of reflections (as shown by the all-year-round, minute-by-minute modelling) only occurs when the panels are in a horizontal or near horizontal position and able to pick up very low altitude incoming solar rays in the early morning (sunrise) or late afternoon (sunset) for certain months of the year.<br>• In fact, the modelling shows that, under an Operational "Back-Tracking" mode, all reflections can be avoided entirely by avoiding horizontal panel angles at the start and end of each day.<br>• The BSP2048 residential areas of interest lie to the south of the proposed facility and hence can only potentially be impacted by reflections that arise from incoming solar rays which arise themselves from the north.<br>• Such north-incoming solar rays occur close to midday when the altitude of the sun is at its highest (at any time of the year). Accordingly, incoming midday solar rays (from the north) will create reflections that are directed back upwards away from the ground. This is why residences to the south of the site in the original SLR analysis did not |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | | encounter any visible reflections conditions or reflections which might constitute glare.<br>Therefore, it can be confidently concluded that the proposed solar facility will have no impact in relation to reflective glare for the future residential areas identified in Bungendore Structure Plan 2048.<br>This is due to the distance of these areas from the proposed facility and the position of these areas south of the facility in relation to incoming solar angles and their reflections. |

| Issue | Detail of issue | Applicant response |
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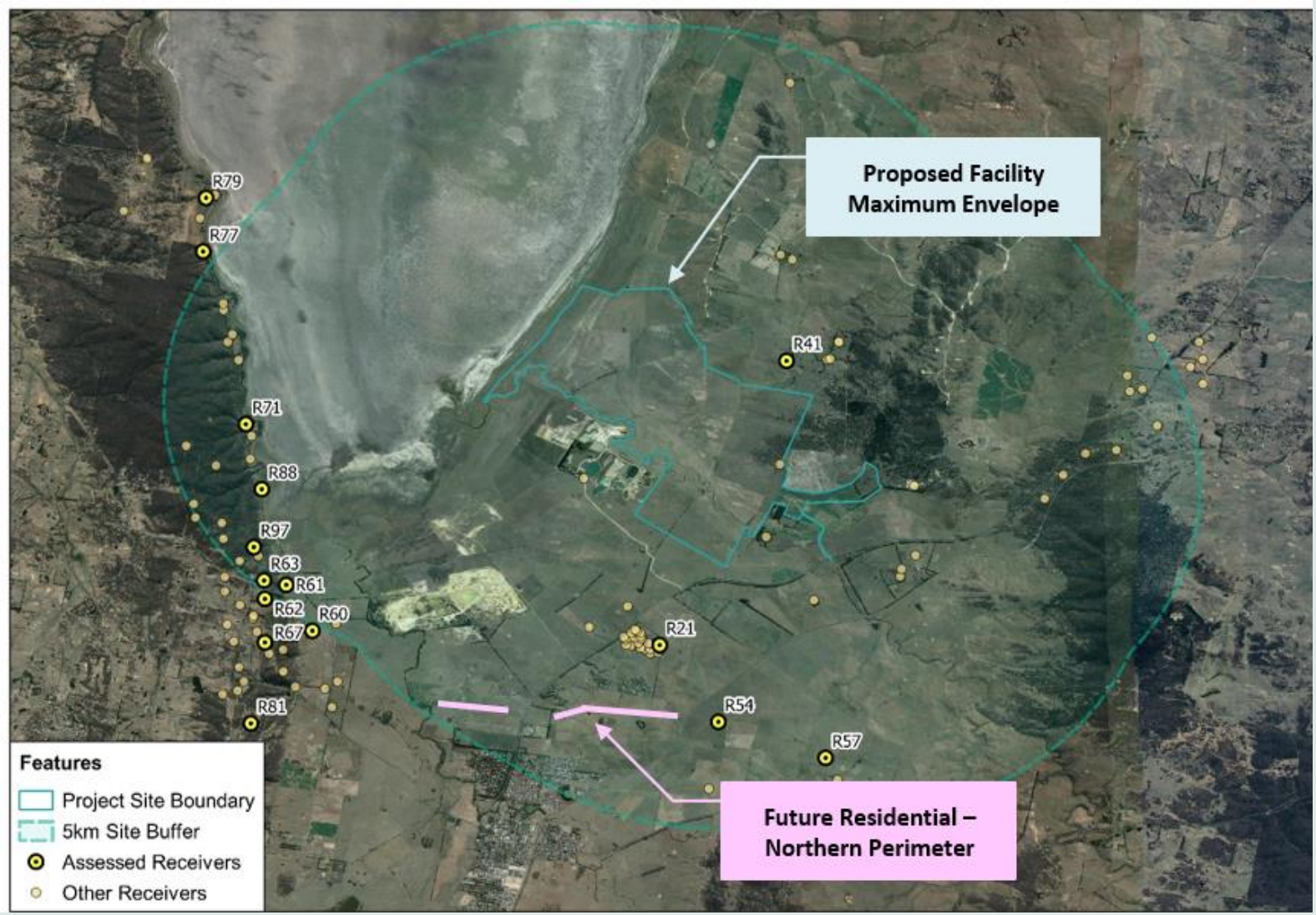


Figure 4-16 Project “Assessment” Receiver Location Map

| Issue | Detail of issue | Applicant response |
|---|---|---|
| **Project description** | The EIS should require confirmation that the panels in the facility will be operated in tracking mode (Pages 12, 17 and 41). | The EIS states panels would be a single axis tracking system, orientated in rows with an approximate north-south axis. |
| **Project description** | Require confirmation that the airstrip will be decommissioned (Pages 3, 20-24 and 47). | The Landholder confirms that the airstrip will be closed if this project proceeds.<br>Prior to construction and the Applicant confirms it will work with CASA to notify relevant parties of this fact, as well as provide on ground visual marking to this effect. |
| **Project description** | Require confirmation about the proposed night time lighting of the development (Pages 45 – 46). | The EIS states:<br>*Night lighting will be located around the buildings and substation, switched on for maintenance and emergency purposes only. Task lighting will be installed at power conversion units….*<br>*Night lighting around the buildings and in the high voltage substation will be installed to comply with Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version, but will only be used for maintenance and emergency purposes. Task lighting will be installed at PCUs. Lighting will be able to be remotely controlled as required…* |
| **Glare** | 24hr lighting of the development is not supported (Pages 5, 12, 45, 48). | As above, this is not proposed. |
| **Glare** | Require confirmation on whether 2P trackers will be used, noting that this will result in an up to 5m higher tilt (Pages 5, 12 and 49). | Regarding whether 2P or 1P trackers will be used, this is a detailed design decision that will be made post approval. The project is seeking an approval envelope large enough to accommodate either option at this time. All studies have been done with this envelope in mind (incl max height of 5m). Refer to heights provided above for a 1P or 2P arrangement at differing flood heights. |
| **Hydrology** | It appears that the flood modelling of the site does not take into account the change in surface roughness coefficient due to earth disturbance during construction. However, it is noted that the subject site is on the foreshores of Lake George and consider that it is possible that the impact | The hydrologist agrees that ground disturbance would need to managed in accordance with Managing Urban Stormwater: Soils and Construction Volumes and 2A; this is a current commitment of the project:<br>*S2 A Construction Environmental Management Plan (CEMP) would be implemented to manage runoff, soil erosion and sedimentation and* |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | resulting from flooding during this stage of the project may be more of an environmental issue with scouring of the site and increased turbidity of receiving waters rather than increased flood affection of neighbouring properties. This consideration is due to relative size of the catchment (not the individual sub-catchments) as a whole and the project site being relatively small in comparison. | *pollution risks at the site. The CEMP would be prepared in accordance with the 'Blue Book' Volume 1 Managing Urban Stormwater: Soils and Construction (Landcom 2004), Volume 2A Installation of Services (DECC 2008a) and Volume 2C Unsealed Roads (DECC 2008b).*<br>The principal objective of these documents is around limiting the extent of disturbance and the retention of as much ground cover as possible.<br>The installation of piers for the solar arrays would be undertaken with limited disturbance of existing vegetation and therefore no wholesale disturbance of the site is proposed and therefore disturbance would primarily be restricted to the installation of roads and service trenches.<br>The current modelling for flood impact is limited to an assessment of the 1% AEP (1 in 100 year ARI) storm event and the probability of such an event occurring during the relatively short construction period (12-18 months) would be in the range of 1-1.5% and therefore modelling of this impact is considered unwarranted. |
| **Hydrology** | It is noted all of the creeks located in the project site are classified as 4th order streams and will require an activity approval through DPI Water for any works or crossings affecting the waterways. | SSD projects do not require controlled activity approval however, the commitment adopting the controlled activity best practice guidance is part of the project:<br>*H12 All proposed infrastructure associated with the proposed development should be setback from existing watercourses at the recommended riparian corridor widths specified in Table 1 of the Guidelines for Riparian Corridors on Waterfront Land (DPI Water, 2012) as provided below. In accordance with the guidelines the width of the vegetated riparian zone (VRZ) should be measured from the top of the highest bank on both sides of the watercourse…* |
| **Traffic** | Traffic volume data is taken from TfNSW traffic volume viewer from 2008 and a growth rate applied to calculate the volumes for 2021. It should be noted that a small error in adopted growth rate can have a significant cumulative impact over the course of a 13 year period. QPRC would expect that proposed State Significant Development would | A tube count was commissioned for Tarago Road adjacent to the site access from Monday 1 August 2022 to Sunday 7 August 2022. The tube count recorded the following:<br>• An average traffic volume of 1,363 vehicles per day;<br>• The morning peak hour recorded an average of 117 vehicles per hour; and |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | warrant on-site traffic counts to be commissioned for the acquisition of factual data and the removal of error and doubt from any calculations and/or assumptions. On this basis QPRC consider the traffic impact assessment to be fundamentally flawed. | • The evening peak hour recorded an average of 120 vehicles per hour.<br>The survey results indicate Tarago Road currently accommodates a low level of traffic. The site is expected to generate in the order of 57 vehicle movements in the peak hour during peak construction.<br>The peak hour for construction will occur at the start and end of the day when staff are transported to/from the site. The majority of staff will typically arrive on-site between 6:00am and 7:00am. However, staff generally have staggered finish times which results in the evening peak hour being less pronounced.<br>During the peak hour during construction Tarago Road would accommodate up to 177 vehicles in the peak hour. Accordingly, Tarago Road would continue to operate with a good level of service (Level of Service A) based on Table 4.5 of the RTA Guide to Traffic Generation Developments. This is a condition of free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high, and the general level of comfort and convenience provided is excellent.<br>During the middle of the day the traffic movements are expected to be predominantly associated with heavy vehicles with approximately 10 vehicle movements per hour.<br>Therefore, the road network is able to readily accommodate the increase in traffic generated by the solar farm during construction. The tube count data can be provided upon request. |
| **Traffic** | Section 2.4 of the report asserts that there are no public transport services within the vicinity of the site. This statement does not account for school bus services. | Bungendore Bus and Coach has a minibus that leaves the bus depot at 6:25am that travels to Mount Fairy Road and then returns to Bungendore by 7:15am. A large bus leaves Bungendore at 7:50am and travels to Taylors Creek Road and travels back to Bungendore by 9:00am. The large bus leaves Bungendore Primary School at 3:10pm and travels to Taylors Creek Road and returns by 4:15pm. The minibus leaves Bungendore at 4:35pm to Mount Fairy Road and is back at Bungendore by 5:25pm.<br>It is recommended that heavy vehicle movements occur outside of times when |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | | school buses will be present on Tarago Road.<br>**New commitment now proposed:**<br>The requirement that heavy vehicle movements occur outside of times when school buses will be present on Tarago Road is carried into the Traffic Management Plan (TMP), as detailed within the updated mitigation measure AT1 (Appendix B). |
| **Traffic** | Both average and peak VPD during construction comprise a significant percentage of the assumed traffic volume as calculated from assumptions in point 1 above:<br>• 6.5% to 13.6% for light vehicles (assuming the same Light to Heavy split noted in Table 1).<br>• 19.2% to 96% for heavy vehicles (assuming the same Light to Heavy split noted in Table 1).<br>The maximum peak of staff on-site for construction activities does not match the maximum peak in VPD attributed to the development. i.e. Peak staff rate of 300 and peak VPD of 170. The report contains no rationale to describe how modes of transport may achieve such a discrepancy between worker and vehicle numbers nor does it confirm whether the 300 staff noted include any of the HV drivers who would likely spend the majority of their day off-site. | The traffic volume information has been provided by the Applicant who has advised that shuttle buses will be available to transport some staff to reduce the number of light vehicle movements. The details of how these vehicles will be provided is proposed to be documented within the Construction Traffic Management Plan which will be prepared by the appointed contractor prior to construction.<br>As outlined above, Tarago Road is expected to operate with a good level of service and the crash search presented within the Traffic Impact Assessment indicates the road network is currently operating in a relatively safe manner. Accordingly, the light and heavy vehicle movements associated with the solar farm are expected to be able to be suitably accommodated on the road network.<br>Note the assessment assumed carpooling (3 persons per car) which reduced the total light vehicle numbers. A breakdown is provided below. |

Table 4-2 Vehicle breakdown (note carpooling assumption in red)

| | | Volume Per Unit (M^3) | Weight Per Unit (T) | Number per Vehicle | Total Entering Site |
|---|---|---|---|---|---|
| **B-double Loads** | | | | | |
| Piles | 125,588.70 | 0.09 | 0.10 | 500.00 | 251 |
| Cable DC high current (km) | 1,040.00 | | | 20 | 52 |
| Cable AC | 30.00 | | 4 | 2 | 15 |
| 40' containers of panels | 1,221.00 | | | 2 | 611 |
| Site offices | 8.00 | | | 2 | 4 |
| **Total B Double Loads** | | | | | **933** |
| | | | | | |
| **Semi Trailer Loads** | | | | | |
| Substation Components | | | | | 50 |
| Tracking systems | 8791 | | 0.25 | 160 | 55 |
| Battery (20 foot container) | 200.00 | | | 1 | 200 |
| Gravel Capping (m^3) | 15000 | | 1.3 | 38.46153846 | 390 |
| WATER | 10000 | | 1.3 | 38.46153846 | 260 |
| Miscellaneous (water pipe, fence materials, other) | | | | | 25 |
| Inverters / PCU | 80 | | | 1 | 80 |
| **Total Semi Trailer Loads** | | | | | **1060** |
| | | | | | |
| **Over size** | | | | | |
| Transformers | 2 | | | | **2** |
| | | | | | |
| **Low Loaders** | | | | | |
| Earth Moving Floats (grader, roller, dozer, excavator) | 20 | | | | **40** |
| | | | | | |
| **Small and Medium Rigids with Miscellanous incl Concrete** | | | | | **2000** |
| | Average Staff Level | | | | |
| **Cars and Utes** | 145 | | | 3 | **16917** |

| Issue | Detail of issue | Applicant response |
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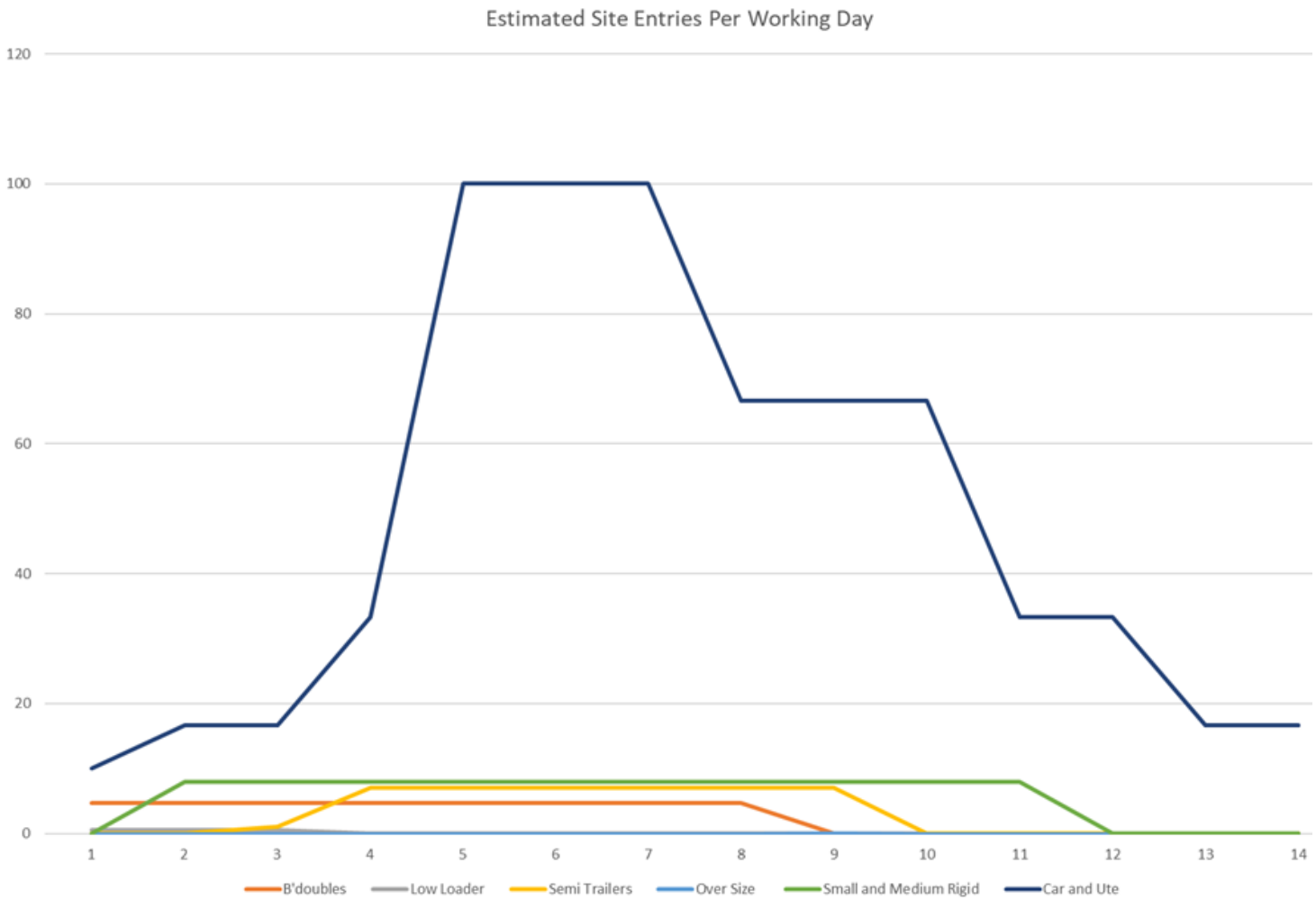
| |  <br>Figure 4-17 Numbers of vehicles per day (y axis) by month of construction (x axis); peak occurs during months 5-7. | |
| **Traffic** | The OSOM (Over-size / Over-mass) vehicle described in | The OSOM vehicles are subject to specific road permits that will be applied for |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | the swept path assessment appears to be a vehicle that will require a police escort as part of any approval to operate on the subject road network. | by the contractor once the dimensions of the load and the specific delivery vehicle are known. Road management techniques, such as police escorts, will be determined at this time.<br>Post approval all OSOM vehicle movements that require an escort will require a permit from the NHVR. The Permit will include the approved route, any travel conditions or road upgrades required. |
| **Traffic** | The traffic impact assessment is generally constrained to Tarago Road without sufficient consideration and assessment of the impact on other nearby roads. | Given Tarago Road accommodates a low level of traffic and traffic movements associated with the solar farm will be further disbursed on the wider road network it is considered that the wider road network is also able to readily accommodate the traffic volumes generated by the solar farm.<br>Regional Roads are routes, together with the State Roads, that provide the main connections to and between smaller towns and districts and perform a sub arterial function in major urban areas. Regional Roads are the responsibility of councils to fund, determine priorities and carry out works. They are capitalised as a council asset. |
| **Traffic** | The assessment does not address financial reparations for damage to the road caused by the increased construction traffic associated with the development. | The haulage roads have been demonstrated to have the level of service required for the traffic volumes required by the project. The project commits to upgrade the intersection with the site access road.<br>Where smaller local roads are used to connect to the site access, it is standard for dilapidation surveys to demonstrate any impacts will be addressed by the Applicant however, this is not considered appropriate for this project, given the site access is directly off Tarago Road and the intersection treatment is being developed.<br>A royalty payment based on the mass of materials entering the site has been proposed by BCSF. This has been included as Mitigation Measure T5 and T6 below (Appendix B). |
| **Social and economic** | Various parts of the EIS refer to a Community Benefit Sharing Scheme (CBSS) and a Project to provide $1.25M towards funding for a new community swimming pool (page | On page 32-33, the EIS states:<br>*Through its Community Benefit Sharing Scheme (CBSS), the Project is sharing* |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | 32, 33 and 318). The earlier references need to be rewritten to make it clear that the contribution to the swimming pool will be facilitated through a Planning Agreement with Council and that the $1.25M is to be spent on recreational facilities including a swimming pool in Bungendore.<br>Other parts of the EIS refer to a meeting which occurred on 28/7/2021 not 28/7/2012 (page 106) as written. An addition should also be added to this sentence along the lines: Since this time negotiations have continued between BCSF Pty Ltd and Council towards a planning agreement and the Applicant made a presentation on the project to a Council workshop on 30 March 2022. | *the financial benefits of the Project with relevant community stakeholder groups, equivalent to approximately $330/MW per year.*<br>*As part of this scheme, the* Applicant *and Queanbeyan-Palerang Regional Council have agreed a form of* ***Voluntary Planning Agreement*** *(VPA), through which the* Applicant *will provide a 'development contribution' of $1.25m over 20 years to Council. This contribution will be used for installing, maintaining and operating a swimming pool in Bungendore and/or other facilities within the planned Bungendore sports precinct.*<br>*Through its* ***Community Benefit Sharing Scheme****, the Project is sharing the financial benefits of the Project with relevant community stakeholder groups, equivalent to approximately $330/MW per year. Recipients of funding are encouraged to spend the money locally to ensure the financial benefits stay within the community.*<br>*As part of this scheme, the* Applicant *and Queanbeyan-Palerang Regional Council have agreed a form of* ***Voluntary Planning Agreement,*** *through which the* Applicant *will provide a 'development contribution' of $1.25m over 20 years to Council. This contribution will be used for installing, maintaining and operating a swimming pool in Bungendore and/or other facilities within the planned Bungendore sports precinct.*<br>Note, page 318 of the EIS is not considered to need updating as it references the VPA specifically.<br>It is noted that the date of the EIS meeting was 28/07/2021, not 28/07/12, and an additional presentation was made to Council on 30/03/2022. |
| **Social and economic** | It is recommended that with the recent release of the 2020 ABS Census data that Population and Growth (page 309-310), age, households and cultural diversity, socio-economic advantage and disadvantage and housing and accommodation (all page 312) be updated to reflect the latest available data. | The ABS 2021 Census data is being released in a phased approach. The first release on 28 June 2022 included population and people, and households and housing topics. Please note that the socio-economic advantage and disadvantage indexes (SEIFA) will not be released until 2023.<br>The relevant sections have been updated with currently available data, as shown below:<br>*Age, households, and cultural diversity* |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | | In 2021, the median ages of the populations in Bungendore and the Queanbeyan-Palerang LGA were both 38 years (ABS 2021a, 2021b), just below the median age for NSW (39 years). Bungendore had a slightly higher proportion of children aged 0-14 (23%) compared to NSW (18.2%). The town also had a lower proportion of older people compared to the state average, with 12.2% of people aged 65 or over, compared to around 18% (17.7) for NSW. The proportion of family households in Bungendore (85%) was higher than the wider Queanbeyan-Palerang region (73%) and NSW as a whole (71%). Of those family households, around 61% were families with children in Bungendore, on par with the broader region and state (both around 61%).<br>Relative to the wider region and NSW, there were lower proportions of Bungendore residents born overseas. Around 84% of Bungendore residents were born in Australia, with other countries of birth including England, New Zealand, the US, and Scotland. The proportion of Aboriginal and Torres Strait Islander people was also slightly lower in Bungendore (2.5%) than in the Queanbeyan-Palerang region and NSW (both around 3.5%).<br>*Socio-economic advantage or disadvantage*<br>In 2021, the median household weekly income in Bungendore was $2,922, notably higher than that of the Queanbeyan-Palerang LGA ($2,295) and the NSW average ($1,829) (ABS, 2021a, 2021b). The Social-Economic Indexes for Areas (SEIFA) produced by the ABS is an aggregated score of factors reflecting relative socio-economic advantage and disadvantage within an area. On the index of relative socio-economic advantage/disadvantage based on the 2016 Census data (the most recent data available), the Bungendore State Suburb comprises the highest possible score (decile of 10) across the indexes of economic resources, education and occupation, which shows that residents experience a high level of access to employment, income, and living conditions (ABS, 2016c). The Queanbeyan-Palerang Region LGA similarly scored highly (deciles of 9 and 10) across these indexes. (Please note that SEIFA data for the 2021 Census are not scheduled for release until 2023.)<br>*Housing and accommodation* |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | | In 2021, most Bungendore residents lived in separate houses (94%), and the town had higher rates of home ownership (85%) compared to the Queanbeyan-Palerang region (71%) and NSW (64%) (ABS, 2021a, 2021b). At the time of the 2021 Census, 8.3% of households in Bungendore reported monthly mortgage repayments, and 20.7% reported weekly rent payments, that were greater than or equal to 30% of household income.<br>More recently, the median weekly rent for a house in the Queanbeyan-Palerang region was $655 for the March 2022 quarter, which was higher than the NSW average ($550) (NSW Department of Communities & Justice, 2022). Median weekly rents for houses in the region have increased by 16% from March 2021. This was likely influenced by accelerating rental rates in the neighbouring ACT ($759) and record low vacancy rates averaging 0.7% in the first six months of 2022 (SQM, 2022c). Rental vacancy rates of 3% are regarded as representing a balance between supply and demand. Within the postcode 2621, which includes Bungendore and surrounding areas, vacancy rates have been very low over both the long and short term. The rate in January 2022 was 1.5%, dropping to 0.8% in June 2022 (SQM Research, 2022a), which indicates a very tight rental market and a lack of supply of private rental accommodation. In nearby Queanbeyan, the residential vacancy rate has been between 0.2% - 0.3% in the first six months of 2022 (SQM Research, 2022b). Compounding this are the adverse impacts of the COVID-19 pandemic on renters in regional areas generally, causing declining vacancy rates and increasing median rental rates (Pawson, H., Martin, C., Thompson, S. & Aminpour, F., 2021). |
| **Employment and accommodation** | The EIS suggests that there is adequate accommodation capacity within 67km of the development site (page 319). QPRC's experience is that the rental market is currently very tight particularly in Queanbeyan and that this type of project tends to drive up rentals locally, therefore adversely impacting on other potential renters. This section of the EIS needs to further consider these aspects of accommodation as should the Employment and | Private accommodation is often used to support construction worker needs, e.g., leasing of holiday homes and investment properties, either privately or through real estate.<br>As described in the EIS, and above, the rental market is currently very tight in the Queanbeyan-Palerang LGA. This is compounded by spill over from the ACT housing market, and any additional pressures, such as demand for construction worker accommodation related to projects in the region, have the strong potential to increase demand for rental accommodation and drive up rents. |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | Accommodation Strategy to be developed (pages 319, 325 and 326 – Item SE3). | Anecdotal reports suggest that this has been the case in Yass, where local rents have reportedly increased dramatically in recent years due to the influx of construction workers on renewable energy projects. A lack of short-term accommodation options in the Yass area has meant that the developers of these projects have purchased and/or rented houses to ensure accommodation for their workforce. However, this has adversely impacted on other renters in the area as well as other local businesses subsequently unable to attract new employees.<br>As Queanbeyan and Goulburn is likely to be the destination of choice for any non-resident Project construction workforce, given it offers access to a range of accommodation options and services, these potential impacts will be given careful consideration in the development of the Employment and Accommodation Strategy. Council have advised this is a very topical issue now.<br>**New commitment now proposed:**<br>*The* Applicant *will consult with QPRC during the development of the Employment and Accommodation Strategy, and throughout Project construction, to minimise adverse impacts on both the rental market, and on vulnerable populations who may be temporarily housed in short-term accommodation.* This is detailed within the updated mitigation measure SE3 (Appendix B). |
| **DPE** | | |
| **Response to submissions** | We now require a written response to the full range of matters and recommendations raised in the submissions (including from Council) and agency advice, as required under section 59(2) of the *Environmental Planning and Assessment Regulation 2021*. The written response must be in the form of a submissions report that has been prepared having regard to the *State Significant Development Guidelines* (SSD Guidelines). The *Preparing a Submissions Report Guideline* forms part of the SSD | This document follows the SSD Guidance and meets the requirements of section 59(2) of the *Environmental Planning and Assessment Regulation 2021* |

<table>
<tr><th>Issue</th><th>Detail of issue</th><th>Applicant response</th></tr>
<tr><td></td><td>Guidelines (Appendix C).</td><td></td></tr>
<tr><td colspan="3">DPE-Hazards (response received through direct correspondence)</td></tr>
<tr><td>PHA clarification</td><td>In Section 3.2 of the PHA describes the BESS as 300 MW discharge with between 2 and 9 hours of full export capacity. However, in section 3.2.2 of the PHA the centralised BESS is described as 300 MW with 2 hours storage capacity (600 MWhr). Please clarify the energy storage capacity of the BESS;</td><td>All sections of the Preliminary Hazards Assessment (PHA) have been updated to reflect a 300MW/600MWh. Refer to the updated PHA presented in Appendix G.<br>As such, the Application wished to clarify the energy storage capacity as 300MW/600MWh.</td></tr>
<tr><td>PHA clarification</td><td>In section 3.2.2 of AC Coupled Energy Storage facility is described as having 60 individual containers. The Department is not aware of individual containers with a capacity of 5MW/10 MWhr. Please supply supporting information (brochure or datasheet) of the individual containers assumed for the AC Coupled Energy Storage facility; and</td><td>The description of the 60 individual containers is unclear and ill-defined within Section 3.2.2 of the PHA. As such, the PHA has been updated as follows (refer Appendix G):<br>“The batteries and conversion equipment are grouped into BESS Units, with each unit including a transformer, multiple inverters, multiple batteries, and medium voltage switchgear. With appropriate spacing between all devices and equipment, a 5MW / 10MWh Unit would occupy approximately 300m$^2$. To meet the desired capacity of approximately 300MW, the AC-coupled BESS would have approximately 60 Units. The AC-coupled BESS would also include internal access roads, and buildings for additional low and medium voltage switchgear. These buildings would occupy a footprint of approximately 300m$^2$. In total, the AC-coupled BESS would occupy approximately 3ha.”</td></tr>
<tr><td>PHA clarification</td><td>It is considered that the submitted documents identified reasonable credible scenarios and assessed the associated risk in a qualitatively manner. However, as part of a qualitative analysis, consideration of the codes and standards for BESSs, such as and not limited to NFPA 855, AS 5139, IEC 62897, UL 9540, FM Global DS 5-33, and UL 9540A test reports are important.</td><td>Section 3.2.3 BESS detailed design standards of the PHA (Appendix G) has been updated to include the following standards for future consideration:
<table>
<tr><th>Standard / code</th><th>Consideration</th></tr>
<tr><td>AS 2067</td><td>Substations and high voltage installations exceeding 1.0kVAC considering electrical, operation and safety separation</td></tr>
<tr><td>IEC 61000-6</td><td>Electromagnetic compatibility (EMC)</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Issue</th><th>Detail of issue</th><th>Applicant response</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>IEC 62477-1</td><td>Safety requirements for power electronic converter systems and equipment</td></tr>
<tr><td>IEC 62619</td><td>Safety requirements for secondary lithium cells and batteries, for use in industrial applications</td></tr>
<tr><td>IEC 62897</td><td>Stationary Energy Storage Systems with Lithium Batteries - Safety Requirements</td></tr>
<tr><td>UL 1973</td><td>Standard for Safety Batteries for Use in Stationary and Motive Auxiliary Power Applications</td></tr>
<tr><td>UL 9540</td><td>Standard for Energy Storage Systems and Equipment</td></tr>
<tr><td>UL 9540A</td><td>Test Method Brings Clarity to Insurance and Fire Mitigation Professionals especially for battery rack system</td></tr>
<tr><td>UN 38.3</td><td>Transportation Testing for Lithium Batteries and Cells</td></tr>
<tr><td>NFPA 855</td><td>Standard for the Installation of Stationary Energy Storage Systems</td></tr>
<tr><td>AS/NZ 5139:2019</td><td>Electrical installations - Safety of battery systems for use with power conversion equipment</td></tr>
<tr><td>FM Global DS 5-33</td><td>Property Loss Prevention Data Sheets</td></tr>
<tr><td>FM Global</td><td>Development of Sprinkler Protection Guidance for Lithium Ion Based Energy Storage Systems</td></tr>
</table>
</td></tr>
<tr><td></td><td>The current PHA does not provide sufficient information for us to verify the separation distances between battery sub-units (containers, enclosures etc) are sufficient to ensure that a fire does not propagate between the individual battery sub-units (containers, enclosures etc). In addition, the findings of the recent 2021 Victorian Big Battery fire are publicly available (noting that in table 4-4the results were</td><td>The final design and technology for the BESS has not been confirmed. As such, the Application has committed to design the BESS in accordance with standards provided above. This will be presented in the final detailed design. The detailed design will also include suitable separation distances between battery sub-units to ensure that a fire does not propagate between the individual battery sub-units.</td></tr>
</table>

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | described as "when available"). The fire resulted in fire propagation to the roof of the adjacent BESS sub-unit and the learning from incident should be considered. As such, the Applicant is requested to provide the following:<br>a. Verification that the BESS would be accommodated within the area designated for the BESS, accounting for separation between BESS subunits (containers, enclosures etc) to prevent fire propagation. This verification should examine relevant codes and standards for BESSs and the findings of the 2021 Victorian Big Battery fire; and<br>b. Demonstrate that the fire risks from BESS can comply with the Department's Hazardous Industry Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning' | As per the recommendations in the HIPAP no. 6, *"The final hazard analysis extends and updates the PHA with design information that becomes available as the project progresses."*<br>As such, the Applicant has committed to updating the PHA with design information in the detailed design stage (refer PHA5 Appendix B).<br>Section 4 of the updated PHA (Appendix G) has been updated to include recommendations following the Victorian Big Battery Fire.<br>Mitigation Measure BF15 has been updated to include the requirements of HIPAP No. 4. (Appendix B). |
| **Goulburn Mulwaree Council (GMC) (response received through direct correspondence)** | | |
| **Traffic** | Any approval granted to include a condition to rectify any road damage due to construction traffic. A road dilapidation survey is to be carried out prior to construction and submitted to GMC for review and endorsement. | The Applicant now commits to royalty payments for the ongoing maintenance of Tarago Road. |
| **Traffic** | A swept path analysis should be carried out on all intersections and site entrances to identify their suitability for construction vehicles. Should a swept path analysis identify non-compliant geometry then these intersections and site entrances are to be upgraded to cater for construction traffic. | A swept path assessment has been prepared for the site access and is provided within the TIA (Amber, 2022). A review of the relevant routes will be provided by the appointed contractor as part of the relevant permits for larger trucks once the routes are known. |
| **Traffic** | GMC endorses the correspondence from TADPAI dated 20 June 2022 on traffic issues (Adrian Ellson, TADPAI | Please refer to responses in Section 4.2 relating to the TADPAI submission. |

| Issue | Detail of issue | Applicant response |
|---|---|---|
| | President). | |
| **Traffic** | GMC has recent traffic data it can provide to reflect the existing circumstances.<br>An independent review of the Blind Creek Solar Farm Traffic Impact Assessment (Amber, April 2022) should be carried out to verify conclusions and findings. | Additional traffic information is not considered necessary as updated traffic counts have been included in this report. Please refer to the QPR council responses.<br>Amber organisation is an independent traffic engineering company. It is not considered appropriate for an additional independent review of the TIA to be completed for the Project, beyond those that could be carried out by public agencies. |
| **Traffic – Cumulative impacts** | In consideration of the amount of SSD facilities along the Tarago-Bungendore Road and the increasing traffic volume using this road should prompt the reclassification of this Regional Road to a State Road. | Bungendore Road and Tarago Road are local roads under the management of Queanbeyan-Palerang Regional Council. As defined in the EIS (NGH , 2022), these two roads have been defined as local roads as they are under the management of Queanbeyan-Palerang Regional Council.<br>Reclassification of Bungendore Road and Tarago Road is out of scope of this Project. Reclassification of the roads should be referred to TfNSW and Queanbeyan-Palerang Regional Council. |

## 4.4. Updated mitigation measures

A full set list of safeguards and mitigation measures are provided below in Appendix B. Table 4-3 below details those mitigation measures that have either been amended or added as a response to community and agency submissions:

Table 4-3 Updated mitigation measures

| No. | Mitigation measures | Phase |
|---|---|---|
| | **Visual Amenity** | |

| No. | Mitigation measures | Phase |
|---|---|---|
| V1 | A Landscape Management Plan (LMP) ~~is recommended~~ **will be developed in consultation with a landscape architect** to address the 'as built' visual impacts of the proposed solar farm. The plan ~~should~~ **will** include:<br>• On-site vegetation screening generally in accordance with **the plan presented in the Visual Impact Assessment, and the final constraints/layout map**. This would include details of selected species aimed at 'breaking up' not blocking views of onsite infrastructure.<br>• ~~Vegetation screening along Butmaroo Creek would avoid Archaeological and ecological sensitive areas. Consultation with the RAPS will be undertaken to inform the location of this vegetation screening.~~<br>• **Vegetation screening along Butmaroo Creek will be in accordance with the Addendum ACHAR, including the following:**<br>  • **A surface collection of registered Aboriginal objects and unexpected finds within the planting corridor must take place prior to any works taking place**<br>  • **The planting of native vegetation must be performed by hand and using hand tools to minimise the potential impacts to unrecorded Aboriginal objects.**<br>  • **The proponent should consider engaging representatives from the local Aboriginal community to be present or assist with the vegetation planting for screening and the White Fronted Chat habitat offset associated with the proposed Blind Creek Solar Farm.**<br>• Location of planting locations, generally expected to be between the security fencing and the property boundary.<br>• Band width, generally expected to be approximately 6m with three (3) rows of vegetation in high visual impact areas and two (2) rows in low / moderate visual impact areas.<br>• Maintenance schedule for a period of 24 months. Maintenance should generally include the removal of weeds and replacement of dead or non-performing plants.<br>• **Measures to ensure effective screening within three years of commencing operations.**<br>The plan would be implemented nearing completion of construction and would be subject to agreement with the relevant landowner. | Design<br>Construction |
| B11 | Preparation of a vegetation management plan to regulate activity in vegetation and habitat adjacent to the proposed ~~Project~~ development:<br>• **Preparation of a management plan that would include protocols for:**<br>• **Protection of native vegetation to be retained, particularly within the following areas:**<br>  ○ **Remnant Monaro Tablelands Cool Temperate Grassy Woodlands at the eastern end of the Subject Land**<br>  ○ **HBT's** | Construction |

| No. | Mitigation measures | Phase |
|---|---|---|
| | ○ **The wetland area at the north-western end of the Development Site**<br>○ **The setback area from Butmaroo Creek**<br>• **The installation of permanent fencing around areas of native vegetation to be retained**<br>• **Best practice removal and disposal of vegetation cleared**<br>• **Weed management**<br>• **Unexpected threatened species finds**<br>• **Exclusion of vehicles from sensitive areas**<br>**Rehabilitation of disturbed areas.** | |
| **B15** | **Implementation of a Biodiversity Management Plan to restore an equivalent amount of White-fronted Chat breeding habitat impacted by the Project:**<br>• **Survey the extent of Scotch Thistle within the Subject Land to identity the exact area(ha) of White-fronted Chat breeding habitat being impacted.**<br>• **Identify areas within the Subject Land which are not being impacted and establish an area of equivalent size to be used to restore White-fronted Chat breeding habitat.**<br>• **Preparation of an adaptive Pest Action Management Plan (PAP) to regulate pest animal species and mitigate any potential impacts to the White Fronted Chat.**<br>• **Detail a monitoring plan in the BMP to assess the performance and effectiveness of the White-fronted Chat breeding habitat** | **Pre-construction**<br>**Operation** |
| **AH11** | **All works associated with the intersection upgrade along Tarago Road and the main entrance road for the proposed Blind Creek solar farm can proceed with caution within the existing road reserve. Any works outside of the proposed intersection design will be subject to further assessment.** | **Pre-construction**<br>**Construction** |
| **AH12** | **Where plantings are required for screening or as an offset habitat for the White Fronted Chat within the Development Site, the following is recommended:**<br>**a) A surface collection of registered Aboriginal objects and unexpected finds within the planting corridor must take place prior to any works taking place**<br>**b) The planting of native vegetation must be performed by hand and using hand tools to minimise the potential** | **Pre-construction**<br>**Construction** |

| No. | Mitigation measures | Phase |
|---|---|---|
| | **impacts to unrecorded Aboriginal objects.**<br>**c) The proponent should consider engaging representatives from the local Aboriginal community to be present or assist with the vegetation planting for screening and the White Fronted Chat habitat offset associated with the proposed Blind Creek Solar Farm.**<br>**Any unexpected finds collected during the surface collection or hand digging stages of the works should be held in temporary storage by NGH until the Proponent and the local Aboriginal community come to an agreement on how they should be managed.** | |
| **AH13** | **All works must be constrained to the areas of existing disturbance and any activity proposed outside of the current assessment area should also be subject to an addendum Aboriginal heritage assessment.** | **Pre-construction**<br>**Construction**<br>**Operation**<br>**Decommissioning** |
| **AH14** | **Where possible, consideration should be given to the request for collection of native vegetation that is to be removed as part of the project development.** | **Pre-construction** |
| H12 | All proposed infrastructure associated with the proposed development should be setback from existing watercourses at the recommended riparian corridor widths specified in Table 1 of the Guidelines for Riparian Corridors on Waterfront Land (DPI Water, 2012) as provided below. **This takes into account riparian setbacks for Butmaroo Creek and the ephemeral wetland.** In accordance with the guidelines the width of the vegetated riparian zone (VRZ) should be measured from the top of the highest bank on both sides of the watercourse. | Design<br>Construction |

<table>
<tr><th>No.</th><th>Mitigation measures</th><th>Phase</th></tr>
<tr><td></td><td>
Table 1. Recommended riparian corridor (RC) widths
<table>
<tr><th>Watercourse type</th><th>VRZ width<br>(each side of watercourse)</th><th>Total RC width</th></tr>
<tr><td>1st order</td><td>10 metres</td><td>20 m + channel width</td></tr>
<tr><td>2nd order</td><td>20 metres</td><td>40 m + channel width</td></tr>
<tr><td>3rd order</td><td>30 metres</td><td>60 m + channel width</td></tr>
<tr><td>4th order and greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)</td><td>40 metres</td><td>80 m + channel width</td></tr>
</table>
For the undefined overland section of Wrights Creek, a connection, free from solar panels shall be maintained between its defined section and the ephemeral wetland. Given the defined section of Wrights Creek is a 4th order stream, the average exclusion will not be less than 40m each side of the creek bank (where defined) or nominal centreline (where undefined), and in no place less than 20m (i.e. the non-riparian corridor works and activities averaging rule). For the avoidance of doubt, cables and tracks may cross this exclusion provided they are designed not to impede flow. Final design will be informed by a hydrology assessment to ensure the natural flow path is maintained. The final design will be developed in consultation with DPE Water prior to construction.
</td><td></td></tr>
<tr><td>AT5</td><td>Prior to commencement of delivery of materials to Site, the Proponent shall undertake a Road Dilapidation Report of the sealed road between Tarago, Bungendore and the Site entrance within the Goulburn Mulwaree Council and Queyanbean-Palerang Regional Council areas. The Report shall assess the current condition of the road using a method agreed with the relevant road authorities. The final Report must be submitted to the relevant road authorities for information prior to the commencement of deliveries to Site.</td><td>Pre-construction<br>Post-construction</td></tr>
</table>

| No. | Mitigation measures | Phase |
|---|---|---|
| **AT6** | **Within three months after the Project achieving Commercial Operation Date, the Proponent shall provide to the relevant road authorities (Goulburn Mulwaree Council and Queanbean-Palerang Regional Council) a royalty payment to contribute to the upkeep of the Tarago Road between Tarago and the Site entrance. The payment shall be provided as a royalty per tonne of construction materials imported into the Site, at a rate to be agreed between the Proponent and the road authorities prior to commencement of delivery of materials to Site. The rate shall be based on the actual tonnage of materials delivered to the Site.** | **Pre-construction**<br>**Post-construction** |
| **AT6** | **Prior to construction, the EPC Contractor is required to complete a Heavy Vehicle Access Study in consultation with QPRC and GMC.** | **Pre-construction** |
| SE3 | The Employment and Accommodation Strategy will provide further detail on accommodation providers. The strategy will include engagement with accommodation providers to avoid negatively impacting on tourism opportunities and any vulnerable populations.<br>**The Applicant will consult with QPRC during the development of the Employment and Accommodation Strategy, and throughout Project construction, to minimise adverse impacts on both the rental market, and on vulnerable populations who may be temporarily housed in short-term accommodation.** | Design, Construction, Operation |
| **SE5** | **Bungendore Sands Quarry are considered a key stakeholder in the project and will be included in future engagement activities.** | **Design**<br>**Construction**<br>**Operation** |
| BF13 | Prior to operation of the solar farm, an Emergency Response Plan (ERP) would be prepared in consultation with NSW RFS and Fire and Rescue NSW. This plan must include but not be limited to:<br>• Specifically addresses foreseeable on site and off site fire events and other emergency incidents.<br>• Risk control measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the PV system (either in its entirety or partially, as determined by risk assessment).<br>• Outline other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site.<br>• Two copies of the ERP are stored in a prominent ‘Emergency Information Cabinet’ which is located in a position directly | Operation |

| No. | Mitigation measures | Phase |
|---|---|---|
| | adjacent to the site's main entry point/s.<br>• Once constructed and prior to operation, the operator of the facility would contact the relevant local emergency management committee (LEMC).<br>• **Be in accordance with Hazardous Industry Planning Advisory Paper 1. Emergency Planning (HIPAP no. 1).** | |
| **BF17** | **An Emergency Services Information Package (ESIP) be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.** | **Pre-construction** |
| PHA5 | The results of this PHA should be used as inputs into other safety studies required including:<br>• Fire Response Plan.<br>• Evacuation Plan.<br>• Spill and Contamination Response Plan.<br>**The PHA will be updated and submitted with the detailed design once battery technology has been confirmed.** | **Pre-construction**<br>Construction<br>Operation<br>Decommissioning |

# 5. Project justification and evaluation

## 5.1. Evaluation, subsequent to Project changes

In consideration of the amendments made to respond to agency and community submissions, the Project demonstrates a commitment to:

- Address uncertainty,
  - More detailed consideration where possible or if not,
  - with more conservativism, reducing Project risks.
- Increase the role of key stakeholders as the Project moves forward into the detailed design.
- Improve rigour of environment mitigation commitments.

On balance this leads to a project that responds well not only to its environmental context but to its valued stakeholders in the local community, to which this project will generate long term positive contribution.

Table 5-1 Updated evaluation in light of Project amendments

| Refinement | Net result |
|---|---|
| 1. A commitment to royalty payments to local Councils to address the use of local roads, in response to both local Council submissions | More certainty regarding the Project's commitment to repair damage that may be generated by construction traffic on Tarago Road, in the vicinity of the Project site. |
| 2. A commitment to a larger intersection treatment at the site access point, off Tarago Road, to improve safety. | Improved traffic safety outcomes, exceeding the best practice guidance provided by traffic specialists. |
| 3. A commitment to exclude solar infrastructure within the Wrights Creek overland flow path, creating a corridor unimpeded by solar panels | The detailed design will take into consideration the Non-riparian corridor works and activities averaging rule, thereby 50% of the outer riparian zone would be used for development with an equivalent area connected to the riparian corridor fully offset. The inner 50% of the riparian zone will be offset.<br>Subsurface access across the overland flow path (i.e. for access tracks and laying cables) will form a requirement of the Project. |
| 4. Strengthening several mitigation measures which now specifically include the requirement for further agency or Council input. | Greater opportunity for input of agencies as the Project moves forward into the detailed design and management stages. |
| 5. Offsets for the WFC – Biodiversity to complete | Restore and protect 33.86 ha of WFC breeding habitat |

| Refinement | Net result |
|---|---|
| 6. A downward revision of construction water requirements and further information in relation to sourcing water for construction. | More certainty regarding water use and supply options. |
| 7. A commitment to exclude solar panels from elevated areas on or bordering Lot 17 DP535180 (above elevation 691m) to reduce visual impacts to receivers on Lake Road, and west of an established line of elm trees between Butmaroo Creek and the ephemeral wetland. | Reduce visual impact for receivers along Lake Road |

## 5.2. Ecologically Sustainable Development

Ecologically Sustainable Development (ESD) involves the effective integration of social, economic and environmental considerations in decision-making processes. In NSW, the concept has been incorporated into legislation including the EP&A Act, the EP&A Regulation and the *Protection of the Environment Administration Act 1991* (NSW).

Based on the likely costs and benefits of the proposed solar farm, the Project is considered to comply with the principles of ESD. ESD principles and their relationship to the design, construction and ongoing operations of the Project are identified in Table 5-2.

The aims, structure and content of this EIS have incorporated these ESD principles. The mitigation measures in Appendix B provide an auditable set of environmental management commitments to these parameters. Based on the social and environmental benefits accruing from the Project at a local and broader level, and the assessed impacts on the environment and their ability to be managed, it is considered that the Project would be ecologically sustainable within the context of ESD.

Table 5-2 Assessment of the Project against the principles of ESD

| Assessment of the Project against the principles of ESD |
|---|
| *(a) The precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:*<br>*(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*<br>*(ii) an assessment of the risk-weighted consequences of various options.* |
| The precautionary principle has been adopted in the assessment of impact of the Project; with first preference given to avoiding and minimising environmental impacts (as described in Section 3 of the EIS (NGH , 2022)). The impacts of the construction of the solar farm at the site are likely to be |

| **Assessment of the Project against the principles of ESD** |
| --- |
| reasonably predictable and carry low levels of uncertainty and risk. Based on field surveys and assessments, the works would be unlikely to result in irreversible environmental damage. The development would have an operational life of nominally 35 years or more and would be highly reversible. A 'worst case' impact assessment has been undertaken to account for any uncertainty in the final impact footprint. |
| *(b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.* |
| The Project would not diminish long term ecological or agricultural productivity, biological resources or future land use options at the site. At the end of the operating life of the solar farm, the above-ground infrastructure would be removed (to a depth of 500mm or less) to restore former land use potential, agricultural productivity and land use and planning options at the site. Soil values would be restored with reference to the results of a pre-works baseline soil survey.<br>The Project would provide a significant environmental benefit by producing sustainable energy, reducing the reliance on fossil fuels which threatens the well-being of current and future generations through climate change. In contrast to non-renewable energy sources, the solar farm would not emit carbon dioxide, airborne particulates or other pollutants. At the end of its operational life, the Project would not require expensive and difficult land remediation or leave a legacy of toxic waste to be stabilised and stored. |
| *I conservation of biological diversity and ecological integrity— namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration.* |
| Layout planning and mitigation measures have been adopted to avoid or mitigate any impacts which would affect the long-term viability of populations of all native species at and around the site, particularly threatened species and communities. These measures include avoiding and protecting natural areas and habitats on the site. It is noted that climate change is a key global threat to many species and communities, and that the Project would contribute to the abatement of carbon emissions from the electricity sector in Australia. |
| *(d) improved valuation, pricing and incentive mechanisms— namely, that environmental factors should be included in the valuation of assets and services, such as:*<br>*(i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement, and*<br>*(ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste, and*<br>(iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.* |
| The Project would provide for the increased penetration of renewable energy into the energy market. The BESS would use the market to regulate the storage and release of energy based on prevailing demand. To date the environmental and social costs of electricity generation have not been fully |

| Assessment of the Project against the principles of ESD |
|---|
| measured or incorporated into wholesale or retail electricity pricing. The long-term external costs of carbon-intensive energy sources in terms of climate change in particular have not been factored into prices. For each kilowatt hour of electricity generated over the lifetime of a solar farm, it has an emissions footprint of 6 grams of CO2 equivalent (gCO2e/kWh). In contrast, coal has an emissions footprint of 109 gCO2e/kWh (Evans, 2017).<br><br>External costs are similarly not included in calculations of Levelised Cost of Electricity (LCOE) - the discounted lifetime cost of ownership and use of a generation asset expressed in cost per MWh.<br><br>In terms of life cycle energy consumption, the 'energy payback time' for polycrystalline PV modules has been estimated at one (1) year for a solar installation in Southern Europe (refer to Section 9.11 of the EIS (NGH , 2022)). |

## 5.3. Overall justification for the Project

The Blind Creek Solar Farm would result in numerous benefits, local and regional. The Project's objectives centre on the development of a viable and acceptable renewable energy generation facility that will provide a meaningful contribution to the state's transition to renewable energy technologies. It aims to ensure continued agricultural land use and maximises positive community and environmental outcomes. Specifically, the Blind Creek Solar Farm would:

- **Generate electricity from a low-cost renewable source**
- **Provide storage in order to deliver electricity at high demand times, when roof top solar is unavailable.**
- **Address Federal, state and local policies as well as international agreements in relation to reducing greenhouse gas emissions, global warming and the transition to greater renewable energy generation.**
- **Supply the equivalent of approximately 124,155 residential dwellings.**
- **Co-exist and compliment intensive sheep grazing and regenerative agriculture practices that will continue on the site.**
- **Respond to input from the community and environmental specialists in order to maximise the benefits to the local community and minimise adverse environmental impacts during construction, operation and decommissioning.**
- **Addresses the principles of ecologically sustainable development.**

The Blind Creek Solar Farm would be an important part of building the regional skill base for this and other large solar projects to follow. It will assist to diversify the regional employment sector. It will build renewable specific skills such as electrical and civil engineering. As well, it will boost the existing service sector through the provision of recreation and accommodation services.

Significant financial and social benefits to the host communities of solar farms occur in the form of community sponsorships. The Project involves a scheme to share financial rewards with identified neighbours as far as 6.5km with visual or other verified impacts. Financial contributions are also made to local council, which will directly support local community projects and services.

On balance, the Project is considered appropriate:

- To the site's environmental constraints, avoiding high value areas and including long reaching mitigation strategies that will benefit the broader area in the longer term.

- To the site's resources, maximising renewable energy generation alongside existing agricultural and quarry operations.
- To the site's location where it will supply nearby population centres.
- To meeting global state and local policy targets to reduce in global greenhouse gas emissions.
- To the community's expectations.

It meets all relevant planning provisions and guidelines and is considered justifiable and acceptable.

# 6. References

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# APPENDIX A Submissions register

| Group | Internal reference number (Public and organisations) | Name (and location for individuals) | Section where submission is addressed in the report |
|---|---|---|---|
| Individuals | 1 | Name Withheld, Lake George | Section 4.1 |
| | 2 | Tom Gordan, Bungendore | Section 4.1 |
| | 3 | Thomas Sinkovits, Bywong | Section 4.1 |
| | 4 | Name Withheld, Paddington | Section 4.1 |
| | 5 | Will Jeffreys,<br>Lake George | Section 4.1 |
| | 6 | Peter Sharp, Bywong | Section 4.1 |
| | 7 | Name Withheld, Tarago | Section 4.1 |
| | 8 | Name Withheld, Bungendore | Section 4.1 |
| | 9 | Kate Butler, Bungendore | Section 4.1 |
| | 10 | Dimity Davy, Bungendore | Section 4.1 |
| | 11 | Henry Gundry, Tarago | Section 4.1 |
| | 12 | Andy Bray, Bungendore | Section 4.1 |
| | 13 | Andrew Johnston, Mount Fairy | Section 4.1 |
| | 14 | Carmel Johnston, Mount Fairy | Section 4.1 |
| | 15 | Robert Gordon, Mount Fairy | Section 4.1 |
| | 16 | Name Withheld, Bungendore | Section 4.1 |
| | 17 | Tony Hill, Mount Fairy | Section 4.1 |
| | 18 | Eliza Walker, Bungendore | Section 4.1 |
| | 19 | Andrew Walker, Bungendore | Section 4.1 |
| | 20 | Name Withheld, Bungendore | Section 4.1 |
| | 21 | Patrice Coffee, Bungendore | Section 4.1 |
| | 22 | Bob Parsons, Bungendore | Section 4.1 |

| Group | Internal reference number (Public and organisations) | Name (and location for individuals) | Section where submission is addressed in the report |
|---|---|---|---|
| | 23 | Richard Harry, Bungendore | Section 4.1 |
| | 24 | Phillip Dean, Bywong | Section 4.1 |
| | 25 | John and Rosemary Laing, Bungendore | Section 4.1 |
| | 26 | Hugh Gordon, Manar | Section 4.1 |
| | 27 | Damian Robinson, Bungendore | Section 4.1 |
| | 28 | Kianne Kopec, Bungendore | Section 4.1 |
| | 29 | Kylie Tasker, Bungendore | Section 4.1 |
| | 30 | Bill Barnes, Bungendore | Section 4.1 |
| | 31 | Colin Waters, Bungendore | Section 4.1 |
| | 33 | Sam Gordon, Manar | Section 4.1 |
| | 34 | Steven Broussos, Greenacre | Section 4.1 |
| | 36 | Shaylee Dal Santo, Bungendore | Section 4.1 |
| | 37 | Bronwyn Darlington, Carwoola | Section 4.1 |
| | 40 | Withheld | Section 4.1 |
| | 41 | David Liversidge, Lake George | Section 4.1 |
| | 43 | Harry Dobson, Castle Cove | Section 4.1 |
| | 44 | Name Withheld, Lower Boro | Section 4.1 |
| | 45 | Withheld, Bungendore | Section 4.1 |
| Organisations | 32 | Bungendore Rural Services Pty Ltd | Section 4.2 |
| | 36 | Cleanseeds Pty Ltd | Section 4.2 |
| | 39 | Ecowise Services | Section 4.2 |
| | 40 | Denrith Pty Ltd | Section 4.2 |
| | 42 | Tarago and District Progress | Section 4.2 |

| Group | Internal reference number (Public and organisations) | Name (and location for individuals) | Section where submission is addressed in the report |
|---|---|---|---|
| | | Association Inc | |
| | N/A (received after exhibition period) | Fraish Consulting | Section 4.2 |
| Councils | | Queanbeyan-Palerang Regional Council | Section 4.3 |
| | | Goulburn Mulwaree Council | Section 4.3 |
| Public Authorities | | WaterNSW | Section 4.3 |
| | | DPE - Mining, Exploration & Geoscience | Section 4.3 |
| | | DPI - Fisheries | Section 4.3 |
| | | DPE Water | Section 4.3 |
| | | DPE Hazards | Section 4.3 |
| | | EPA | Section 4.3 |
| | | Fire and Rescue | Section 4.3 |
| | | DPE Heritage NSW | Section 4.3 |
| | | DPE Crown Lands | Section 4.3 |
| | | DPI Agriculture | Section 4.3 |
| | | Biodiversity, Conservation and Science Directorate | Section 4.3 |
| | | TfNSW | Section 4.3 |

# APPENDIX B Updated table of mitigation measures

In response to community and agency submissions and as a result of more intensive investigations in several areas, a number of changes to the safeguards and mitigation measures detailed in the EIS are now proposed. The table below provides the full list of safeguards and mitigation measures. New text is shown **in bold** and removed text shown with ~~strikethrough~~. The table below provides the full list of safeguards and mitigation measures as amended.

| No. | Mitigation measures | Phase |
|---|---|---|
| | **Visual Amenity** | |
| V1 | A Landscape Management Plan (LMP) ~~is recommended~~ **will be developed in consultation with a landscape architect** to address the 'as built' visual impacts of the proposed solar farm. The plan ~~should~~ **will** include:<br>• On-site vegetation screening generally in accordance with the **plan presented in the Visual Impact Assessment, and the final constraints/layout map**.. This would include details of selected species aimed at 'breaking up' not blocking views of onsite infrastructure.<br>• ~~Vegetation screening along Butmaroo Creek would avoid Archaeological and ecological sensitive areas. Consultation with the RAPS will be undertaken to inform the location of this vegetation screening.~~<br>• **Vegetation screening along Butmaroo Creek will be in accordance with the Addendum ACHAR, including the following:**<br>  • **A surface collection of registered Aboriginal objects and unexpected finds within the planting corridor must take place prior to any works taking place**<br>  • **The planting of native vegetation must be performed by hand and using hand tools to minimise the potential impacts to unrecorded Aboriginal objects.**<br>  • **The proponent should consider engaging representatives from the local Aboriginal community to be present or assist with the vegetation planting for screening and the White Fronted Chat habitat offset associated with the proposed Blind Creek Solar Farm.**<br>• Location of planting locations, generally expected to be between the security fencing and the property boundary.<br>• Band width, generally expected to be approximately 6m with three (3) rows of vegetation in high visual impact areas and two (2) rows in low / moderate visual impact areas.<br>• Maintenance schedule for a period of 24 months. Maintenance should generally include the removal of weeds and replacement of dead or non-performing plants.<br>• **Measures to ensure effective screening within three years of commencing operations.** | Design<br>Construction |

| No. | Mitigation measures | Phase |
|---|---|---|
| | The plan would be implemented nearing completion of construction and would be subject to agreement with the relevant landowner. | |
| V2 | To ensure that the screen planting integrates into the existing landscape character, the bands will be planted with fast growing small trees and bushes, and low-lying vegetation to ensure a naturalistic effect whilst providing habitat and movement corridors for the native fauna. | Design |
| V3 | Consult with landowners where landscaping has been proposed, in order to receive their feedback and adjust the mitigation measures accordingly. | Design |
| V4 | Plantings from the following species will be selected, as they match the Plant community type generally present at the site:<br>• *Eucalyptus pauciflora* 12m.<br>• *Eucalyptus mannifera* 10-20m.<br>• *Eucalyptus viminalis* 50m.<br>• *Eucalyptus stellulata* 15m.<br>• *Casuarina cunninghamiana* 10-15m.<br>• *Cassinia aculeata* 1.0-2.6m.<br>• *Hakea laurina* 5m.<br>• *Dodonea viscosa subsiata* 2m. | Design |
| V5 | Consideration will be given to the colours, type and height of the PCUs, the battery facility, O&M facility buildings and storage shed to ensure minimal contrast and to help blend into the surrounding landscape to the extent practicable. | Design |
| V6 | Existing vegetation generally present around the site, and specifically to the eastern and southern boundary will be mostly retained and protected to maintain the existing level of screening. | Design<br>Construction |
| V7 | External lighting would be installed to comply with Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version.<br>All external operational lighting would be low intensity lighting (except where required for safety or emergency purposes) and would not shine above the horizontal. | Design<br>Operation |

| No. | Mitigation measures | Phase |
|---|---|---|
| | **Reflective Glare** | |
| R1 | General methods to reduce visual impact of buildings will centre on the colour and materials of infrastructure, to reduce the overall visual contrast and reflectivity of the Project. | Design<br>Construction |
| R2 | Back-Tracking software can address all of the identified potential reflection glare and/or visibility during operational, specifically, by avoiding the horizontal position of panels at the very start and end of each day. The precise limiting angle should be established during commissioning. | Operation |
| R3 | Avoid very low tilt angles either East or West. | Construction<br>Operation |
| R4 | Potential glare conditions at ID7 and 8 will be addressed via vegetation screening or avoid low angle fixed tilt east (avoid tilt position less than 25 degrees east). | Design<br>Construction |
| R5 | Lighting design AS 4282-1997 *Control of the Obtrusive Effect of Outdoor Lighting* will be implemented for lighting at the Project.<br>• Lights will be directed downward as much as possible and luminaires that are designed to minimise light spill will be used, e.g., full cut-off luminaires where no light is emitted above the horizontal plane, ideally keeping the main beam angle less than 70°. Less spill-light means that more of the light output can be used to illuminate the area and a lower power output can be used, with corresponding energy consumption benefits, but without reducing the illuminance of the area.<br>• Wherever possible use floodlights with asymmetric beams that permit the front glazing will be kept at or near parallel to the surface being lit. | Design<br>Operation |
| | **Biodiversity** | **Phase** |
| B1 | Preparation and implementation of a Biodiversity Management Plan (BMP) for the site to include:<br>• How to remove and dispose of vegetation and topsoil containing weeds declared under the *Biosecurity Act 2015* during and after construction.<br>• Identification and protection of biodiversity exclusion zones during construction and operation. | Pre-construction<br>Construction<br>Operations |

| No. | Mitigation measures | Phase |
|---|---|---|
| B2 | Instigating clearing protocols including pre-clearing surveys, daily surveys and staged clearing, the presence of a trained ecologist or licensed trained spotter catcher during clearing events, construction and maintenance activities for human-made structures and non-native vegetation. | Pre-construction<br>Construction |
| B3 | Relocating habitat features (fallen timber, hollow logs and embedded rock) from within the Development footprint. | Pre-construction<br>Construction |
| B4 | Induct all staff prior to construction to identify vegetation to be retained, prevent inadvertent damage and reduce soil disturbance:<br>○ Staff training and site briefing to communicate environmental features to be protected and measures to be implemented.<br>○ Approved clearing limits to be clearly delineated with temporary fencing or similar prior to construction commencing.<br>○ No stockpiling or storage within dripline of any mature trees.<br>○ No stockpiling or storage within riparian buffers. | Pre-construction<br>Construction |
| B5 | Adopt clearing protocols that identify vegetation to be retained, prevent inadvertent damage and reduce soil disturbance; for example, removal of native vegetation by chainsaw, rather than heavy machinery, is preferable in situations where partial clearing is proposed:<br>• Documented clearance protocols to mark and protect vegetation to be retained.<br>• Use handheld machinery where possible and have elevated work platform check hollows prior to tree felling. | Pre-construction<br>Construction |
| B6 | Use noise barriers, or daily/seasonal timing of construction and operational activities to reduce impacts of noise. | Construction |
| B7 | Light shields or daily/seasonal timing of construction and operational activities to reduce impacts of light spill. | Construction |
| B8 | Using adaptive dust management and monitoring programs to control air quality. | Construction<br>Operations |
| B9 | Install temporary fencing to protect significant environmental features such as riparian zones, karst, caves, rock outcrops and water bodies:<br>• Prior to construction commencing, exclusion fences and signage would be installed around identified exclusion zones. | Pre-construction<br>Construction |

| No. | Mitigation measures | Phase |
|---|---|---|
| B10 | Hygiene protocols to prevent the spread of weeds or pathogens between infected areas and uninfected areas. | Construction<br>Operations |
| B11 | Preparation of a vegetation management plan to regulate activity in vegetation and habitat adjacent to the proposed ~~Project~~ development:<br>• **Preparation of a management plan that would include protocols for:**<br>• **Protection of native vegetation to be retained, particularly within the following areas:**<br>  ○ **Remnant Monaro Tablelands Cool Temperate Grassy Woodlands at the eastern end of the Subject Land**<br>  ○ **HBT's**<br>  ○ **The wetland area at the north-western end of the Development Site**<br>  ○ **The setback area from Butmaroo Creek**<br>• **The installation of permanent fencing around areas of native vegetation to be retained**<br>• **Best practice removal and disposal of vegetation cleared**<br>• **Weed management**<br>• **Unexpected threatened species finds**<br>• **Exclusion of vehicles from sensitive areas**<br>• **Rehabilitation of disturbed areas.** | Construction |
| B12 | Scheduling the timing of construction activities to avoid critical life cycle events (e.g. timing construction activities to avoid migratory species on site, or using the site). | Construction |
| B13 | Using sediment barriers and spill management procedures to control the quality of water runoff released from the site into the receiving environment. | Construction |
| B14 | Ecological restoration, rehabilitation actions and/or maintenance of retained native vegetation on, or adjacent to, the Development footprint. | Construction |
| **B15** | **Implementation of a Biodiversity Management Plan to restore an equivalent amount of White-fronted Chat breeding habitat impacted by the Project:** | **Pre-construction**<br>**Operation** |

| No. | Mitigation measures | Phase |
|---|---|---|
| | • **Survey the extent of Scotch Thistle within the Subject Land to identity the exact area(ha) of White-fronted Chat breeding habitat being impacted.**<br>• **Identify areas within the Subject Land which are not being impacted and establish an area of equivalent size to be used to restore White-fronted Chat breeding habitat.**<br>• **Preparation of an adaptive Pest Action Management Plan (PAP) to regulate pest animal species and mitigate any potential impacts to the White Fronted Chat.**<br>• **Detail a monitoring plan in the BMP to assess the performance and effectiveness of the White-fronted Chat breeding habitat** | |
| | **Aboriginal Heritage** | |
| AH1 | The proponent must prepare a Cultural Heritage Management Plan (CHMP) to outline management steps and requirements for ongoing management of cultural heritage values within the construction, operation and decommissioning stages of the project. The CHMP may include some of the following elements, with agreement of relevant stakeholders.<br>• Management of known sites,<br>• Management of high sensitivity areas excluded from the project footprint,<br>• Management of unexpected finds, and<br>• Ongoing consultation and engagement with the local Aboriginal community. | Pre-construction<br>Construction<br>Operation<br>Decommissioning |
| AH2 | All cultural material recovered from the subsurface testing programme which is currently in temporary care at the NGH Canberra office be reburied in accordance with Requirement 26 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* in an appropriate location within the Development site as agreed with the registered Aboriginal parties. The reburial location must be submitted to the AHIMS database and will not be impacted in the future. | Pre and post construction |
| AH3 | Any recorded surface artefacts that cannot be avoided by the Development footprint must be salvaged by community collection prior to the commencement of ground disturbing works. The collection and relocation of the artefacts should be undertaken by an archaeologist with representatives of the registered Aboriginal parties in accordance with Requirement 26 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. The map shown in Figure 8-27 must be used as a guide for undertaking community collections. The artefacts should be collected and moved to a safe area within the property that will not be subject to any ground disturbance. | Pre-construction |

| No. | Mitigation measures | Phase |
|---|---|---|
| AH4 | All objects salvaged must have their reburial location submitted to the AHIMS database. An Aboriginal Site Impact Recording Form must be completed and submitted to AHIMS following harm for each site collected or destroyed from salvage and/or construction works. | Post construction |
| AH5 | A Cultural Smoking Ceremony should be considered if requested by the Aboriginal community to take place to cleanse any artefacts salvaged during the reburial. | Pre-construction |
| AH6 | Representative subsurface salvage excavations should be undertaken within the following landforms where significant ground disturbance works such as cabling or infrastructure is proposed.<br>• Elevated Sand Body.<br>• Undulating Plains.<br>• Creek Terrace.<br>The excavations would be undertaken within relatively undisturbed deposits (or deposits assumed to be undisturbed) and be aimed at retrieving important scientific information about the nature and age of the sites. The detailed research aims should be guided by those identified in this assessment and other researchers. This includes detailed analysis of the stone artefact technology and landuse. | Pre-construction |
| AH7 | A selection of salvaged artefacts could be stored securely on-site (within the Cultural Learning Zone, for example) for easy access by the local Aboriginal community for education and cultural purposes such as Open Days, (contingent upon the consensus of comments received from RAPs on this ACHA report). | Pre-construction |
| AH8 | The Proponent continue to consult with the Aboriginal community should the Project receive approval regarding any conditions of consent concerning Aboriginal cultural heritage. | Pre-construction<br>Construction<br>Operation<br>Decommissioning |
| AH9 | In the event that human remains are discovered during the works, all work must cease in the immediate vicinity. Heritage NSW and the local police should be notified. Further assessment would be undertaken to determine if the remains were Aboriginal or non-Aboriginal. Should the remains be identified as Aboriginal in origin, Heritage NSW will identify the appropriate course of | Pre-construction<br>Construction<br>Operation |

| No. | Mitigation measures | Phase |
|---|---|---|
| | action. | Decommissioning |
| AH10 | Any changes to the proposed Development footprint that has not been assessed by this report should be subject to further assessment. | Pre-construction<br>Construction<br>Operation<br>Decommissioning |
| **AH11** | **All works associated with the intersection upgrade along Tarago Road and the main entrance road for the proposed Blind Creek solar farm can proceed with caution within the existing road reserve. Any works outside of the proposed intersection design will be subject to further assessment.** | **Pre-construction**<br>**Construction** |
| **AH12** | **Where plantings are required for screening or as an offset habitat for the White Fronted Chat within the Development Site, the following is recommended:**<br>**d) A surface collection of registered Aboriginal objects and unexpected finds within the planting corridor must take place prior to any works taking place**<br>**e) The planting of native vegetation must be performed by hand and using hand tools to minimise the potential impacts to unrecorded Aboriginal objects.**<br>**f) The proponent should consider engaging representatives from the local Aboriginal community to be present or assist with the vegetation planting for screening and the White Fronted Chat habitat offset associated with the proposed Blind Creek Solar Farm.**<br>**g) Any unexpected finds collected during the surface collection or hand digging stages of the works should be held in temporary storage by NGH until the Proponent and the local Aboriginal community come to an agreement on how they should be managed.** | **Pre-construction**<br>**Construction** |
| **AH13** | **All works must be constrained to the areas of existing disturbance and any activity proposed outside of the current assessment area should also be subject to an addendum Aboriginal heritage assessment.** | **Pre-construction**<br>**Construction**<br>**Operation**<br>**Decommissioning** |

| No. | Mitigation measures | Phase |
|---|---|---|
| **AH14** | **Where possible, consideration should be given to the request for collection of native vegetation that is to be removed as part of the project development.** | **Pre-construction** |
| | **Hydrology** | |
| H1 | Ensure appropriate erosion and sediment controls are incorporated into the design and should be implemented before works commence and maintained for the duration of the construction and until soil is stabilised after construction. | Design<br>Construction<br>Operations<br>Decommissioning |
| H2 | The Flood Response Plan prepared as part of the Emergency Response Plan would include:<br>• Detail who will be responsible for monitoring the flood threat and how this is to be done.<br>• Detail specific response measures to ensure site safety and environmental protection.<br>• Outline a process for removing any necessary equipment and materials offsite and out of flood risk areas (i.e. rotate array modules to provide maximum clearance of the predicted flood level).<br>• Consider site access in the event that some tracks become flooded.<br>• Establish an evacuation point.<br>• Define communication protocols with emergency services agencies. | Construction<br>Operations<br>Decommissioning |
| H3 | All buildings and structures (including solar arrays) associated with the Project should be located outside high hazard areas (H5 and above) where they may be vulnerable to structural damage and have significant impact on flood behaviour. | Design<br>Construction |
| H4 | The finished floor level of all buildings should be a minimum of 500mm above the 1% AEP flood level, whilst critical infrastructure such as the electrical substation, control room and battery storage areas (i.e. BESS infrastructure) should be a minimum of 500mm above the PMF flood level in the adjacent Blind Creek. | Design<br>Construction |
| H5 | For proposed crossing structures over any watercourses that will likely be rendered impassable during significant flood events it is recommended that: | Design<br>Construction |

| No. | Mitigation measures | Phase |
|---|---|---|
| | • Flood warning signs and flood level indicators should be placed on each approach to the proposed crossings.<br>• A Business Floodsafe Plan be prepared for the development to ensure the safety of employees during flood events in general accordance with the NSW SES "Business Floodsafe Toolkit and Plan" | |
| H6 | For solar tracking modules, the tracking axis should be located above the 1% AEP flood level plus 500mm freeboard, and the modules rotated to the horizontal during significant flood events to provide maximum clearance to the predicted flood level. | Design<br>Construction |
| H7 | Where located in the floodplain the solar array mounting piers should be designed to withstand the forces of floodwater (including any potential debris loading) up to the 1% AEP flood event, giving regard to the depth and velocity of floodwaters. Post development 1% AEP flood levels and velocities are shown in Figure 8-38 and Figure 8-39. | Design<br>Construction |
| H8 | All electrical infrastructure, including power conversion stations (PCUs) and the proposed substation, should be located above the 1% AEP flood level plus appropriate freeboard (minimum 500mm). | Design<br>Construction |
| H9 | Where electrical cabling is required to be constructed below the 1% AEP flood level it should be capable of continuous submergence in water. | Design<br>Construction |
| H10 | Wherever possible security fencing within the floodplain should be avoided or minimised. Where required security fencing should be constructed in a manner which does not adversely affect the flow of floodwater and should be designed to withstand the forces of floodwater or collapse in a controlled manner to prevent impediment to floodwater. | Design<br>Construction |
| H11 | Any fencing across Butmaroo, Blind and Wrights Creeks should be avoided in preference to creating separate fenced compounds on either side of the creeks. | Design<br>Construction |
| H12 | All proposed infrastructure associated with the proposed development should be setback from existing watercourses at the recommended riparian corridor widths specified in Table 1 of the Guidelines for Controlled Activities on Waterfront Land (DPI Water, 2012) as provided below. **This takes into account riparian setbacks for Butmaroo Creek and the ephemeral wetland.** In accordance with the guidelines the width of the vegetated riparian zone (VRZ) should be measured from the top of the highest bank on both sides of the watercourse. | Design<br>Construction |

<table>
<tr><th>No.</th><th>Mitigation measures</th><th>Phase</th></tr>
<tr><td></td><td>
Table 1. Recommended riparian corridor (RC) widths
<table>
<tr><th>Watercourse type</th><th>VRZ width<br>(each side of watercourse)</th><th>Total RC width</th></tr>
<tr><td>1st order</td><td>10 metres</td><td>20 m + channel width</td></tr>
<tr><td>2nd order</td><td>20 metres</td><td>40 m + channel width</td></tr>
<tr><td>3rd order</td><td>30 metres</td><td>60 m + channel width</td></tr>
<tr><td>4th order and greater (includes estuaries, wetlands and any parts of rivers influenced by tidal waters)</td><td>40 metres</td><td>80 m + channel width</td></tr>
</table>
For the undefined overland section of Wrights Creek, a connection, free from solar panels shall be maintained between its defined section and the ephemeral wetland. Given the defined section of Wrights Creek is a 4th order stream, the average exclusion will not be less than 40m each side of the creek bank (where defined) or nominal centreline (where undefined), and in no place less than 20m (i.e. the non-riparian corridor works and activities averaging rule). For the avoidance of doubt, cables and tracks may cross this exclusion provided they are designed not to impede flow. Final design will be informed by a hydrology assessment to ensure the natural flow path is maintained. The final design will be developed in consultation with DPE Water prior to construction.
</td><td></td></tr>
<tr><td>H13</td><td>Non-riparian corridor works may be authorised in the outer riparian corridor, so long as where appropriate 50 percent of the outer vegetated riparian zone width may be used for non-riparian uses including asset protection zones, recreational areas, roads, development lots and infrastructure. However, an equivalent area connected to the riparian corridor must be offset on the site and the inner 50 percent of the vegetated riparian zone must be fully protected and vegetated with native endemic riparian plant species.</td><td>Design<br>Construction</td></tr>
</table>

| No. | Mitigation measures | Phase |
|---|---|---|
| H14 | Any road crossing of existing watercourses associated with the proposed development should be of the type defined in Table 2 of the Guidelines for Riparian Corridors on Waterfront Land (DPI Water, 2012) and Guidelines for Laying Pipes and Cable in Watercourses on Waterfront Land (NSW DPI, 2012). All crossings will be designed in consultation with DPI Fisheries.<br>Based on a preliminary assessment under the Strahler System defined in the Guidelines for Riparian Corridors on Waterfront Land (DPI Water, 2012) all three watercourses of the Development site would be classified as having a stream order of four or greater. | Design<br>Construction |
| H15 | Within the floodplain access roads should be constructed as close to natural ground levels as possible so as not to form an obstruction to floodwaters, unless otherwise supported by modelling to demonstrate no adverse flooding impacts during the detailed design phase.<br>The surface treatment of roads should be designed giving regard to the velocity of floodwaters to minimise potential for scouring during flood events, which could include the use of stabilised gravels or grassed surfaces for roads within the floodplain. | Design<br>Construction |
| H16 | Any areas of existing erosion within the proposed Development footprint should be appropriately treated prior to the erection of solar array modules to ensure their ongoing stability.<br>For further information refer to Saving Soil: A Landowners Guide to Preventing and Repairing Soil Erosion, NSW DPI (2009) available at<br>https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0008/270881/saving-soil-complete.pdf | Construction |
| | **Noise and vibration** | |
| N1 | A Noise Management Plan (NMP) would be developed as part of the CEMP. The plan would include, but not be limited to:<br>• Use less noisy plant and equipment where feasible and reasonable.<br>• Plant and equipment will be properly maintained.<br>• Use and maintain ‘noise control’ or ‘silencing’ kits fitted to machines to ensure they perform as intended.<br>• Strategically position plant on site to reduce the emission of noise to the surrounding neighbourhood and to site personnel.<br>• Avoid any unnecessary noise when carrying out manual operations and when operating plant.<br>• Any equipment not in use for extended periods during construction work will be switched off | Construction<br>Decommissioning |

| No. | Mitigation measures | Phase |
|---|---|---|
| | • Implement a complaints procedure to manage noise complaints that may arise from construction activities. Each complaint will need to be investigated and appropriate noise amelioration measures put in place to mitigate future occurrences, where the noise in question is in excess of allowable limits.<br>• Establish good relations with people living in the vicinity of the site at the beginning of Project. Keep people informed, deal with complaints seriously and expeditiously. The community liaison member of staff should be adequately experienced. | |
| N2 | Potential noise impacts to associated receivers R2 and R48, will be managed in consultation with the homeowner and may include the following:<br>• Time restrictions and/or providing periods of respite for residents, where feasible and reasonable e.g., between 10am and 3pm (with one-hour break for lunch between 12pm and 1pm).<br>• Allowing the construction activities to proceed, despite the noise exceedance, may be the preferred method in order to complete the works expeditiously, with noise exceedances occurring over only two to three days.<br>• These residents will be consulted to determine appropriate respite periods and will be notified of the potential noise impact during this time period so that they can organise their day around the noisy period. | Construction |
| N3 | Works will be undertaken during standard working hours only (except for works that can be performed without noise nuisance):<br>No work on Sundays or public holidays.<br>Construction<br>• Monday – Friday 7am to 6pm.<br>• Saturday 8am to 1pm.<br>• No work on Sundays or public holidays.<br>Operation<br>• Monday – Friday 7am to 6pm.<br>• Saturday 8am to 1pm. | Construction<br>Operation<br>Decommissioning |
| N4 | All staff on-site should be informed of procedures to operate plant and equipment in a quiet and efficient manner where possible. | Construction<br>Operation<br>Decommissioning |

| No. | Mitigation measures | Phase |
|---|---|---|
| | **Access and Traffic** | |
| AT1 | A Traffic Management Plan (TMP) will be developed as part of the CEMP, OEMP and DEMP, in continued consultation with Council and TfNSW. The plan would include:<br>• Neighbours of the solar farm will be consulted and notified regarding the timing of major deliveries which may require additional traffic control and disrupt access.<br>• Loading and unloading is proposed to occur within the work area. No street or roads will be used for material storage at any time.<br>• All vehicles will enter and exit the site in a forward direction.<br>• Management of vehicular access to and from the site is essential in order to maintain the safety of the general public as well as the labour force. The following code is to be implemented as a measure to maintain safety within the site:<br>o Utilisation of only the designated transport routes.<br>o Construction vehicle movements are to abide by finalised schedules as agreed by the relevant authorities.<br>o Heavy vehicle movements occur outside of times when school buses will be present on Tarago Road.<br>• Implementation of a proactive erosion and sediment control plan for on-site roads, hardstands and laydown areas.<br>• All permits for working within the road reserve will be received from the relevant authority prior to works commencing.<br>• A map of the primary haulage routes highlighting critical locations.<br>• An induction process for vehicle operators and regular toolbox meetings.<br>• A complaint resolution and disciplinary procedure.<br>• Local climatic conditions that may impact road safety of employees throughout all project phases (e.g., fog, wet and significant dry, dusty weather). | Preconstruction<br>Construction<br>Decommissioning |
| AT2 | TfNSW education staff will be invited to provide information, guidance and discussion on fatigue management and road safety to site staff. | Preconstruction<br>Construction<br>Decommissioning |
| AT3 | Stakeholders including TfNSW, Queanbeyan-Palerang Regional Council, local landholders and emergency services will continue to be consulted during construction and decommissioning to advise of any changes to road use and conditions. | Construction<br>Decommissioning |
| AT4 | The intersection of Blind Creek Road Entrance + and Tarago Road will be upgraded to accommodate a BAL treatment to allow | Pre-construction |

| No. | Mitigation measures | Phase |
|---|---|---|
| | B-Doubles to exit the track to the north. | |
| **AT5** | **Prior to commencement of delivery of materials to Site, the Proponent shall undertake a Road Dilapidation Report of the sealed road between Tarago, Bungendore and the Site entrance within the Goulburn Mulwaree Council and Queyanbean-Palerang Regional Council areas. The Report shall assess the current condition of the road using a method agreed with the relevant road authorities. The final Report must be submitted to the relevant road authorities for information prior to the commencement of deliveries to Site.** | **Pre-construction**<br>**Post-construction** |
| **AT6** | **Within three months after the Project achieving Commercial Operation Date, the Proponent shall provide to the relevant road authorities (Goulburn Mulwaree Council and Queanbean-Palerang Regional Council) a royalty payment to contribute to the upkeep of the Tarago Road between Tarago and the Site entrance. The payment shall be provided as a royalty per tonne of construction materials imported into the Site, at a rate to be agreed between the Proponent and the road authorities prior to commencement of delivery of materials to Site. The rate shall be based on the actual tonnage of materials delivered to the Site.** | **Pre-construction**<br>**Post-construction** |
| **AT7** | **Prior to construction, the EPC Contractor is required to complete a Heavy Vehicle Access Study in consultation with QPRC and GMC.** | **Pre-construction** |
| | **Land Use** | |
| L1 | Consultation would be ongoing with TransGrid regarding connection to the substation and design of electricity transmission infrastructure. | Preconstruction |
| L2 | Consultation with adjacent landowners, to minimise impact of the Project on adjacent agricultural activities and access. | Preconstruction<br>Construction |
| L3 | Construction, operation and decommissioning to operate in accordance with the Traffic Management Plan (TMP), to minimise dust generation and disturbance to livestock. | Construction<br>Operation<br>Decommissioning |

| No. | Mitigation measures | Phase |
|---|---|---|
| L4 | Relevant landholders and residents would be consulted and notified to minimise, where possible, the noise, dust, traffic and other disturbance impacts. | Preconstruction<br>Construction |
| L5 | Underground cabling and other works to remain in situ following decommissioning of the solar farm would be installed deeper than 500mm to allow cultivated cropping to resume following decommissioning. | Decommissioning |
| L6 | Prior to construction, a license will be applied for to allow construction to commence within Crown roads on the Development site. | Preconstruction |
| L7 | Consultation with representatives from nearby Major Projects, including Capital Wind Farm, Woodlawn Wind Farm, and Woodlawn Bioreactor would be undertaken to ensure cumulative traffic and pressure on local services are managed adequately. | Preconstruction<br>Construction |
| L8 | A Decommissioning Environmental Management Plan (DEMP) would be prepared and submitted to DPE for approval prior to decommissioning. The DEMP would include a Site Rehabilitation Plan covering:<br>• Criteria and indicators for the restoration of land capability and agricultural potential based on pre-works soil survey results.<br>• Details of rehabilitation actions such as removal of infrastructure, remediation of soils, reinstatement of dams and irrigation/drainage channels as required, reinstatement of property boundaries and establishment of suitable groundcover vegetation on bare areas.<br>• A monitoring and assessment process to demonstrate that the target state has been achieved.<br>• An expected timeline for the rehabilitation program. | Pre-decommissioning |
| | **Soils and Landforms** | |
| S1 | The solar array would be designed and installed to optimise the capacity of the solar array and maintain perennial groundcover (subject to climatic conditions). Groundcover management details (including any stocking levels etc) and rehabilitation of civil work completed during construction are to be included in the Construction Environmental Management Plan and Operational Environmental Management Plan. | Preconstruction<br>Construction<br>Operation |
| S2 | A Construction Environmental Management Plan (CEMP) would be implemented to manage runoff, soil erosion and | Pre-construction |

| No. | Mitigation measures | Phase |
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| | sedimentation and pollution risks at the site. The CEMP would be prepared in accordance with the 'Blue Book' Volume 1 Managing Urban Stormwater: Soils and Construction (Landcom 2004), Volume 2A Installation of Services (DECC 2008a) and Volume 2C Unsealed Roads (DECC 2008b). | Construction |
| S3 | As part of the CEMP, a Soil and Water Management Plan (incorporating a Site Drainage Plan and Erosion and Sediment Control Plan) would be prepared, implemented and monitored during the Project to minimise soil and water impacts. These plans would include provisions to:<br>• Install, monitor and maintain erosion controls.<br>• Identify and protect sensitive features such as native vegetation, dams and water courses.<br>• Ensure that machinery leaves the site in a clean condition to avoid tracking of sediment onto public roads.<br>• Manage topsoil: in all excavation activities, separate subsoils and topsoils to restore natural soil profiles and assist revegetation, guided by the findings of the pre-works soil survey. Topsoils stockpiled for extended periods would be managed to avoid contact with overland runoff, minimise weed risks, and maintain soil organic matter, soil structure and microbial activity.<br>• Minimise the area of disturbance from excavation and compaction and rationalise vehicle movements to minimise soil impacts.<br>• Ensure any discharge of water from the site is managed to ensure ANZECC (2000) water quality criteria are met as far as practicable, ensure excavations are not scheduled when heavy rainfall events are predicted, or soils are saturated. | Pre-construction<br>Construction |
| S4 | Prior to commencement of construction, representative soil samples would be gathered as part of a specialist soil survey to establish baseline data on the existing agronomic characteristics of the soil. The survey would include sampling and analysis for soil texture and structure, nutrients, acidity, salinity, sodicity, dispersion and organic matter. | Pre-construction |
| S5 | The Spill and Contamination Response Plan prepared as part of the Emergency Response Plan would include measures to:<br>• Respond to the discovery of existing contaminants at the site (e.g., Pesticide containers or asbestos), including stop work protocols and remediation and disposal requirements.<br>• Manage the storage of any potential contaminants on-site.<br>• Mitigate the effects of soil and water contamination by fuels or other chemicals (including emergency response and EPA notification procedures).<br>• Ensure that machinery and materials arrive on site in a clean and secure condition. | Construction<br>Operation<br>Decommissioning |

| No. | Mitigation measures | Phase |
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| | • Prevent contaminants affecting adjacent pastures, water courses, dams and native vegetation.<br>• Monitor and maintain spill equipment including spill kits in relevant machinery.<br>• Induct and train site staff.<br>• Detail fuels, chemicals, and liquids storage locations that are at least 50m from any waterways or drainage lines, in an appropriate bunded area.<br>• Disposal process for contaminated materials. | |
| S6 | If earthworks during construction have a likelihood of impacting potential NOA, an Asbestos Management Plan (AMP) is to be prepared prior to construction for identified or suspected areas of naturally occurring asbestos mapped by NSW Department of Planning, Industry & Environment. The AMP is to include the items outlined in the NSW SafeWork Naturally occurring asbestos factsheet, www.safework.nsw.gov.au. | Pre-construction<br>Construction |
| S7 | Any development that intersects mapped moderate to high salinity, a salinity soil survey is required. | Pre-construction |
| S8 | Sodic soil amendment should be applied where sodic soils are present. Treatment with Gypsum should be applied. The application rate should be determined following soil testing (Clay content, ECEC and EC), and should be at a minimum rate of 10t/ha. | Pre-construction |
| S9 | An unexpected finds protocol is to be prepared prior to construction including actions to be undertaken if contaminated soils and/or water are encountered during construction. | Pre-construction<br>Construction |
| | **Water use and water quality** | |
| W1 | The Spill and Contamination Response Plan prepared as part of the Emergency Response Plan would include measures to:<br>• Respond to the discovery of existing contaminants at the site (e.g., Pesticide containers or asbestos), including stop work protocols and remediation and disposal requirements.<br>• Manage the storage of any potential contaminants on-site.<br>• Mitigate the effects of soil and water contamination by fuels or other chemicals (including emergency response and EPA notification procedures).<br>• Ensure that machinery and materials arrive on site in a clean and secure condition. | Construction<br>Operation<br>Decommissioning |

| No. | Mitigation measures | Phase |
|---|---|---|
| | • Prevent contaminants affecting adjacent pastures, irrigation channels, dams and native vegetation.<br>• Monitor and maintain spill equipment including spill kits in relevant machinery.<br>• Induct and train site staff.<br>• Detail fuels, chemicals, and liquids storage locations that are at least 50m from any waterways or drainage lines, in an appropriate bunded area.<br>• Disposal process for contaminated materials. | |
| W2 | If the substation is oil-cooled, the layout, design, size etc of the oil containment bunding and drainage would comply with the relevant standards and guidelines. The bund would be regularly inspected and cleaned, including removal of rainwater. | Pre-construction<br>Construction<br>Operation |
| W3 | A Soil and Water Management Plan will be developed to incorporate the following:<br>• That no detergents or other chemicals would be added to the solar panel cleaning water.<br>• Specify concrete washout process and location.<br>• Specify the procedures for testing, treatment and discharge of construction wastewater.<br>• Detail staff training required. | Construction<br>Operation |
| W4 | If a new bore is to be constructed, the construction and maintenance of the groundwater extraction bore will be in accordance with the Minimum Construction Requirements for Water Bores in Australia (3rd edition) produced by the National Uniform Drillers Licencing Committee (NUDLC). The minimum requirements for consideration include:<br>• Only a licensed driller shall carry out the bore installation works and shall be present at all times during bore construction activities.<br>• The bore design should aim to ensure the protection of the groundwater resource from surface contamination. The headworks and casing are sealed so that there is no potential for flow outside the casing.<br>• To minimise the possibility of contaminating the bore and any surrounding bores, the new bore should be located away from existing bores, surface water sources and any sources of pollution (e.g., dairies, septic tanks and absorption trenches, refuse dumps, landfill, effluent discharges from drainage ditches, cattle/stock dips).<br>• Chemicals and other drilling fluid additives that could leave a residual toxicity should not be added to any drilling fluids or cement slurries (i.e., grouts) used to drill and complete any water bore. | Pre-Construction<br>Construction<br>Operation<br>Decommissioning |

| No. | Mitigation measures | Phase |
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| W5 | If ground water is to be used, a Groundwater Management Plan would be incorporated into the CEMP to manage impacts. This would be informed by onsite survey by an appropriately trained expert and include:<br>• Pollution controls.<br>• Management of dewatering. | Pre-Construction |
| W6 | If possible, a dedicated refuelling area near to the servicing area should be established. Refuelling areas will be communicated to all site personnel by signs and notice boards. | Construction<br>Operations<br>Decommissioning |
| | **Historic heritage** | |
| HH1 | Stock fence around the Trig Station<br>It is recommended that a stock fence be installed along the proposed buffer around the Trig Station. There is currently no protection from live stock. | Pre-construction |
| HH2 | Archival Recording of the Trig Station<br>A photographic archival recording of the Trig Station shall be prepared in accordance with Heritage NSW guideline, Photographic Recording of using Film or Digital Capture (2006).<br>The photographic recording will include additional research to confirm the existence of other Trig Station or markers within or in proximity to the Development site. The photographic recording shall include photos, descriptions and a brief historical account of these identified survey markers and their relationship to each other. | Pre-construction |
| HH3 | Implement an Unexpected Finds Procedure<br>Should historical archaeological materials be uncovered while undertaking works to develop the Blind Creek Solar Farm, all activities must stop and Heritage NSW be immediately notified. An appropriately qualified archaeologist should also be consulted for the purpose of implementing best practice protection and conservation measures while the relevant approvals are obtained. | All stages |
| | **Social and economic** | |

| No. | Mitigation measures | Phase |
|---|---|---|
| SE1 | The Local Industry Participation Plan will focus on maximising the involvement of local people and businesses in the Project. It will:<br>• Include specific focus on people and businesses within the Queanbeyan-Palerang LGA, but also the ACT, and the wider regional area.<br>• Consider specific opportunities for Aboriginal people and businesses, women, and young people.<br>• Include culturally sensitive Aboriginal employment goals for workers and university graduates, and protocols and systems to ensure Aboriginal employment does not conflict with cultural obligations (Appendix D-2).<br><br>The plan should be developed in partnership with the key local economic development stakeholders in the region (e.g., the Industry Capability Network, NSW Training Services, Regional Development Australia, Queanbeyan-Palerang Regional Council, Bungendore Chamber of Commerce and Industry, and Queanbeyan Business Chamber). It will assess the feasibility to support local schools in science and engineering studies through a partnership.<br>The plan would outline mechanisms that will be used to ensure that local people and businesses are given full, fair, and reasonable opportunity to participate in the Project. It will also detail how the proponent will link in at the local level with government and agency support programs that assist people and businesses improve their capacity and capability. | Design, Construction, Operation |
| SE2 | The Local Procurement Policy will outline the proponent's commitment to providing local and regional businesses the opportunity to supply goods and services to meet Project needs during all phases of the Project. This will be developed through consultation with key local economic development stakeholders (e.g., the Industry Capability Network, Regional Development Australia, Queanbeyan-Palerang Regional Council). It will give Aboriginal businesses full and fair opportunities to supply goods and services.<br>The Local Procurement Policy will include the requirements of a Local Contractor Day, giving local contractors the opportunity to register their interest and participate in the Project. | Design, Construction, Operation |
| SE3 | The Employment and Accommodation Strategy will provide further detail on accommodation providers. The strategy will include engagement with accommodation providers to avoid negatively impacting on tourism opportunities and any vulnerable populations.<br>**The Applicant will consult with QPRC during the development of the Employment and Accommodation Strategy, and throughout Project construction, to minimise adverse impacts on both the rental market, and on vulnerable populations who may be temporarily housed in short-term accommodation.** | Design, Construction, Operation |

| No. | Mitigation measures | Phase |
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| SE4 | Develop the CBSS in partnership with residents. The intention is to create a fund that can support very localised and meaningful community development or other neighbourhood-level initiatives that have strong resident support, throughout the life of the Project. The proponent will consider the need for a greater level of clarity on the rationale for benefit sharing and the way the CBSS has been structured. | Design<br>Construction<br>Operation |
| **SE5** | **Bungendore Sands Quarry are considered a key stakeholder in the project and will be included in future engagement activities.** | **Design**<br>**Construction**<br>**Operation** |
| | **Bushfire** | |
| BF1 | Copper conductors would be used where necessary to electrically bond the metal structures to earth to protect personnel and equipment in the event of lightning strikes and electrical faults. | Design |
| BF2 | Dangerous or hazardous materials would be stored and handled in accordance with AS1940-2004: *The storage and handling of flammable and combustible liquids*. | Construction<br>Operation<br>Decommission |
| BF3 | Develop a Bushfire Emergency Management and Operations Plan to include but not be limited to:<br>• Specific management of activities with a risk of fire ignition (hot works, vehicle use, smoking, use of flammable materials, blasting).<br>• Incorporation of fire safety and response in staff and contractor induction, training, OHS procedures and Work Method Statements.<br>• Designation of a staff safety officer tasked with ensuring implementation of the plan and regular liaison with firefighting agencies including emergency access to site.<br>• Document all firefighting resources maintained at the site with an inspection and maintenance schedule.<br>• Monitoring and management of vegetation fuel loads.<br>• A communications strategy incorporating use of mobile phones, radio use (type, channels and call-signs), Fire Danger Warning signs located at the entrance to the site compounds, emergency services agency contacts. | Construction<br>Operation<br>Decommission |

| No. | Mitigation measures | Phase |
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| | In developing the Bushfire Emergency Management and Operations Plan, NSW RFS and Fire and Rescue NSW would be consulted on the volume of water supplies, fire-fighting equipment maintained on-site, fire truck connectivity requirements, emergency access points, proposed APZ and access arrangements, communications, vegetation fuel levels and hazard reduction measures. | |
| BF4 | An APZ buffer of minimum 10m would be maintained from the outside edge of the Project infrastructure.<br>Additionally, where remnant or planted woody vegetation is present within the Development footprint, an APZ buffer of minimum 20m would be maintained between this vegetation and solar farm infrastructure.<br>An APZ comprising of crushed gravel (20m in width) would be maintained between the substation and hazard vegetation<br>Average grass height within the APZ buffer (adjacent solar array perimeter) would be maintained at or below 10 centimetres on average in the lead-up to and throughout the October - April fire season. APZs would meet the specifications of Appendix 4 of PBP.<br>Land outside designated APZs, including beneath the solar array, would be maintained by intensive rotational grazing. | Construction<br>Operation<br>Decommission |
| BF5 | The project would include a defendable space around the permitter of the solar array area that permits unobstructed vehicle access:<br>• 20m around woody vegetation.<br>• 10m around grassland. | Design<br>Operation |
| BF6 | The overhead powerlines to the TransGrid transmissions lines at the site would be managed by maintaining appropriate vegetation clearance limits to minimise potential ignition risks, in accordance with the *ISSC 3 Guideline for Managing Vegetation Near Power Lines.* | Operation |
| BF7 | Appropriate fire-fighting equipment would be held on site to respond to any fires that may occur at the site during construction. This equipment would include fire extinguishers, a 1000 litre water cart (fitted with suitable hosing, fittings and diesel fire-fighting pump) retained on site on a precautionary basis, particularly during any blasting and welding operations. Equipment lists would be detailed in Work Method Statements.<br>A 20,000-litre non-combustible water storage tank, with a 65mm Storz outlet with a ball valve fitted to the outlet, would be provided close to the entrance of the substation.<br>A 100,000-litre tank close to the entrance of the solar array area and a second 100,000-litre tank within the solar array area | Construction<br>Operation<br>Decommission |

| No. | Mitigation measures | Phase |
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| | would be provided, each with 20,000-litres reserved for firefighting purposes with a 65mm Storz outlet and ball valve fitted to the outlet | |
| BF8 | The NSW RFS and Fire and Rescue NSW would be provided with a contact point for the solar farm, during construction and operation. | Construction<br>Operation |
| BF9 | Following commissioning of the solar farm, the local RFS and Fire and Rescue brigades would be invited to an information and orientation day covering access, infrastructure, firefighting resources on-site, fire control strategies and risks/hazards at the site. | Operation |
| BF10 | All internal access tracks would comply with the requirements of property access roads in accordance with Table 5.3b of the PBP.<br>All access and egress tracks on the site would be maintained and kept free of parked vehicles to enable rapid response for firefighting crews and to avoid entrapment of staff in the case of bushfire emergencies. Access tracks would be constructed as through roads as far as practicable. Dead end tracks would be signposted and include provision for turning firefighting vehicles. | Construction<br>Operation<br>Decommission |
| BF11 | A Hot Works Permit system would be applied to ensure that adequate safety measures are in place. Fire extinguishers would be present during all hot works. Where practicable hot works would be carried out in specific safe areas (such as the Construction Compound temporary workshop areas). | Construction<br>Operation<br>Decommission |
| BF12 | Machinery capable of causing an ignition would not be used during bushfire danger weather, including Total Fire Ban days. | Construction<br>Operation<br>Decommission |
| BF13 | Prior to operation of the solar farm, an Emergency Response Plan (ERP) would be prepared in consultation with NSW RFS and Fire and Rescue NSW. This plan must include but not be limited to:<br>• Specifically addresses foreseeable on site and off site fire events and other emergency incidents.<br>• Risk control measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of | Operation |

| No. | Mitigation measures | Phase |
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| | shutting down and isolating the PV system (either in its entirety or partially, as determined by risk assessment).<br>• Outline other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site.<br>• Two copies of the ERP are stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.<br>• Once constructed and prior to operation, the operator of the facility would contact the relevant local emergency management committee (LEMC).<br>• **Be in accordance with Hazardous Industry Planning Advisory Paper 1. Emergency Planning (HIPAP no. 1).** | |
| BF14 | Fire risk mitigation associated with the lithium-ion BESS would include:<br>• Selecting a BESS unit with:<br>  ○ Enclosures which protect the system from weather and extreme heat, solar degradation, dust, and animals. Of course these must be fit for the local conditions.<br>  ○ Cooling systems able to handle the local conditions.<br>  ○ Battery management systems to monitor for faults, automatically respond and alert staff.<br>  ○ Fire suppression systems, if effective.<br>• Appropriate fire risk reduction including<br>  ○ Strictly adhere to the manufacturer's requirements on installation and testing.<br>  ○ Carefully handle the BESS during transport and installation to avoid mechanical damage.<br>  ○ Locating the BESS as far as practicable from any sensitive receptors or large stands of vegetation.<br>  ○ Provide adequate clearance between battery containers and/or install fire rated walls to avoid or delay fire spread.<br>  ○ Provide adequate access/egress for installation, maintenance and fire response.<br>  ○ Provide an Asset Protection Zone to reduce the risk of fire spreading to or from the BESS. In the case of a centralised (AC coupled) this should be a 10m radius around the installation of a vegetation free surface such as crushed gravel.<br>• Facilitation (including funding) of first responder training in the management of LiB fires at the site for local brigades.<br>• Preparation of a BESS specific section within the Battery Fire Response Plan, under the Bushfire Emergency Management and Operations Plan, in consultation with fire authorities, fire suppression experts and in reference to relevant standards and guidelines. | Operation |

| No. | Mitigation measures | Phase |
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| BF15 | A Fire Safety Study (FSS) will be undertaken and developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper No. 2 (HIPAP No.2) , HIPAP No. 4 and consultation with FRNSW prior to commencement of construction. The FSS will consider the limited operational capacity of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety dependence. | Pre – Construction |
| BF16 | Ensure the battery cooling systems are fully -tested when installed. | Construction |
| **BF17** | **An Emergency Services Information Package (ESIP) be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.** | **Pre-construction** |
| | **Hazardous materials and development** | |
| PHA1 | Dangerous or hazardous materials would be stored and handled in accordance with AS1940-2004: *The storage and handling of flammable and combustible liquids* and the ADG code where relevant. | Construction<br>Operation<br>Decommissioning |
| PHA2 | Protocols would be developed for lithium-ion battery storage, maintenance, and incident response to mitigate Li-ion fire risks. | Construction<br>Operation<br>Decommissioning |
| PHA3 | The transportation of new and waste lithium-ion batteries would comply with the requirements of the Dangerous Goods Code, including specific ‘special provisions’ and ‘packing instructions’ applying to the transportation of Li-ion batteries. | Construction<br>Operation<br>Decommissioning |
| PHA4 | Preparation of a specific Battery Fire Response Plan, under the general Fire Response Plan, in consultation with fire authorities, fire suppression experts, and in reference to relevant standards and guidelines. | Construction<br>Operation<br>Decommissioning |

| No. | Mitigation measures | Phase |
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| PHA5 | The results of this PHA should be used as inputs into other safety studies required including:<br>• Fire Response Plan.<br>• Evacuation Plan.<br>• Spill and Contamination Response Plan.<br>**The PHA will be updated and submitted with the detailed design once battery technology has been confirmed.** | **Pre-construction**<br>Construction<br>Operation<br>Decommissioning |
| | **EMF** | |
| E1 | All electrical equipment would be designed in accordance with relevant codes and industry best practice standards in Australia. | Preconstruction<br>Construction |
| E2 | All design and engineering would be undertaken by qualified and competent person/s with the support of specialists as required and would aim to minimise EMFs. | Preconstruction<br>Construction |
| | **Air quality** | |
| AQ1 | The CSES will be implemented to promote information sharing for air quality and include:<br>• Notification of relevant stakeholders.<br>• An accessible complaints process with a timely response protocol. | Preconstruction/<br>Construction/<br>Decommissioning |
| AQ2 | Dust control measures, including on site access roads, will be specified in the CEMP and DEMP and may include water applications or other means as required. | Construction/<br>Decommissioning |
| AQ3 | Idling for more than 5 minutes is prohibited. Lorries and trucks engines would be turned off. | Construction/<br>Decommissioning |
| AQ4 | Vehicle loads of material which may create dust or litter would be covered while using the public road system. | Construction/<br>Decommissioning |

| No. | Mitigation measures | Phase |
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| AQ5 | All vehicles and machinery used at the site would be in good condition, fitted with appropriate emission controls and comply with the requirements of the POEO Act, relevant Australian standards and manufacturer's operating recommendations. Plant would be operated efficiently and turned off when not in use. | Construction/ Decommissioning |
| AQ6 | Fires and material burning would be prohibited in the Development site. | Construction/ Decommissioning |
| | **Resource use and waste generation** | |
| R1 | A Waste Management Plan (WMP) would be developed to minimise waste, including:<br>• Identification of opportunities to avoid, reuse and recycle, in accordance with the waste hierarchy.<br>• Quantification and classification of all waste streams.<br>• Provision for recycling management on-site.<br>• Provision of toilet facilities for on-site workers and identify that sullage would be disposed of (i.e., pump out to local sewage treatment plant).<br>• Tracking of all waste leaving the site.<br>• Disposal of waste at facilities permitted to accept the waste.<br>• Requirements for hauling waste (such as covered loads). | Construction/ Operation/ Decommissioning |
| R2 | A septic system would be installed and operated according to the Queanbeyan Palerang Regional Council regulations. | Construction/ Operation |

# APPENDIX C Addendum ACHAR

# APPENDIX D Crown lands consultation

# APPENDIX E SLR glare memo

# APPENDIX F Updated BDAR

# APPENDIX G Updated VIA

# APPENDIX H Doing updated preliminary hazards assessment

# APPENDIX I Updated TIA and bar treatment design