

Department of Planning and Environment

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# Oxley Solar Farm

State Significant Development Assessment Report (SSD-10346)

September 2023





# Acknowledgement of Country

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# Preface

This assessment report provides a record of the Department of Planning and Environment's (the Department) assessment and evaluation of the State significant development (SSD 10346) application for the Oxley Solar Farm located in the New England Renewable Energy Zone (REZ), approximately 14 kilometres (km) south east of Armidale, lodged by Oxley Solar Developments Pty Ltd. The report includes:

- an explanation of why the project is considered SSD and who the consent authority is
- an assessment of the project against government policy and statutory requirements, including mandatory considerations
- a demonstration of how matters raised by the community and other stakeholders have been considered
- an explanation of any changes made to the project during the assessment process
- an assessment of the likely environmental, social and economic impacts of the project
- an evaluation which weighs up the likely impacts and benefits of the project, having regard to the proposed mitigations, offsets, community views and expert advice; and provides a view on whether the impacts are on balance, acceptable
- an opinion on whether the project is approvable or not, along with the reasons, to assist the Independent Planning Commission in making an informed decision about whether development consent for the project can be granted and any conditions that should be imposed.

# Executive Summary

Oxley Solar Development Pty Ltd (OSD) proposes to develop a 215 megawatt (MW) solar farm and a 50 MW / 50 MW-hour (MWh) battery, approximately 14 kilometres (km) south east of Armidale in the New England Renewable Energy Zone.

The site is located close to the New England Highway in a rural area, with the nearest non-associated receiver located about 615 m east of the proposed development footprint. The project would connect to the two existing 132 kilovolt (kv) transmission lines that traverses the site.

The Department exhibited the Environmental Impact Statement (EIS) for the project and received 79 public submissions (78 objections and 1 providing comment) and comment from Armidale Regional Council (Council). Advice was received from 15 government agencies.

The Department also consulted with Council and the relevant government agencies on key issues, inspected the site and held a community information session in May 2021. None of the agencies, Council or utility providers objected to the project, and they each recommended the implementation of appropriate mitigation and management measures.

In response to agency advice and public submissions, OSD undertook additional assessments and amended the project by refining the development footprint to increase setback distances from sensitive receivers (including the Oxley Wild Rivers National Park and nearby residences) and avoid environmental constraints.

The project amendments would lead to better outcomes and address many of the concerns raised by the Department, agencies and in public submissions by reducing impacts on visual amenity and biodiversity values.

The key assessment considerations are energy security, land use compatibility, biodiversity, transport and visual amenity. The Department has also undertaken a comprehensive assessment of the full range of other potential impacts and recommended a range of detailed conditions, developed in conjunction with agencies and Council, to ensure all potential impacts are effectively minimised, managed or offset.

The project would not significantly reduce the overall agricultural productivity of the region and the site could be returned to agricultural uses in the future. The Department notes that OSD intends to continue grazing concurrently with the operation of the solar farm.

The development footprint includes 92.78 ha of native vegetation, which includes 1.68 ha of woodland vegetation and 90.71 ha of derived native grassland. The project has been designed and refined to avoid and minimise biodiversity impacts to these areas. The Department considers that the biodiversity impacts of the project would not be significant, subject to a range of mitigation and adaptive management measures and by offsetting the residual biodiversity impacts

The Department considers the project would not result in unacceptable impacts on the capacity, efficiency or safety of the road network. Potential traffic impacts would be largely restricted to the 18-month construction period and would be suitably managed through road upgrades, road maintenance and the implementation of a Traffic Management Plan.

The Department has also considered the potential cumulative impacts with other developments in the region and considers that there would be no significant cumulative traffic, visual or noise impacts due to distance and different haulage routes.

There are 11 non-associated residences located within 2 km of the development footprint with the closest residence about 615 m to the east. The solar arrays are relatively low-lying structures and expansive views across the area are limited by topography and established vegetation. While the introduction of the project would represent a change to the local rural landscape, the Department considers that OSD's proposed

mitigation measures, including screen planting, would adequately reduce the potential visual impacts of the project to an acceptable level, consistent with the Department's *Large-Scale Solar Energy Guidelines*.

The project is consistent with the Commonwealth's Renewable Energy Target and NSW's *Climate Change Policy Framework* and the *Net Zero Plan Stage 1: 2020 – 2030*, as it would contribute 215 MW of renewable energy to the National Electricity Market, including a battery storage facility with a capacity of 50 MW / 50 MWh. Importantly, the battery would enable the project to store solar energy for dispatch to the grid outside of daylight hours and / or during periods of peak demand, which has the potential to contribute to increased grid stability and energy security.

The project is located in the New England REZ, which was formally declared by the Minister for Energy in 2022 under section 19(1) of the *Electricity Infrastructure Investment Act 2020* (the EII Act). The REZ is aimed at encouraging investment in electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW. The New England REZ was declared due to its excellent renewable energy resource potential and proximity to the existing electricity network.

Overall, the Department considers the site to be appropriate for the project as it has good solar resources, available capacity on the existing electricity network and is consistent with the Department's *Large-Scale Solar Energy Guideline*.

The project would also provide flow-on benefits to the local community, including up to 300 construction jobs, 5 operational jobs and contributions to local council of \$2,790,000 on commencement of construction then an annual payment of \$139,500, through a voluntary planning agreement. There would be broader benefits to the State through an injection of \$370 million in capital investment into the NSW economy.

The Department considers the project would not result in any significant impacts on the local community or the environment, and any residual impacts can be managed through the implementation of the recommended conditions.

The Department considers that the project would result in benefits to the State of NSW and the local community and is therefore in the public interest and approvable.

# Contents

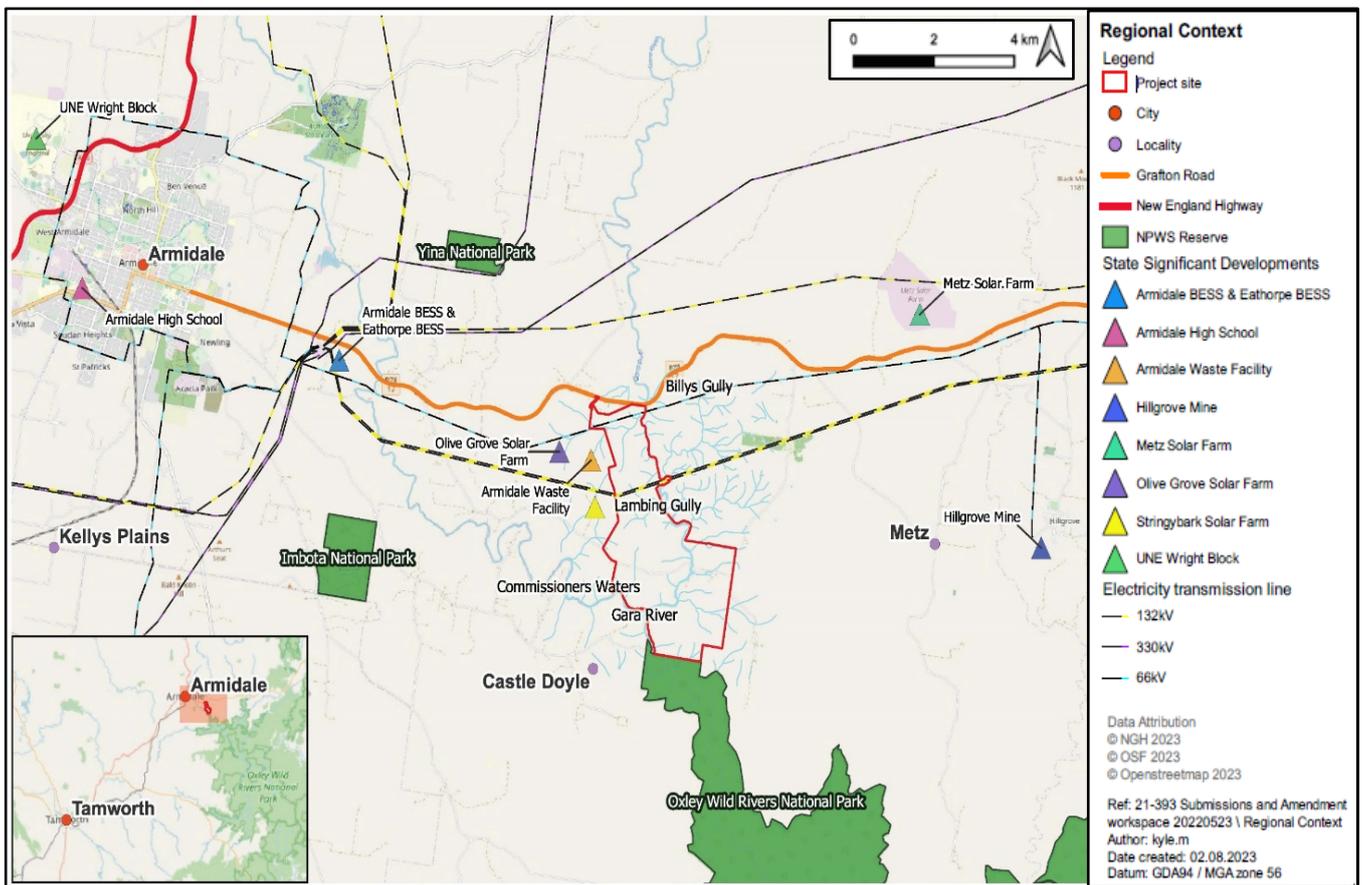
<b>Preface</b> .....	<b>i</b>
<b>Executive Summary</b> .....	<b>ii</b>
<b>1 Introduction</b> .....	<b>1</b>
1.1 Project.....	1
<b>2 Strategic Context</b> .....	<b>4</b>
2.1 Site and Surrounds.....	4
2.2 Other Energy Projects .....	4
2.3 Energy Context .....	6
2.4 NSW Solar Guideline.....	6
<b>3 Statutory Context</b> .....	<b>7</b>
3.1 State significant development .....	7
3.2 Amended application.....	7
3.3 Permissibility.....	7
3.4 Integrated and other approvals.....	8
3.5 Renewable energy zone.....	8
3.6 Mandatory matters for consideration.....	8
<b>4 Engagement</b> .....	<b>9</b>
4.1 Department’s engagement.....	9
4.2 Summary of advice received from government agencies .....	9
4.3 Summary of Council’s submission.....	10
4.4 Summary of public submissions.....	10
4.5 Response to submissions .....	12
4.6 Amendment report.....	12
<b>5 Assessment</b> .....	<b>15</b>
5.1 Energy transition.....	15
5.2 Land use compatibility .....	15
5.3 Biodiversity.....	17
5.4 Traffic and transport.....	22
5.5 Visual.....	25

5.6 Other issues.....	30
<b>6 Evaluation.....</b>	<b>37</b>
<b>Appendices.....</b>	<b>39</b>
Appendix A – Environmental Impact Statement.....	39
Appendix B – Submissions.....	39
Appendix C - Agency advice.....	39
Appendix D - Submissions Report.....	39
Appendix E - Amendment Report.....	39
Appendix F - Additional Information.....	39
Appendix G – Recommended Development Consent.....	39
Appendix H – Consideration of community views.....	39
Appendix I - Statutory considerations.....	42

# 1 Introduction

## 1.1 Project

1. Oxley Solar Development Pty Ltd (OSD) proposes to develop a 215 megawatt (MW) State significant development (SSD) solar farm and associated battery energy storage system (BESS) in the New England Renewable Energy Zone (REZ), approximately 14 kilometres (km) southeast of Armidale, in the Armidale local government area (LGA) (see **Figure 1** and **Figure 2**).
2. The project would include a 50 MW / 50 MW-hour (MWh) BESS, an on-site substation and connection to the two existing 132 kilovolt (kV) transmission lines operated by Transgrid that cross the north of the site (see **Figure 2**). It also involves the upgrading and decommissioning of equipment over time.
3. Access to the site is proposed via the New England Highway and Waterfall Way and the existing Armidale Regional Landfill facility (ARL) access road to the northwest of the site. Construction of the solar farm would be approximately 12 to 18 months, with a peak period of 6 to 9 months.

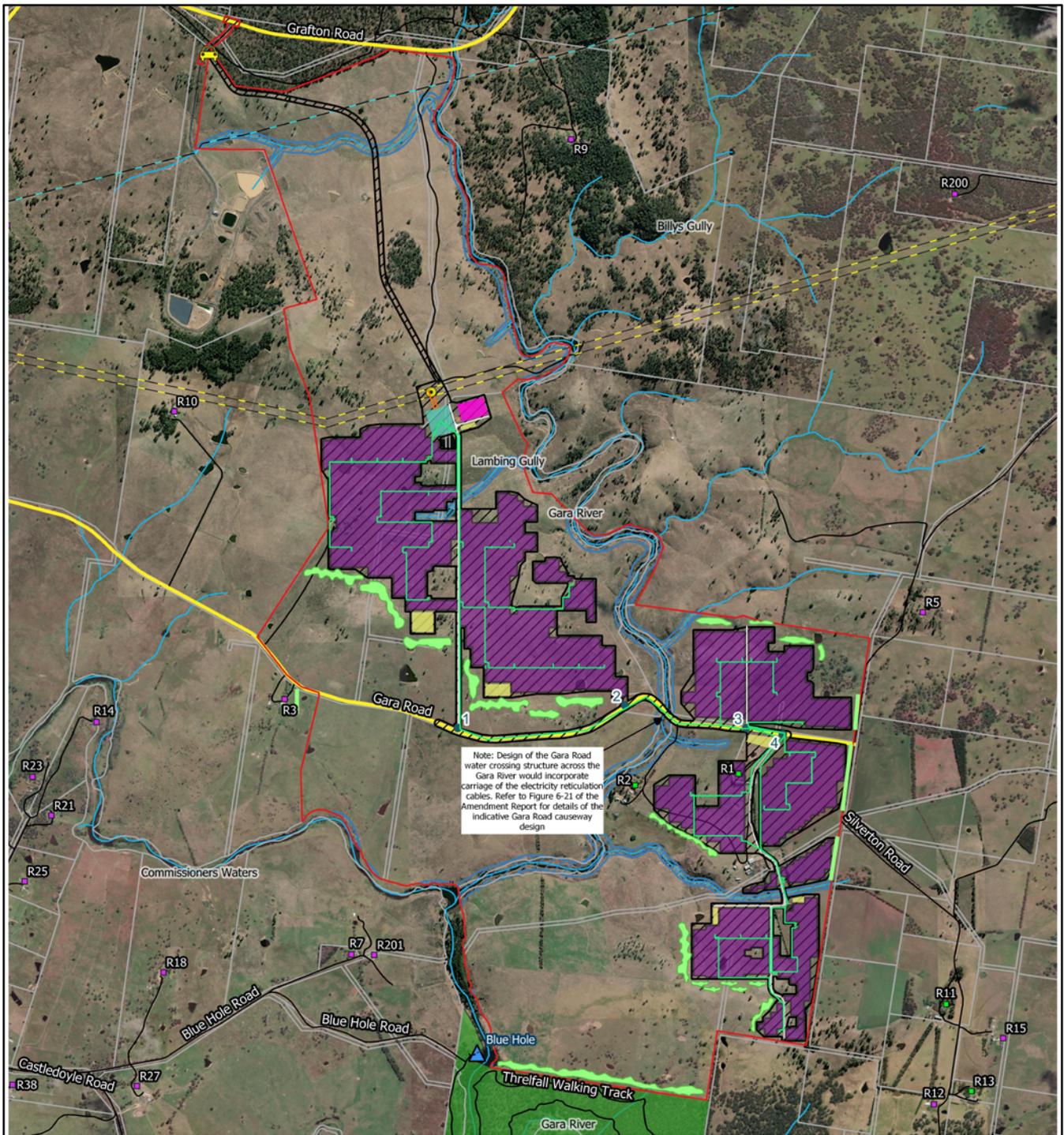


**Figure 1 | Regional Context**

4. The key components of the project are summarised in **Table 1**, depicted in **Figure 2**, and described in detail in the Environmental Impact Statement (EIS) and supporting documentation (see **Appendices B, C, D and F**).

**Table 1 | Main aspects of the project**

Aspect	Description
<b>Project Summary</b>	<p>The project includes:</p> <ul style="list-style-type: none"> <li>• a generating capacity of approximately 215 MW;</li> <li>• approximately 385,280 solar panels mounted on fixed or single-axis tracking system (up to 4 m high) supported by 43 power conversion units, inverters, transformers and associated control equipment;</li> <li>• underground cabling between solar panels and power conversion units;</li> <li>• an on-site substation and connection into Transgrid's 132 kV transmission lines;</li> <li>• a centralised lithium-ion BESS with up to 50 MW / 50 MWh capacity, located in the northern portion of the site near the substation and laydown area; and</li> <li>• internal access tracks, staff amenities, control buildings, maintenance buildings, offices, laydown areas, car park, watercourse crossings and security fencing.</li> </ul>
<b>Project Area</b>	<ul style="list-style-type: none"> <li>• Site: 1,021 ha</li> <li>• Development footprint: 268 ha</li> </ul>
<b>Site entry and access route</b>	<ul style="list-style-type: none"> <li>• The proposed access route is New England Highway, Uralla Road, Kentucky Street, Dangar Street, Barney Street, Waterfall Way (Grafton Road) and the ARL access road.</li> <li>• All vehicles would access the site via a new entry point off the ARL access road.</li> </ul>
<b>Road upgrades</b>	<p>Road upgrade proposed:</p> <ul style="list-style-type: none"> <li>• construction of the primary site access off the ARL access road and closure of the existing property access at 1352 Grafton Road;</li> <li>• widening and sealing 2 km of Gara Road from chainage 7,750 m until 9,750 m, to a minimum width of 6 m with 0.5 m shoulders each side;</li> <li>• upgrade the Gara River Causeway on Gara Road (chainage 9.05 km); and</li> <li>• construction of four standard rural property access on Gara Road at chainages 7,780 m, 8,770 m, 9,420 m and 9,700 m;</li> </ul>
<b>Construction</b>	<ul style="list-style-type: none"> <li>• The construction period would be approximately 12 to 18 months, with a peak construction period of 6 to 9 months</li> <li>• Construction hours would be limited to Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.</li> </ul>
<b>Operation</b>	<ul style="list-style-type: none"> <li>• The expected operational life of the infrastructure is approximately 30 years. However, the project may involve infrastructure upgrades that may extend the operational life.</li> <li>• The solar farm and BESS would operate 24 hours a day, seven days a week.</li> </ul>
<b>Decommissioning and rehabilitation</b>	<p>At the end of the project life, all infrastructure would be removed and the land rehabilitated.</p>
<b>Subdivision</b>	<p>Subdivision would be required to facilitate connection to the transmission network, for the onsite substation (which will become the property of Transgrid), for the BESS, and to enable the existing landowner to retain the residual agricultural land.</p>
<b>Employment</b>	<p>Up to 300 construction jobs and up to 5 operational jobs.</p>
<b>Capital investment value</b>	<p>\$370 million</p>



Note: Design of the Gara Road water crossing structure across the Gara River would incorporate carriage of the electricity reticulation cables. Refer to Figure 6-21 of the Amendment Report for details of the indicative Gara Road causeway design

### Development Footprint

#### Legend

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li><span style="border: 1px solid red; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Project Boundary</li> <li><span style="background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Development Footprint</li> <li><span style="border-bottom: 1px solid black; display: inline-block; width: 15px; margin-right: 5px;"></span> Roads</li> <li><span style="border-bottom: 2px solid yellow; display: inline-block; width: 15px; margin-right: 5px;"></span> Key roads</li> <li><span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> National Park</li> <li><span style="background-color: #D2B48C; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Travelling Stock Reserves</li> <li><span style="color: blue; font-weight: bold;">▲</span> Blue Hole Picnic Area</li> </ul> | <h4>Infrastructure layout</h4> <ul style="list-style-type: none"> <li><span style="background-color: #800080; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Array area</li> <li><span style="background-color: #FF00FF; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> BATTERY STORAGE</li> <li><span style="background-color: #FFA500; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> CONTROL ROOM</li> <li><span style="background-color: #FF00FF; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> PV-PCU</li> <li><span style="background-color: #FF0000; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Shed</li> <li><span style="border-bottom: 1px solid black; display: inline-block; width: 15px; margin-right: 5px;"></span> Site road</li> <li><span style="background-color: #FFFF00; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Laydown areas</li> <li><span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Solar array</li> <li><span style="background-color: #00CED1; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Substation</li> <li><span style="border-bottom: 1px solid green; display: inline-block; width: 15px; margin-right: 5px;"></span> Internal electricity reticulation cables (underground in trench within development footprint including Gara Road)</li> <li><span style="border-bottom: 1px solid orange; display: inline-block; width: 15px; margin-right: 5px;"></span> Transmission line electrical connection (overhead)</li> <li><span style="color: yellow; font-weight: bold;">●</span> Transmission connection point</li> </ul> | <h4>Electricity transmission lines</h4> <ul style="list-style-type: none"> <li><span style="border-bottom: 2px solid yellow; display: inline-block; width: 15px; margin-right: 5px;"></span> 132kV</li> <li><span style="border-bottom: 2px solid blue; display: inline-block; width: 15px; margin-right: 5px;"></span> 66kV</li> <li><span style="color: green; font-weight: bold;">■</span> Associated residences</li> <li><span style="color: purple; font-weight: bold;">■</span> Non-associated residences</li> <li><span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Vegetation screening</li> <li><span style="color: yellow; font-weight: bold;">●</span> Site access</li> <li><span style="color: blue; font-weight: bold;">●</span> Gara Road access points</li> <li><span style="background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> Waterway buffers</li> <li><span style="border-bottom: 1px solid blue; display: inline-block; width: 15px; margin-right: 5px;"></span> Waterway &gt;1st order (strahler)</li> </ul> |
|--|--|--|

0 500 1,000 m

Data Attribution

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Ref: 21-393 Submissions and Amendment workspace  
 20220523 \ Development Footprint  
 Author: kyle.m  
 Date created: 18.09.2023  
 Datum: GDA94 / MGA zone 56



**NGH**

Figure 2 | Project Site

## 2 Strategic Context

### 2.1 Site and Surrounds

5. The site is largely cleared grazing and cropping land zoned RU1 Primary Production. Surrounding land is also predominantly zoned RU1, with the exception of the Oxley Wild Rivers National Park (National Park) located adjacent to the southern boundary of the site (approximately 460 m from the development footprint), which is zoned C1 - National Parks and Nature Reserves.
6. The National Park is managed under the NSW *National Parks and Wildlife Act 1974* (NPW Act), is declared under the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) as a World heritage property and a National Heritage place, and forms part of the Gondwana Rainforests of Australia.
7. Access to the site would be via a new site access point off the ARL access road at the northwest of the site. Two parallel 132 kV transmission lines operated by Transgrid traverse the north of the site (south-west to north-east).
8. The development footprint was designed to avoid site constraints, including areas of intact native vegetation, Threatened Ecological Communities (TEC), established vegetative wind breaks, rocky areas and Aboriginal heritage items, and is not mapped as Biophysical Strategic Agricultural Land (BSAL). The soil and land capability is predominantly Class 5 (severe limitation) (67 % of the development footprint) with the balance of site containing Class 4 (moderate to severe limitations) and Class 6 (very severe limitations) land.
9. The Gara River traverses the site and intersects with Commissioners Waters (both 6<sup>th</sup> order waterways) at the western boundary of the site before entering Gara Gorge within the National Park. There are 37 dams and 22 unnamed ephemeral tributaries of the within the project site, 18 of which are tributaries of the Gara River and four of which are tributaries of Commissioners Waters.
10. There are 11 non-associated receivers and four associated receivers located within 2 km of the development footprint. The closest residence (R5) is located 615 m northeast of the development footprint.
11. The key aspects of the project are provided in detail in the Project Description chapter of the Amendment Report and outlined in **Table 1**.

### 2.2 Other Energy Projects

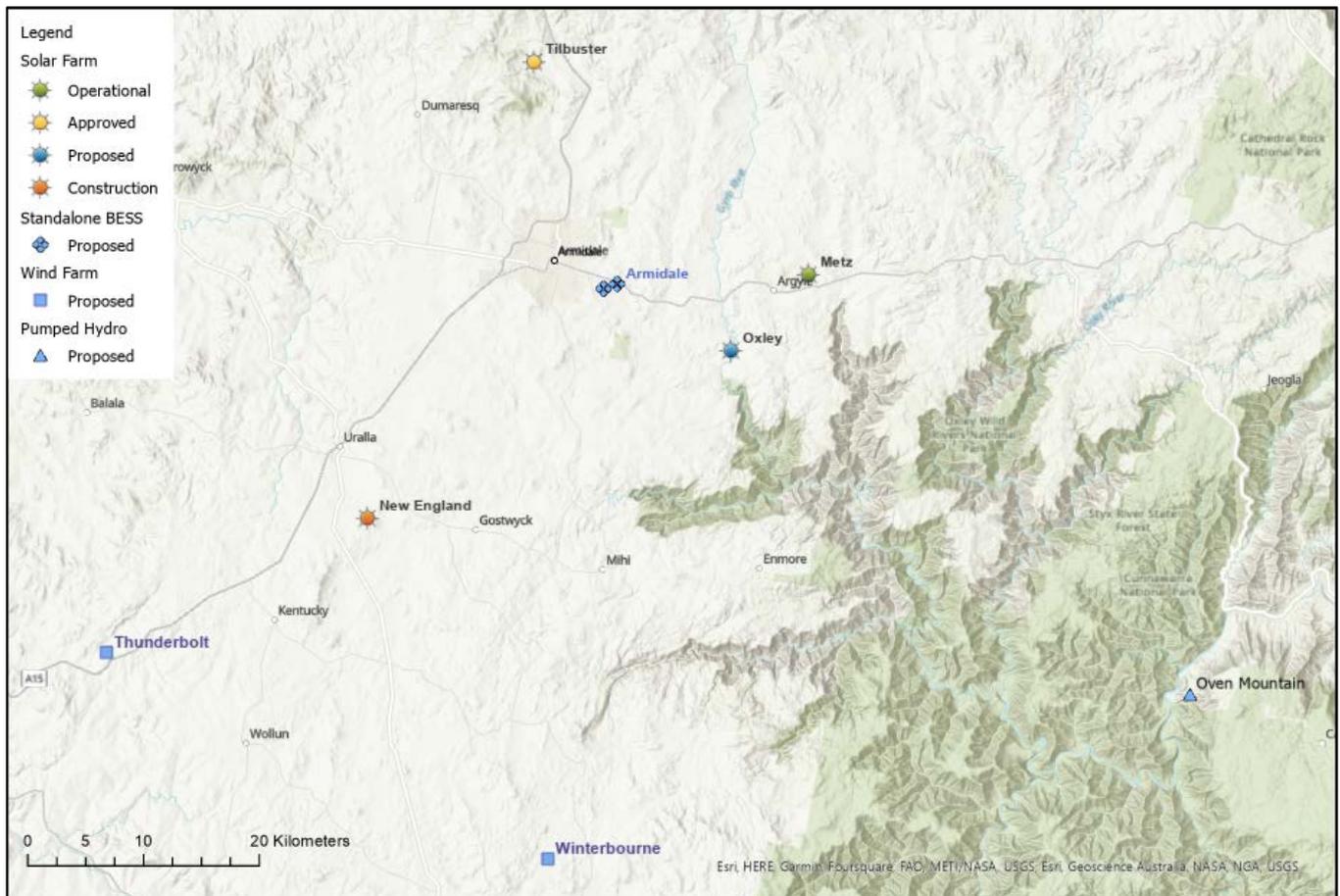
12. There are seven State significant renewable energy projects within 50 km of the project site (see **Figure 3**). There are also two smaller solar farms, Stringybark Solar Farm and Olive Grove Solar Farm, approved by the Northern Joint Regional Planning Panel (JRPP) in 2020, which are in closer proximity to the site (see **Table 2** and **Figure 9**). The nearest SSD project, Metz Solar Farm, is operational.
13. The New England Solar Farm (20 km southwest of the project) has completed construction of Stage 1, and Tilbuster Solar Farm (25 km northwest) was approved in March 2022 and has not yet commenced construction. Armidale BESS and Eathorpe BESS (both 8 km northwest) and are all at an early stage of the planning process and are yet to submit a development application.
14. Potential cumulative impacts at a regional level relate to the loss in agricultural land and workforce accommodation. The broader potential cumulative impact on agricultural land in the region is discussed further in **section 5.2** and workforce accommodation is addressed in **section 5.6**.

15. Potential cumulative impacts on the local roads along the proposed transport route from these projects is discussed further in **section 5.4**.

**Table 2 |** Nearby Renewable Energy Projects

Project	Capacity (MW)	Status	Approximate distance from the project (km)
<b>Stringybark Solar Farm (not SSD) *</b>	29.9	Approved	Adjacent (southwest)
<b>Olive Grove Solar Farm (not SSD) *</b>	29.9	Approved	5 (northwest)
<b>Metz Solar Farm</b>	100	Operational	7 (northeast)
<b>Armidale BESS</b>	150	Proposed	8 (northwest)
<b>Eathorpe BESS</b>	100	Proposed	8 (northwest)
<b>New England Solar Farm</b>	720	Construction	20 (southwest)
<b>Tilbuster Solar Farm</b>	150	Approved	25 (northwest)
<b>Oven Mountain Pumped Hydro</b>	900	Proposed	40 (southeast)
<b>Winterbourne Wind Farm</b>	700	Proposed	40 (south)
<b>Thunderbolt Wind Farm</b>	200	Proposed	52 (southwest)

\* Approved by the Northern Joint Regional Planning Panel (JRPP) in 2020



**Figure 3 |** Nearby SSD Renewable Energy Projects

## 2.3 Energy Context

16. The Commonwealth and State energy context is described in **Table 3**.

**Table 3 | Energy Context**

Policy / Year	Summary
<i>Australia's Long Term Emissions Reduction Plan (2021)</i>	Sets a pathway to net zero emissions by 2050 and affirms Australia's commitment to meeting its revised 2030 target (43% below 2005 levels).
<i>Australian Energy Market Operator's 2022 Integrated System Plan (ISP)</i>	Notes that: <ul style="list-style-type: none"> <li>without coal, investment is needed to meet significantly increased electricity demand requiring a nine-fold increase in large-scale variable renewable energy generation (wind and solar)</li> <li>a mix of solar and wind is needed, and they offer complementary daily and seasonal profiles.</li> </ul>
<b>NSW:</b> <i>Climate Change Policy Framework (2016),</i> <i>Transmission Infrastructure Strategy (2018),</i> <i>Electricity Strategy (2019),</i> <i>Electricity Infrastructure Roadmap (2020),</i> <i>Net Zero Plan Stage 1: 2020 – 2030 (2020) and Implementation update (2022),</i> <i>New England North West Regional Plan 2036,</i> <i>Armidale Regional Plan 2040</i>	Relevant aspects of these policy documents include: <ul style="list-style-type: none"> <li>aims to achieve net zero emissions in NSW by 2050 and reduce emissions by 70% below 2005 levels by 2035;</li> <li>notes that all coal fired power plants in NSW are scheduled for closure within the next twenty years;</li> <li>identifies Renewable Energy Zones (REZ) across NSW aimed at encouraging investment in new electricity infrastructure and unlocking additional generation capacity in order to ensure secure and reliable energy in NSW;</li> <li>Regional goals to support the State's transition to lower emissions and Council goals to promote renewable energy production; and</li> <li>New England REZ was declared in December 2021 and is the first step in formalising the REZ under the EII Act.</li> </ul>

17. In 2022, NSW derived approximately 32% of its energy from renewable sources. The rest was derived from fossil fuels, including 63% from coal and 5% from gas. NSW is one of the nation's leaders in large-scale renewables, with 38 major operational projects and 14 under construction or planned to be under construction.

18. The project's alignment with existing Commonwealth and State policies and strategies are considered in **section 5.1**.

## 2.4 NSW Solar Guideline

19. The Department released the *Large-Scale Solar Energy Guideline* in December 2018 to provide the community, industry, and regulators with guidance on the planning framework for assessing large-scale solar projects and identifying the key planning considerations relevant to solar energy development in NSW.

20. The Guideline was revised in August 2022 following extensive consultation, to ensure the assessment of large-scale solar energy projects continues to be transparent, consistent and supported by the best available information. While the revised guideline does not strictly apply to this project as it was lodged prior to their release, the project is broadly consistent with the principles in the revised guideline.

21. The Guideline recognises that large-scale solar projects could help to reduce reliance on fossil fuels, thereby contributing to reduction in air pollution and greenhouse gas emissions, while also supporting regional NSW through job creation and investment in communities that may not have similar opportunities from other industries.

## 3 Statutory Context

### 3.1 State significant development

22. The project is classified as State significant development (SSD) under Section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in Clause 20 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), as it is development for the purpose of electricity generating works with a capital investment value of more than \$30 million.
23. Under Section 4.5(a) of the EP&A Act and Clause 1(b) of Section 2.7 of the *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP), the Independent Planning Commission (the Commission) is the consent authority for the development as the project has received more than 50 unique public submissions by way of objection.

### 3.2 Amended application

24. In accordance with Clause 55 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), a development application can be amended at any time before the application is determined. OSD sought to amend its application, the details of which are summarised in **section 4.6** of this report. Under the delegation from the consent authority (i.e. the Commission for this development), of 14 June 2022, the Director, Energy Assessments can agree to amendments to an application.
25. The Department accepted the amended application for the following reasons:
  - the project amendments reduced the impacts of the project as a whole;
  - the amended application directly responds to the key issues raised in public submissions received by the Department during the exhibition of the original application;
  - OSD assessed the impacts of the amended project (see **Appendix E** and **F**); and
  - the Department made the additional information available online and sent it to the relevant agencies for comment.

### 3.3 Permissibility

26. The site is zoned as RU1 - Primary Production under the Armidale LEP, the provisions of which are discussed in **section 5.2**.
27. Electricity generating works are permissible with consent on any land in a prescribed rural, industrial or special use zone, including RU1 zones, under Clause 34 of the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP).
28. While the site is located on the periphery of the regional city Armidale, the entirety of the site (including all solar panels, transmission infrastructure and road upgrades) is located outside of land covered by the Infrastructure SEPP (Regional Cities Map – Armidale).

## 3.4 Integrated and other approvals

29. Under Section 4.41 of the EP&A Act, a number of other approvals are integrated into the SSD approval process, and therefore are not required to be separately obtained for the project. Under Section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the project (e.g. approvals for any works under the *Roads Act 1993*).
30. The main site access from the ARL access road crosses a portion of Crown Lands northwest of the project site. Council have commenced the process of opening a road on the current access, which would service both the ARL and the project. The Department has consulted with Crown Lands and Council throughout the assessment, and both are supportive of OSD's use of the ARL access road.
31. Unless and until the ARL access road is opened for public access, OSD would be required to obtain authorisations under the *Crown Land Management Act 2016*, including a Crown lands licence or easements, before use of the ARL access road commences.
32. The Department has consulted with the relevant government agencies responsible for the integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent to address these matters (see **Appendix G**).

## 3.5 Renewable energy zone

33. The *Electricity Infrastructure Investment Act 2020* (EII Act) coordinates investment in transmission, generation, storage and firming infrastructure in NSW and gives effect to the Electricity Infrastructure Roadmap. Under Section 19 of the EII Act, the Minister for Energy may declare a renewable energy zone comprising a specified geographical area of the State, and specified generation, storage or network infrastructure.
34. This project is located in the geographical area specified in the New England REZ declaration, which would comprise all planned, new and existing network infrastructure, with an intended network capacity of eight gigawatts.

## 3.6 Mandatory matters for consideration

35. Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. The Department has considered all of these matters in its assessment of the project, as well as OSD's consideration of environmental planning instruments in its EIS, as summarised in **Section 5** of this report. The Department has also considered relevant provisions of the environmental planning instruments in **Appendix I**.
36. Since lodgement of the EIS, all NSW State Environmental Planning Policies have been consolidated into 11 policies. The consolidated SEPPs commenced on 1 March 2022, with the exception of *State Environmental Planning Policy (Housing) 2021*, which commenced on 26 November 2021.
37. The SEPP consolidation does not change the legal effect of the repealed SEPPs, as the provisions of these SEPPs have simply been transferred into the new SEPPs. Further, any reference to an old SEPP is taken to mean the same as the new SEPP. For consistency, the Department has considered the development against the relevant provisions of the SEPPs that were in force when the EIS was lodged.

# 4 Engagement

## 4.1 Department's engagement

38. The Department publicly exhibited the EIS from 17 March 2021 until 14 April 2021, advertised the exhibition in the *Sydney Morning Herald*, *Daily Telegraph* and *Country Leader* and notified landowners adjacent to the project boundary and Registered Aboriginal Parties.
39. The Department consulted with Council and relevant government agencies throughout the assessment. The Department also inspected the site on 4 and 5 May 2021, held a community information session in Armidale on 4 May 2021, and visited surrounding landowners to further understand their concerns.
40. The Department notified and sought comment from Transgrid and Transport for NSW (TfNSW) in accordance with the Infrastructure SEPP, as discussed further in **section 4.2** of the report.

## 4.2 Summary of advice received from government agencies

41. During exhibition of the EIS, the Department received advice from 15 government agencies and Armidale Regional Council. A summary of the agency advice is provided in **Table 4**. A link to the full copies of the advice is provided in **Appendix C**.
42. There were no residual issues or concerns raised by any agency following their review of the submissions report, amendment report and additional information provided by OSD during the Department's assessment.

**Table 4 | Summary of agency advice**

Agency	Advice summary
<b>Biodiversity, Conservation Division (BCD)</b>	Raised concerns regarding the adequacy of the Biodiversity Development Assessment Report (BDAR), including the application of the Biodiversity Assessment Method, categorisation of land, impacts to critically endangered vegetation and impacts on adjacent land.
<b>National Parks and Wildlife Service (NPWS)</b>	Requested further information on the potential impacts to National Park and the Gondwana Rainforests of Australia including erosion, stormwater runoff, fire risk, visual amenity and cumulative impacts.
<b>Transport for NSW (TfNSW)</b>	Raised concerns about the adequacy of the traffic impact assessment, including construction traffic impacts and swept path analysis, particularly for heavy vehicles requiring escort, and the safety of the site access initially proposed on Waterfall Way.
<b>Heritage NSW</b>	Required updates to the Aboriginal Cultural Heritage Assessment (ACHAR) to include clear assessment of cultural values as per the Burra Charter and <i>Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (2011)</i> .
<b>DPE Water</b>	Requested an impact assessment on local hydrology and ecology for the proposed standpipe, and raised concerns about the sufficiency of water entitlement and availability and access to viable water supplies.
<b>DPI Agriculture</b>	Provided recommendations for operational and decommissioning measures to maintain the agricultural use and capability of the land.

Agency	Advice summary
<b>DPI Fisheries</b>	Recommended the implementation of riparian buffer zones and measures to ensure fish passage is maintained at the Gara Road causeway. Recommended that development comply relevant policy including with <i>Policy and Guidelines for Fish Habitat Conservation and Management</i> and <i>Guidelines for Controlled Activities on Waterfront Land</i> .
<b>Crown Lands</b>	Potential impacts on Crown lands, roads and waterways (including any land subject to Aboriginal Land Claims). Supported OSD's use of the ARL access road to access the site, which crosses a Crown Lands Travelling Stock Reserve.
<b>Heritage Council of NSW (HNSW)</b>	Required further assessment of impact on the State Heritage listed Gondwana Rainforests and further archaeological assessment as per HNSW guidelines. Recommended effective screen planting between the site and Gondwana Rainforests.
<b>Fire &amp; Rescue NSW</b>	Recommended preparation of a comprehensive Emergency Plan and Fire Safety Study.
<b>Rural Fire Service (RFS)</b>	Recommended bushfire and hazard management measures, including the implementation of a Fire Management Plan (FMP).
<b>Transgrid</b>	Raised concerns about the adequacy of allocated space for the substation, made recommendations for Asset Protection Zones and recommended ongoing engagement between OSD and Transgrid regarding Connection Processes Agreement

43. Mining, Exploration and Geoscience (MEG), Environment Protection Authority (EPA) and WaterNSW did not raise any concerns with the project.

### 4.3 Summary of Council's submission

44. Armidale Regional Council provided comments during exhibition of the EIS and throughout assessment of the project. Additional assessments and project refinements undertaken by OSD have resolved Council's initial concerns regarding visual, biodiversity and cumulative impacts.
45. Council has agreed to the general terms proposed by OSD for a voluntary planning agreement should the project be approved. Further, Council is supportive of the proposed use of the ARL access road as the primary access to the site.

### 4.4 Summary of public submissions

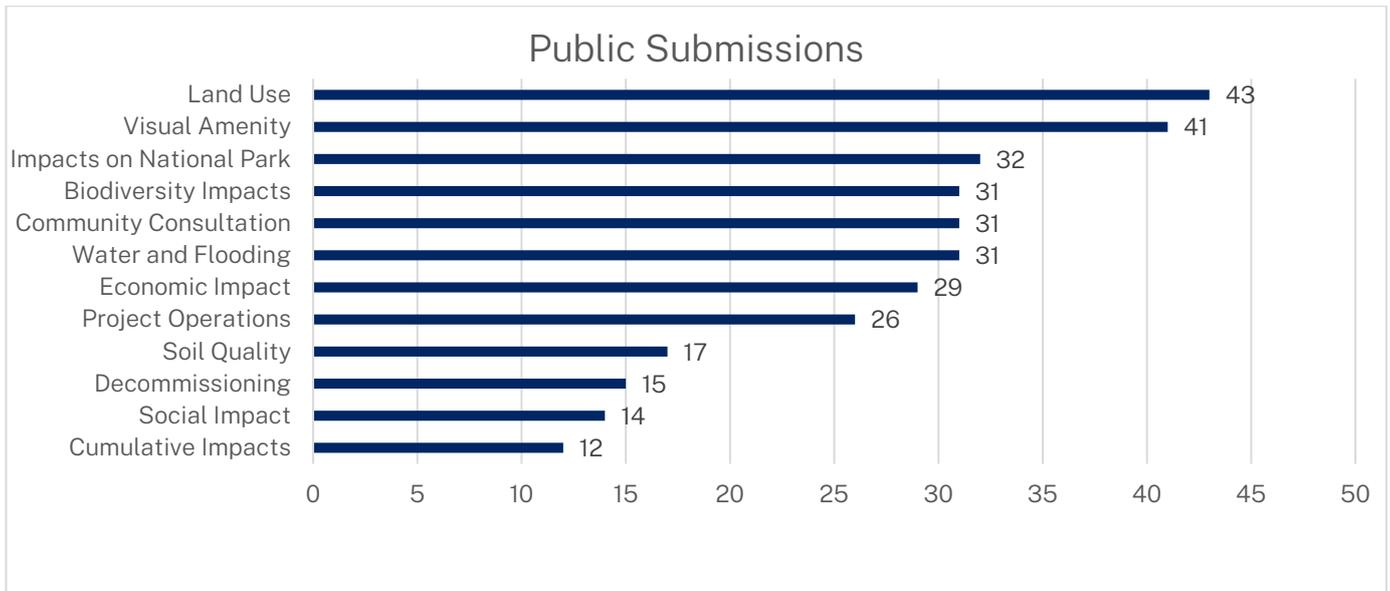
46. During the exhibition period of the EIS, the Department received 76 unique submissions from the public (including one interest group), of which 75 objected to the project and one provided a comment.
47. A summary of the proximity of public submissions is provided in **Table 5** and a link to all submissions in full is provided in **Appendix B**.

**Table 5 | Public submissions on the EIS**

Submitter distance to development footprint	Number of submissions	Position
< 2 km	12	Object
2-5 km	20	Object
	1	Comment
5-15 km	14	Object
15-50 km	5	Object
> 50 km	17	Object
Other*	6	Object

\* Interstate or overseas

48. Around 43% of submissions were received from residents located within 5 km of the site, 21% were from residents located between 5 – 15 km from the site, and 36% were from residents located over 15 km from the site, interstate or overseas. Regardless of proximity to the site, all submissions to the project typically focused on local impacts and matters related to the local community.
49. The key issues raised in public submissions are summarised in **Figure 5**. The most common matters raised in submissions include the following:
- land use compatibility: site selection, use of prime agricultural land, impacts on adjacent agricultural activities, bushfire prone land, food security and reducing the agricultural output of the region (55% of all submissions);
  - visual: impacts on the surrounding landscape, proximity to residents, effectiveness of vegetation screening and glare caused by project. (52% of all submissions);
  - impacts on the National Park: amenity and recreational use (41% of all submissions);
  - biodiversity: removal of native vegetation and habitat loss, proximity and impacts to the National Park and Gondwana Rainforest, soils and erosion impacts. (40% of all submissions);
  - community consultation: a lack of consultation regarding the project, inconsistencies in the implementation of the community consultation plan and a lack of transparency. (40% of all submissions);
  - water and flooding: water contamination and run off to Gara River and Commissioners Waters. (40% of all submissions).
  - economic impacts: lack of employment opportunities after the construction period, impact on land values, opportunity cost of agriculture-based jobs and local tourism impacts. (38% of all submissions); and
  - project operations: foreign ownership, heat island effect, maintenance of damaged panels and increased fire risk. (34% of all submissions).
50. Other issues raised in objections included soil quality, decommissioning, social impacts (including stress and mental well-being), cumulative impacts, landscape values, Aboriginal heritage, traffic and road safety, air quality, battery and noise impacts (including construction noise).
51. A further breakdown and summary of key issues raised by the public is summarised in **Appendix H. Section 5** of this report provides a summary of the Department’s consideration of these matters and recommended conditions.



**Figure 4 | Key Issues Raised in Public Submissions**

## 4.5 Response to submissions

52. Following the public exhibition period, the Department asked the applicant to respond to the issues raised in submissions and the advice received from government agencies.
53. The applicant provided a response to submissions report (**Appendix D**), and provided additional information during the Department's assessment (see **Appendix F**).
54. The Department published the submissions report on the NSW planning portal and forwarded the submissions report to relevant government agencies and Council for comment.

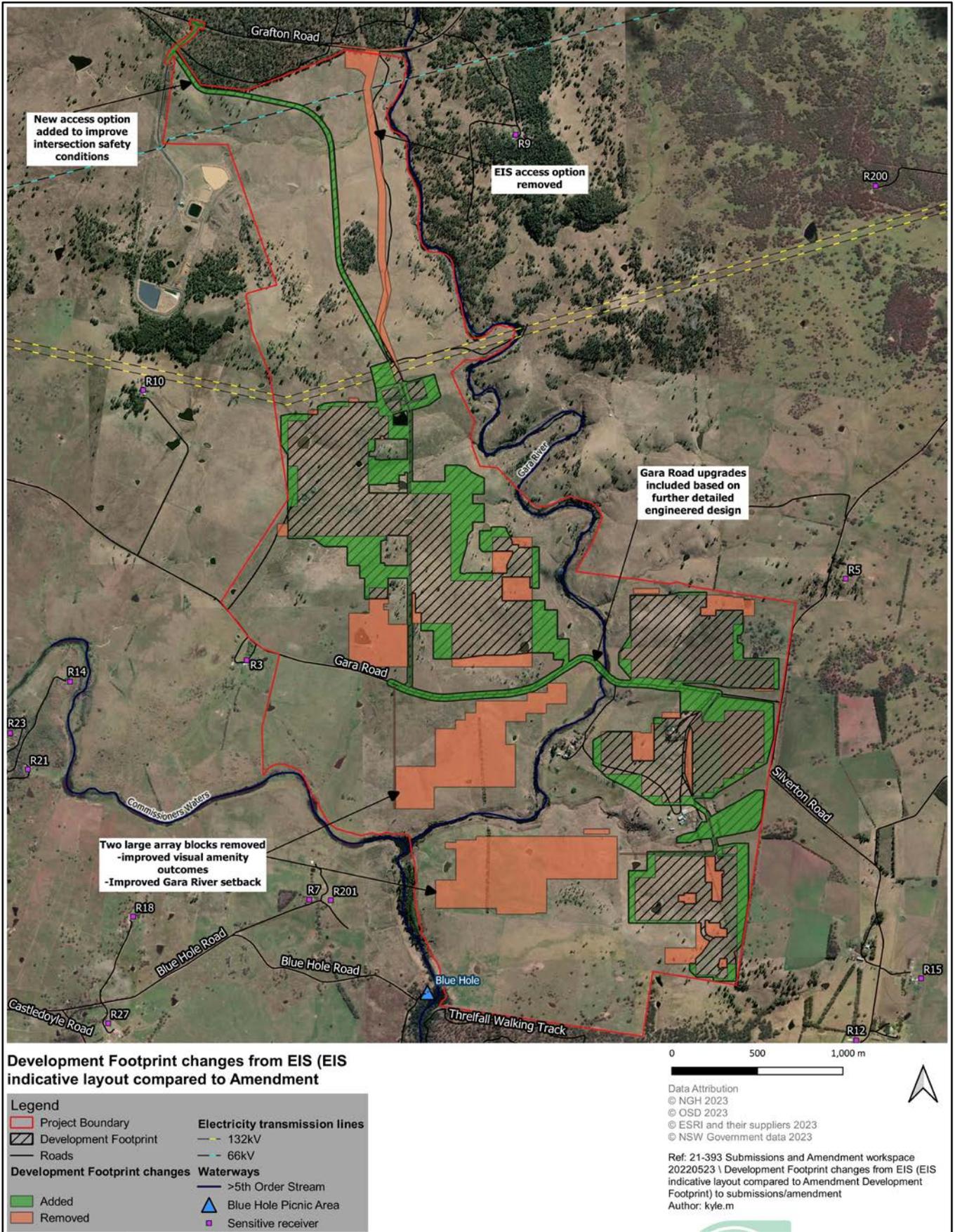
## 4.6 Amendment report

55. Following consideration of submissions on the project, OSD amended its application, as detailed in the Amendment Report (see **Appendix E**). The amendments are summarised in **Table 6** and shown in **Figure 6**.

**Table 6 |** Amendment comparison

Aspect	EIS Project	Amended Project	Difference
<b>Generation capacity</b>	255 MW	215 MW	- 40 MW
<b>Development Footprint</b>	895 ha	268 ha	- 627 ha
<b>Solar Panel area</b>	269.78 ha	195.25 ha	- 74.5 ha
<b>Number of Panels</b>	715,680	385,280	- 330,400
<b>Setback distances</b> Nearest residence:	546 m	626 m	+ 80 m
Blue Hole Picnic Area:	475 m	1,584 m	+ 810 m
<b>Biodiversity Impacts:</b> Native Vegetation:	86.8 ha	93.78 ha	+ 6.98 ha *
Box Gum Woodland:	6.67 ha	2.6 ha	- 4.07 ha
Hollow bearing trees:	20	7	- 13
<b>Site access</b>	Via existing property access on Waterfall Way	Via a new access point from the ARL access road	Relocated site access to improve road safety
<b>Upgrade of Gara River causeway</b>	Upgrades would occur in the vicinity of the causeway	The causeway road will be raised by up to 1.3m and would include culverts	Improve road safety, amenity, flood immunity and enable a fish passage.

\* Increase primarily due to reclassification of non-native vegetation to native vegetation.



**Figure 5 | Project layout amendments**

# 5 Assessment

56. The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the key issues, namely the energy transition (**section 5.1**), land use compatibility (**section 5.2**), biodiversity (**section 5.3**), traffic and transport (**section 5.4**), and visual impacts (**section 5.5**).
57. The Department has also considered the full range of other potential impacts associated with the project and has included a summary of the conclusions in **section 5.6**.

## 5.1 Energy transition

58. The project aligns with a range of national and state policies, which identify the need to diversify the energy generation mix and reduce the carbon emissions intensity of the grid while providing energy security and reliability.
59. With a generating capacity of 215 MW, the solar farm would generate enough electricity to power about 82,000 homes. This is consistent with the *NSW Climate Change Policy Framework* of achieving net zero emissions by 2050. The inclusion of a battery would enable the project to store solar energy for dispatch to the grid outside of daylight hours and/or during peak demand, increasing grid stability and energy security. Further the project would be located within the New England REZ. As such, the project would play an important role in:
- increasing renewable energy generation and capacity;
  - firming the grid by including 50 MW / 50 MWh of energy storage; and
  - contributing to the transition to a cleaner energy system as coal fired generators retire.
60. The project is in an area with direct access to the transmission network with available capacity and abundant solar resources in the New England REZ, on land where solar development is permissible on RU1 zoned land with consent under the Infrastructure SEPP.

## 5.2 Land use compatibility

### 5.2.1 Provisions of the LEP

61. The site is located on land within the RU1 Primary Production zone under the Armidale LEP. While a solar farm is permitted in the RU1 zone under the Infrastructure SEPP, the Department notes a solar farm would otherwise be a prohibited land use in this zone under a strict reading of the LEP. However, based on a broader reading of the LEP, and consideration of the objectives of the RU1 zone and other strategic documents for the region, the Department considers that there is no clear intention to prevent the development of a solar farm on the site.
62. Firstly, the LEP expressly references the Infrastructure SEPP and acknowledges that electricity generating works are regulated by the Infrastructure SEPP, rather than the LEP. As described above, a solar farm is permitted with consent on land zoned RU1 under the Infrastructure SEPP.
63. Secondly, the project is consistent with the objectives of RU1 zoning under the LEP, particularly by:
- providing diversity in primary industry enterprises and systems appropriate for the area;
  - minimising the fragmentation and alienation of resource lands;
  - minimising conflict between land uses within this zone and within adjoining zones; and

- allowing for non-agricultural land uses that will not restrict the use of other land in the locality for agricultural purposes.
64. While the Armidale LGA has traditionally relied upon agriculture, the introduction of solar energy generation would contribute to a more diverse local economy, thereby supporting the local economy and community. In addition, the proposed solar farm would encourage renewable energy development which is consistent with Council's *Delivery Program 2022-2026* and *Renewable Energy Action Plan*.
65. Further, the development is consistent with key government strategic planning guidance, including the *New England North West Regional Plan 2041*, which includes a direction to leverage new renewable energy opportunities and contribute to the State's transition to lower emissions. The plan identifies renewable energy generation as a priority growth sector for the region and emphasises the need to leverage the New England REZ to provide economic benefit to communities.
66. While the Department considers that the project is compatible with the LEP, and broader strategic planning objectives for the site, the project's impacts on other land uses are further discussed below.

## 5.2.2 Potential impacts on other land uses

67. Forty-three submissions objecting to the project raised concerns about establishing a solar farm on productive agricultural land.
68. The vast majority of the site is currently used for low-level sheep grazing, with occasional cultivation for pasture crops.
69. Siting of the project has avoided important agricultural land. A large proportion (71.3 %) of the land across the site is mapped as Class 5 under the *Land and Soil Capability Mapping for NSW* (OEH 2017), indicating agricultural uses are largely restricted to low-moderate impact uses such as grazing and occasional cultivation for fodder crops. This is consistent with the *Large-Scale Solar Energy Guideline's* focus on identifying BSAL and land classes 1, 2 and 3 as constraints that should be considered in site selection. The land classification of the site is summarised in **Table 7**.

**Table 7** | Land capability class

Class	Description	Site (ha)	Development footprint (ha)
4	Moderate to severe limitations, suitable for grazing and occasional cultivation with special management practices	138.9 ha (13.6%)	81.2 ha (30.3%)
5	Severe limitations, more suitable for grazing, occasional cultivation for fodder crops	727.8 ha (71.3%)	179.2 ha (66.8%)
6	Very severe limitations, suitable only for grazing	154.6 ha (15.1%)	7.5 ha (2.8%)

70. The inherent agricultural capability of the land would not be affected by the project due to the relatively low scale of the development, and OSD proposes to return the land back to existing levels of agricultural capability. To this end, the Department has included requirements to maintain the site's current land capability, including ground cover within the development footprint, where practicable, during the construction and operation of the project. OSD would be required to fully reinstate the agricultural capability of the land following decommissioning of the project, including the requirement to return the development footprint to existing land and soil capability.

71. Regarding potential cumulative impacts, the project's development footprint combined with the other approved and/or operational SSD solar farms in the New England North West region would be approximately 5,302 ha. The loss of 5,302 ha of agricultural land represents a tiny fraction (0.07%) of the 7.9 million ha of land currently used for agricultural output. It would result in a negligible reduction in the overall productivity of the region.
72. The Department notes that neither Council nor DPI Agriculture raised concerns that the project would compromise the long-term use of the land for agricultural purposes, subject to the removal of project infrastructure at decommissioning.
73. The potential loss of a small area of grazing land in the region must be balanced against:
  - the broader strategic goals of the Commonwealth and NSW governments for the development of renewable energy into the future;
  - the environmental benefits of solar energy, particularly with reducing greenhouse gas emissions;
  - the economic benefits of solar energy in an area with good solar resources and capacity in the existing electricity network; and
  - the benefits of dispatchable energy for grid stability and reliability.
74. Land adjoining the southern site boundaries is part of the National Park. Amendments to the project have removed all project infrastructure within 460 m of the boundary.
75. Based on these considerations, the Department considers that the proposed solar farm represents an effective and compatible use of the land within the region and that the site is suitable to accommodate the development.
76. The Department considers that the development would not fragment or alienate any resource lands in the LGA, and the land could readily be returned to agricultural land following decommissioning.
77. The Department considers that the project represents an effective and compatible use of the land within the region and that the site is suitable to accommodate the development.

## 5.3 Biodiversity

78. The project has the potential to impact biodiversity through the clearing of native vegetation.
79. The site is predominantly comprised of paddocks that have been historically cleared for agricultural purposes, however fragmented areas of woodland, including planted wind breaks, occur throughout the site. Approximately 175 ha of the 268 ha development footprint (i.e. 65 %) is "Category 1 – exempt land" (see **Figure 7**) in accordance with the *Local Land Services Act 2013*. Clearing on Category 1 land does not require full biodiversity assessment.
80. Public submissions expressed concerns about the biodiversity impacts on the vegetation communities and threatened species present on site and impacts to the conservation values of the National Park. These issues are discussed further below.
81. A BDAR was prepared for the project in accordance with the BC Act and Biodiversity Assessment Method, with a revised BDAR prepared in response to issues raised by BCS, including the land category assessment presented in the EIS. The revised BDAR was reviewed and accepted by BCS.
82. The Department notes that the Amendment Report presented a 6.45 ha increase to native vegetation impact, however this includes an area of vegetation considered non-native in the EIS that was re-classified and assessed as native vegetation.
83. Impacts of the amended project would be largely to lower condition native vegetation.

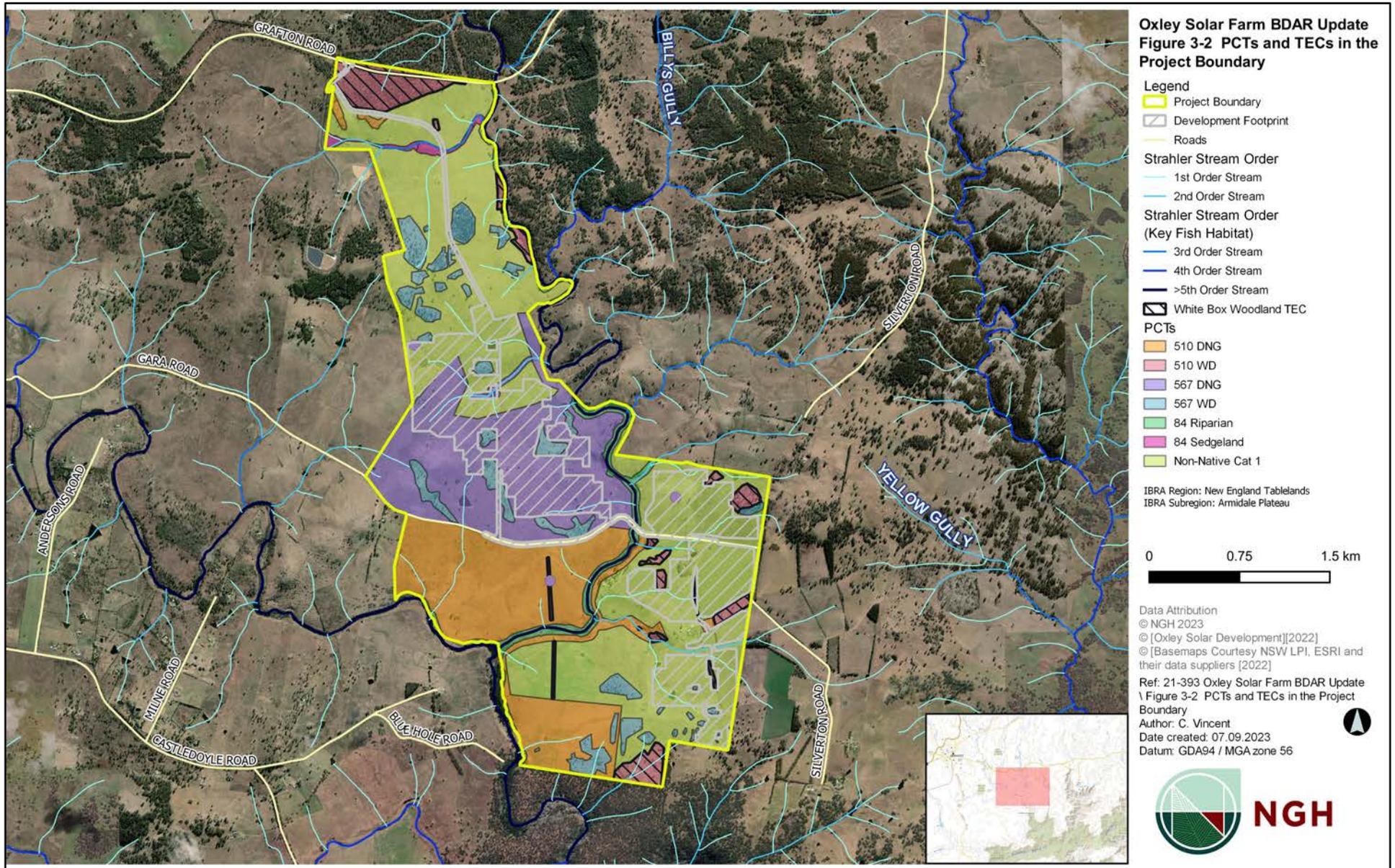


Figure 6 | Vegetation zones within the site

### 5.3.1 Avoidance and mitigation

84. OSD has generally focused on avoidance of impacts through site selection and avoidance of higher quality native vegetation and habitat during the preliminary design process for the project, which is consistent with the *Large-Scale Solar Energy Guideline's* focus on avoiding or minimising impacts during site selection and design. Of the 544.21 ha of native vegetation within the site, 451.43 ha (83%) will remain intact.
85. In response to concerns raised by BCS and in public submissions, refinements were made to the project layout to reduce impacts on native vegetation, including avoidance of an additional 4.07 ha of White-Box-Yellow Box-Blakely's Red Gum Woodland (Box Gum Woodland) threatened ecological community (TEC).
86. Overall, OSD has designed the project to avoid and minimise impacts on high quality vegetation and habitat, including:
- avoiding 451.43 ha of the 544.21 ha of native vegetation on site;
  - avoiding 13 of the 20 hollow-bearing trees on site;
  - setting back infrastructure from the riparian corridors;
  - removal of solar arrays from land immediately adjoining the National Park to limit indirect impacts and edge-effects; and
  - no solar panels would be installed in areas with Box Gum Woodland with a vegetation integrity score of 30 or higher.
87. OSD also amended the development footprint to avoid impacts on better condition native vegetation within the riparian corridor with increased setbacks from Gara River.

### 5.3.2 Native Vegetation

88. Of the 268 ha development footprint, the project would clear 92.78 ha of native vegetation, comprising 90.71 ha of low condition derived native grassland (DNG) and 1.68 ha of woodland condition, as well as a small amount of sedgeland (0.11 ha), riparian vegetation (0.29 ha) and seven hollow bearing trees. The remainder of the development footprint (174.9 ha) is Category 1 land.
89. Of the 1.68 ha of woodland vegetation, 1.13 ha is listed under the BC Act and 0.55 ha is listed under both the BC Act and the EPBC Act.
90. **Table 8** provides a summary of the impacts of the project, and the relevant ecosystem credit liability under the NSW Biodiversity Offset Scheme.

**Table 8 | Ecosystem credit requirements**

Plant Community Types (PCT)	Type	Impact area (ha)	Ecosystem credits required
PCT 84: River Oak – Rough-barked Apple – red gum – box riparian tall woodland (wetland) of the Brigalow Belt South Bioregion and Nandewar Bioregion	Riparian	0.29	5
	Sedgeland	0.11	3
PCT 510: Blakely's Red Gum – Yellow Box grassy open forest or woodland of the New England Tableland Bioregion (CEEC)	DNG	2.12	35
	Woodland	0.55	24
PCT 567: Broad-leaved Stringybark – Yellow Box shrub/grass open forest of the New England Tableland Bioregion (CEEC)	DNG	88.58	1,363
	Woodland	1.13	27
	<b>Total</b>	<b>92.78</b>	<b>1,457</b>

### 5.3.3 Serious and irreversible impacts

91. The project would impact one TEC that is a serious and irreversible impact (SAIL) candidate entity (Box Gum Woodland, as outlined above), and has the potential to impact two threatened species that are SAIL candidate entities (the Tusked Frog and Glandular Frog), which were assumed present on the site as the targeted survey effort was unable to confidently rule them out.
92. Both the Tusked Frog and Glandular Frog were assumed to be present on site based on the presence of potentially suitable habitat, of which 6.3% and 2.24% of total potential habitat on site respectively would be impacted. Up to 1.68 ha of Box Gum Woodland would be impacted, which represents 1.4% of the extent of this community within the project site. BCS raised no concerns about impacts to the Tusked Frog and Glandular Frog.
93. BCS initially raised concern about the level of OSD's assessment of Box Gum Woodland. In response, OSD amended the project to further avoid Box Gum Woodland (woodland vegetation), reducing impacts from 5.75 ha to 1.68 ha, and provided additional information to supplement its assessment. BCS raised no further concerns about SAIL candidate entities and confirmed the offset requirements in the draft conditions for the three SAIL candidate entities are correct.
94. Given this, the Department considers that there is unlikely to be a serious and irreversible impact on these SAIL entities and has included strict clearing limits on the clearing of Box Gum Woodland in the recommended conditions of consent.

### 5.3.4 Threatened Flora and Fauna Impacts

95. The project has the potential to affect flora and fauna species listed in the BC Act and EPBC Act through direct habitat loss from vegetation clearing, and from indirect impacts.

#### *Ecosystem Credit Species*

96. Direct impacts resulting from the development footprint include loss of habitat for 35 threatened species identified or predicted to occur as ecosystem credit species. An additional species (Peppered Tree Frog *Litoria piperata*) was added based on potential suitable habitat. Three of these species (Glossy Black - Cockatoo *Calyptorhynchus lathami*, Little Eagle *Hieraaetus morphnoides* and Square-tailed Kite *Lophoictinia isura*) were detected within the development site during field surveys. Potential impacts on these species would be offset via the ecosystem credit offsets detailed in **Table 8**.

#### *Species Credit Species*

97. Eleven candidate threatened flora species and 17 candidate threatened fauna species were identified as having potential to occur within the project area and were the subject of targeted surveys. Of these, five species were assumed to be present as survey effort could not confidently rule them out. **Table 9** details the conservation significance and the species credit liability for these five species.

**Table 9 | Species credit requirements**

Species Impacts	Type	Conservation Significance		Species credits required
		BC Act	EPBC Act	
Tusked Frog <i>Adelotus brevis</i> (Endangered population in the Nandewar and New England Tableland Bioregions)	Fauna	Endangered	-	657
Glandular Frog <i>Litoria subglandulosa</i>	Fauna	Vulnerable	-	134
Southern Myotis <i>Myotis Macropus</i>	Fauna	Vulnerable	-	299
Hawkweed <i>Picris evae</i>	Flora	Vulnerable	Vulnerable	19
Austral toadflax <i>Thesium australe</i>	Flora	Vulnerable	Vulnerable	869
			<b>Total</b>	<b>1,978</b>

### 5.3.5 Recommended conditions

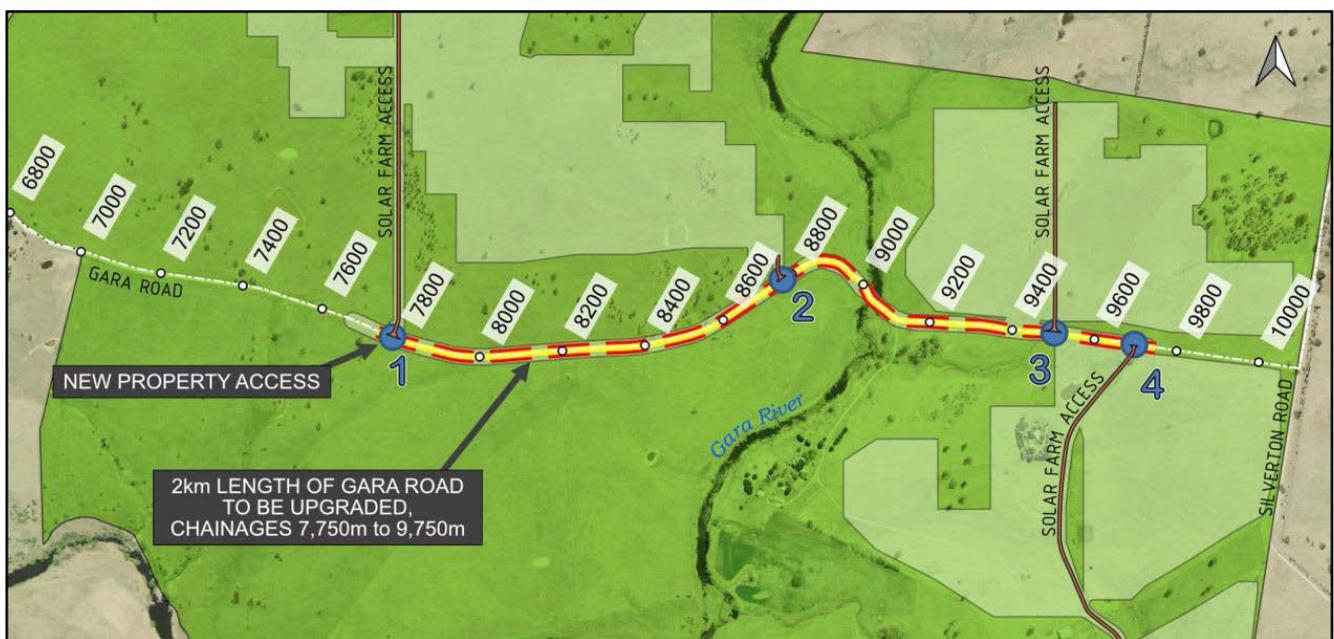
98. The Department has recommended OSD retire the ecosystem and species credits outlined in **Table 8** and **Table 9** accordance with the NSW Biodiversity Offsets Scheme prior to the commencement of construction of the project.
99. Further, the Department has recommended conditions requiring OSD to:
- avoid the disturbance of native vegetation or fauna habitat located outside the development footprint;
  - limit clearing of the Box Gum Woodland TEC (woodland condition) to no more than 1.68 ha and Box Gum Woodland TEC (DNG) to no more than 90.7 ha;
  - retire the applicable biodiversity offset credits in accordance with the NSW Biodiversity Offsets Scheme prior to commencing construction;
  - prepare and implement a Biodiversity Management Plan in consultation with BCS, including measures to minimise clearing and avoid unnecessary disturbance of vegetation located within the development footprint;
  - prepare and implement an incidental threatened species finds protocol to avoid and/or minimise and/or offset options to be implemented if additional threatened species are discovered on the site; and
  - enhance habitats, including corridors, known or likely to be used by threatened fauna species that are characteristic of Box Gum Woodland TEC.
100. With these measures, the Department and BCS consider that the project is unlikely to significantly impact the biodiversity values of the locality.

## 5.4 Traffic and transport

101. Five submissions raised concerns about the potential traffic and road safety impacts on local roads during the construction period.
102. TfNSW raised concerns about the site access point initially proposed directly off Waterfall Way as the minimum safe intersection sight distance (SISD) was unable to be met with a posted speed limit of 100 km/h.
103. Construction of the project involves the delivery of plant, equipment and materials, including the movement of heavy vehicles requiring escort, which has the potential to impact on the local and regional road network primarily during construction.
104. In response to submissions and advice received from Council and TfNSW, OSD supplemented its Traffic Impact Assessment with an additional assessment of the haulage route, a revised site access point from Waterfall Way via the ARL access road, the upgrade of the Gara River causeway on Gara Road and a commitment to transport the majority of construction workers to site on 25-seat shuttle buses to limit light vehicle movements during construction.

### 5.4.1 Traffic routes and site access

105. Most of the components for the project would be transported from the Port of Newcastle or Sydney. The haulage route, an approved heavy vehicle route for vehicles up to 26 m in length, is via the New England Highway, Uralla Road, Kentucky Street, Dangar Street, Barney Street, Waterfall Way (Grafton Road) and the ARL access road.
106. All vehicles associated with the project would access the site via a new primary site access point on the ARL access road off Waterfall Way, located at the northwest corner of the site (see **Figure 2**). All heavy vehicles would be limited to entering and exiting the ARL access road from Waterway Way from the west only.
107. Gara Road and Silverton Road would not be used to access the project from Waterfall Way at any stage of the project, except for the use of Gara Road to undertake the upgrading of a 2 km stretch of Gara Road where it intersects the project (i.e. from chainage 7,750 m until 9,750 m), and to construct secondary site access points 1 to 4 on Gara Road as shown on **Figure 8**.



**Figure 7 | Gara Road - Proposed road upgrades and site access points**

## 5.4.2 Traffic volumes

108. The main increase in project related traffic would occur during the 12 to 18 month construction period, with a peak period of up to nine months. The estimated peak daily vehicle movements would be up to 46 heavy vehicle, 20 shuttle bus and 30 light vehicle movements.
109. Additionally, it is anticipated that there would be a total of 5 movements of heavy vehicles requiring escort during the construction and maintenance phases of the project. As construction activities would be restricted to daytime hours, construction related vehicles would be using the local road network (between access points 1 to 4) during the day only. Heavy vehicles up to 26 m in length would be used for transporting materials and components to the site.
110. The Department notes that OSD has proposed to use a combination of 25-seater shuttle buses and individual vehicles from Armidale and surrounding areas to minimise the number of construction-related light vehicle movements. The Department has included a requirement within the Traffic Management Plan for OSD to develop measures to ensure employee use of this service, which is supported by TfNSW and Council.
111. Traffic generation during operations would be significantly less than the construction phase (i.e. up to five light vehicles and up to two heavy vehicles per day would be required during operations for repairs and maintenance activities only).

## 5.4.3 Road upgrades and maintenance

112. TfNSW and Council support the proposed transport route, subject to the recommended conditions requiring road upgrades to be undertaken to support the increased traffic associated with the project. DPI Fisheries initially raised concerns that the proposed upgrade of the Gara River causeway on Gara Road was not in accordance with best management practice to ensure fish passage and minimal impact on the aquatic environment. In response to these concerns, OSD revised the causeway design to address DPI Fisheries requirements and has committed to consulting with DPI Fisheries on the final design of the Gara Road causeway.
113. The Department has included a requirement for OSD to develop and implement these measures through the Traffic Management Plan (TMP), including the following requirements:
- widening of the ARL access road between chainage 100 m – 300 m (construct and seal to a minimum 6 m width with 0.5 m shoulder each side);
  - construct the primary site access off the ARL access road to accommodate 2-way vehicle movements;
  - upgrade Gara Road between chainages 7,750 – 9,750 m (widen and seal to a minimum width of 6m and 0.5m shoulder each side);
  - construct four secondary site access points on Gara Road at chainages 7,780 m, 8,770 m, 9,420 m and 9,700 m (standard rural property access); and
  - construct Gara Road causeway at chainage 9.05 m, including raising the road by up to 1.3 m with culverts designed in consultation with DPI Fisheries.
114. OSD consulted with TfNSW and Council about the proposed road upgrades, and have committed to preparing road dilapidation surveys and repairing any damage resulting from the construction traffic.
115. TfNSW and Council have confirmed they are satisfied with the proposed road design and upgrades, subject to the recommended conditions of consent.

#### 5.4.4 Cumulative impacts

116. Although there are a number of approved or proposed energy projects in the region, the majority of projects only share common haulage routes on the State road network (namely the New England Highway), except for the following:
- **Metz Solar Farm** (operational) is also accessed directly from Waterfall Way approximately 7km east of the site, however it generates minimal traffic. Waterfall Way is part of the regional road network and would have sufficient capacity for the cumulative vehicle numbers.
  - **Olive Grove Solar Farm** (JRPP approved) would also access the project site from Waterfall Way. The estimated peak daily vehicles movements would be six heavy vehicles, 13 light vehicles and four buses a day during the nine-months of construction, and two light vehicles a day during operation.
  - **Stringybark Solar Farm** (JRPP approved) would access site via Waterfall Way and Gara Road. The estimated peak daily vehicles movements five heavy vehicles, 11 light vehicles and three buses a day during the nine months of construction, and two light vehicle a day during operation.
  - **Over Mountain Pumped Hydro** (proposed): a development application is yet to be submitted for this project. If an EIS is lodged, and the project is approved, there is a chance that the construction period for the two projects to overlap. The main construction access for the project is from the east thus avoiding Waterfall Way, however some heavy vehicles constructing the project's transmission line would utilise Waterfall Way.
117. The State road network has sufficient capacity to accommodate construction traffic of projects that are approved and not yet constructed, as well as those currently under assessment and proposed. The distance between the project and those outlined in **section 2.2** would not result in significant cumulative impacts on the local road network, including the nearby JRPP approved projects which are at a small scale with limited vehicle movements.
118. For these reasons, the Department considers that there would be no material cumulative traffic impacts on the State or local road network as a result of the project. Notwithstanding, the Department has included a requirement in the Traffic Management Plan to minimise potential cumulative traffic impacts.

#### 5.4.5 Recommended conditions

119. The Department has recommended conditions of consent requiring OSD to:
- undertake the relevant road upgrades prior to the commencement of construction;
  - restrict the number of vehicles during construction, upgrading and decommissioning to the peak volumes identified in the EIS;
  - ensure the length of vehicles (excluding heavy vehicles requiring escort) does not exceed 26 m; and
  - prepare and implement a TMP in consultation with TfNSW and Council, including provisions for dilapidation surveys, details of the employee shuttle bus service, and details of the measures that would be implemented to address road safety.
120. Subject to the recommended conditions, the Department, TfNSW and Council are satisfied that the project would not result in significant impacts on road network capacity, efficiency or safety.

## 5.5 Visual

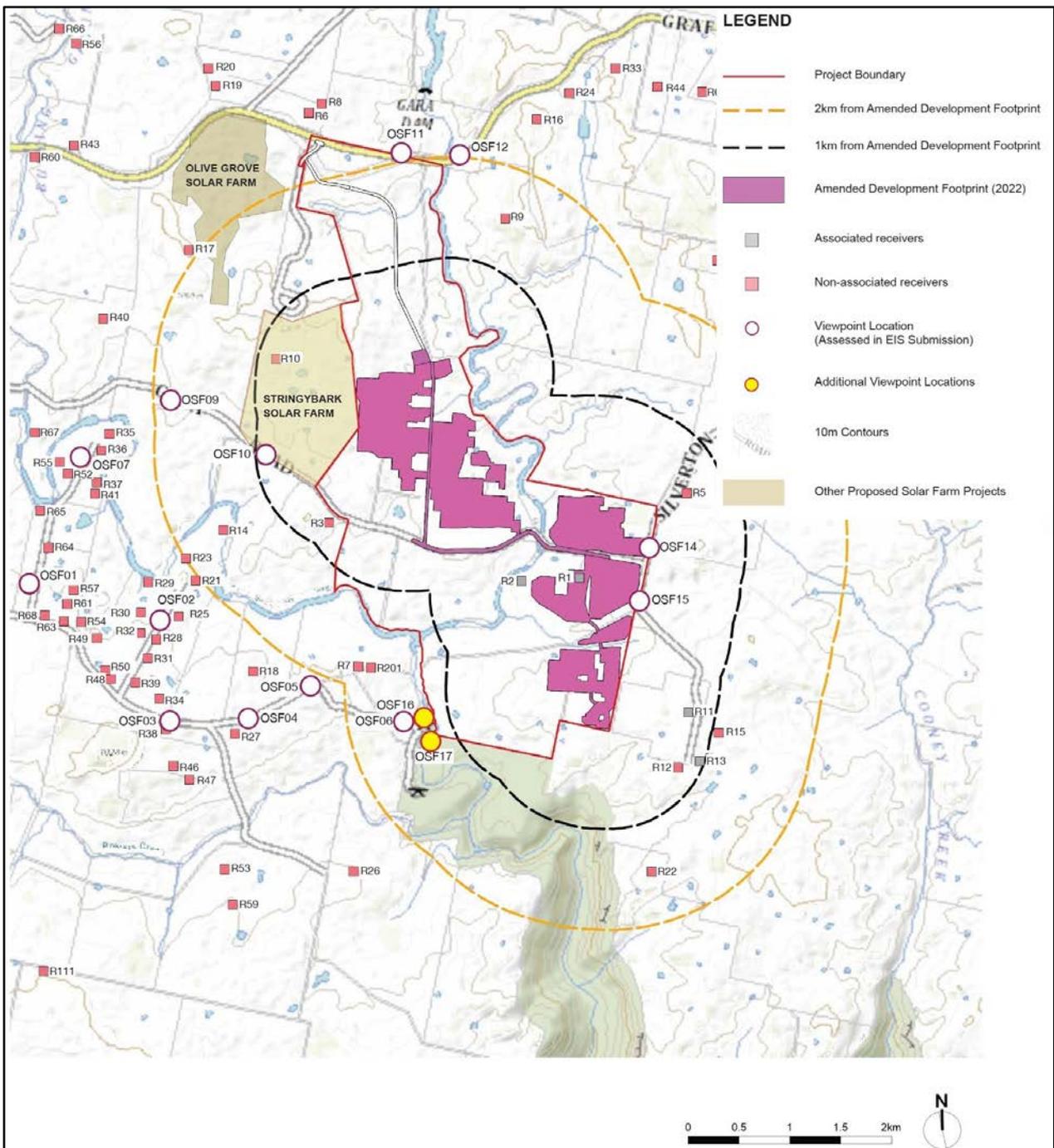
121. Concerns about visual impacts were raised in the majority of public submissions, including a number of residences in proximity to the site. These concerns included potential impacts on the visual landscape and scenic quality of the region, including the Blue Hole picnic area within the National Park, and the rural outlook of the area.
122. OSD provided a Landscape and Visual Impact Assessment with the EIS, an addendum assessing the amended application and further assessment of potential cumulative impacts with the nearby solar farms (collectively the visual reports).
123. The Department visited the site, Blue Hole Picnic Area and Threlfall Walking Track within the National Park, and nearby non-associated residences to assess visual impacts and to further understand residents' concerns.
124. The Department's *Large-Scale Solar Energy Guideline* (2018) applies to the assessment as it was in force at the time of the development application.
125. However, to ensure its assessment is in line with contemporary landscape and visual requirements, the Department also considered the content of the revised *Large-Scale Solar Energy Guideline* (2022) and accompanying *Technical Supplement - Landscape and Visual Impact Assessment*, which provides a detailed description of the landscape character and visual impact assessment process for large-scale solar energy development in NSW.

### 5.5.1 Visual context

126. The site and surrounds are located within a largely cleared agricultural landscape that is heavily disturbed by grazing and occasional cropping. Land within the site is undulating and slopes downwards into the Gara River, Lambing Gully and other unnamed tributaries throughout the site.
127. Two parallel high voltage 132 kV transmission lines traverse the northern section of the site, running west to east. The Gara River is the most prominent watercourse within the site, running along the north-eastern boundary before travelling south and then west through the site.
128. There are 11 non-associated residences within 2 km of the development footprint (see **Figure 9**), with the closest residence (R5) located 615 m away. Waterfall Way is located north of the site, approximately 2.1 km from the development footprint, and is part of the regional road network. Gara Road transects the centre of the site and is primarily used by local traffic.
129. The Threlfall Walking Track and Blue Hole Picnic Area within the National Park are located 1,165 m and 1,285 m south of the development footprint respectively (see **Figure 2**).

### 5.5.2 Visual mitigation

130. Following the exhibition of the development application, and to address concerns raised by the Department, agencies and neighbouring landholders, OSD made a number of changes to the project.
131. Refinements to the development footprint have reduced the scale of the project by removing large sections of infrastructure in the southwest of the site, and smaller areas across the site. This has increased setbacks from all residences to the west of the site, residence R5 to the east and the National Park to the south, including Threlfall Walking Track and Blue Hole Picnic Area (shown in **Figure 6**). These amendments have significantly reduced the potential visual impacts from all residences likely to have views of the project.



**Figure 8 | Location of residences within 2 km of the development footprint**

132. OSD has proposed the following avoidance and mitigation measures to reduce the potential visual impacts on surrounding receivers:
- an overall reduction in the development footprint by 627 ha (from 895 ha to 268 ha);
  - setting back project infrastructure from the Threlfall Walking Track and Blue Hole Picnic Area;
  - removing all solar panels from the southwest of the site near residences R3, R7, R14, and R201;
  - retention of established vegetation within the south and west of the site;
  - planting vegetation screening along sensitive parts of the site and development footprint to screen views of the project from nearby residences, National Park visitors and road users;
  - using non-reflecting materials and paints to reduce glint and glare; and
  - minimising unnecessary night-time lighting of the development and using lower intensity lighting to reduce disturbance to neighbouring properties.

### 5.5.3 Assessment

#### *Landscape*

133. Public submissions highlight that the landscape is valued by the community for its scenic value and agricultural history. However, the Department notes that the low lying nature of the development, and existing and proposed vegetation screening, would minimise views of the project from the surrounding area.
134. Impacts on the local landscape have been reduced through project design, including removal of large sections of the solar panels in the southwest of the site, increased setbacks of project infrastructure from local residences and public roads, and the retention of remnant native vegetation and established wind break plantings across the site.
135. The project would not be visible from vehicles travelling along Waterfall Way, which is located 2.1 km north of the development footprint. There would be filtered views of the project for vehicles travelling along Gara Road and Silverton Road, with topography, existing vegetation and supplementary plantings along the fringes of the development footprint.
136. The Department recognises that the introduction of the proposed solar farm to a rural area would result in a change to the local landscape, but considers it would have a limited impact on the local landscape and region as a whole, and would not be visible from Armidale (14 km west).

#### *Oxley Wild Rivers National Park*

137. The visual reports included assessments from the National Park's Blue Hole Picnic Area and at four locations on the Threlfall Walking Track.
138. Amendments to the project provide a 1,285 m and 1,165 m setback from the solar farm infrastructure and Blue Hole Picnic Area and the Threlfall Walking Track respectively. With these amendments, and the proposed vegetation screening, the project would not be visible and therefore no visual impact would occur.

#### *Residences (Direct and Cumulative Impacts)*

139. The nature of the proposed development would serve to minimise its visibility from surrounding residences as the solar panels would be relatively low lying (up to 4 m high) and the BESS, maintenance buildings, power conversion units and substation would be a similar size to agricultural sheds commonly used in the area.
140. Of the 11 non-associated residences within 2 km of the development footprint, the visual reports concluded that five would have no views of the project and six would experience low or very low visual impacts. OSD has committed to consulting with these landowners to implement vegetation planting to assist in reducing residual impacts from these residences.
141. The Department considers that both the direct and cumulative visual impacts on all potentially affected residences would be low, negligible or nil, due to the separation distance, the undulating topography of land surrounding the site and intervening existing and proposed vegetation, which is consistent with the objectives of the *Large-Scale Solar Guideline* (2018) and broadly consistent with the requirements of the *Large-Scale Solar Energy Guideline* (2022) and accompanying *Technical Supplement - Landscape and Visual Impact Assessment*.
142. The Department's assessment of non-associated residences within 2 km of the development footprint, and the potential for cumulative impacts with Stringybark Solar Farm (SSF) and Olive Grove Solar Farm (OGSF), is summarised in **Table 10**. There would be nil or low cumulative impacts associated with SSF and OGSF due to distance, topography and intervening vegetation.
143. The visual impacts to residences beyond 2 km of the development footprint would be nil to low due to intervening topography and vegetation, and the proposed mitigation measures.

**Table 10 | Summary of visual impacts to residences within 2 km of development footprint**

Residence ID and distance from development footprint	OSD's visual impact rating	Department's assessment
<b>R3</b> (778 m west)	Low	<ul style="list-style-type: none"> <li>Intervening topography northeast of the residence and existing vegetation (including wind break planting and riparian vegetation to the east) would limit views of the project, resulting in low visual impacts. Proposed vegetation plantings would further reduce the project's visibility.</li> <li>SSF (379 m to the north): Existing vegetation north of the residence and topography would limit views of the project.</li> </ul>
<b>R5</b> (615 m east)	Low	<ul style="list-style-type: none"> <li>Intervening vegetation surrounding the residence and on site, and intervening topography, would largely screen views of the project, resulting in low visual impacts. Proposed vegetation plantings would further reduce views of the project.</li> <li>SSF and OGSF: At a distance of 3.37 km and 4.89 km respectively, distant views of the project would be negligible.</li> </ul>
<b>R7</b> (1.58 km southwest)	Low	<ul style="list-style-type: none"> <li>Intervening vegetation northeast of the residence and on site, and intervening topography, would fragment distant views of the project resulting in low visual impacts. Proposed supplementary vegetation would further reduce views.</li> <li>SSF (1,830 m to the north): Project would not be visible due to intervening topography alone.</li> </ul>
<b>R9</b> (1.39 km northeast)	Very Low	<ul style="list-style-type: none"> <li>Dense vegetation surrounding the residence would obscure views of the project, resulting in negligible visual impacts.</li> <li>SSF (2.16 km to the southwest) and OGSF (2.18 km west): intervening vegetation and topography would obscure views of both projects.</li> </ul>
<b>R10</b> (832 m west)	Low	<ul style="list-style-type: none"> <li>Intervening topography would shield views to the east towards the project, resulting in low visual impacts. Proposed supplementary vegetation planting on site would further reduce views.</li> <li>SSF: Residence is associated with SSF.</li> </ul>
<b>R12</b> (778 m southeast) <b>R15</b> (1.08 km southeast) <b>R14</b> (1.5 km west) <b>R22</b> (1.51 km southeast) <b>R23</b> (2 km west)	Nil	<ul style="list-style-type: none"> <li>The Department agrees with OSD's assessment that the project would not be visible from these residences due to a combination of mitigating factors, including intervening topography, existing mature and remnant vegetation (including wind break plantings and riparian vegetation), resulting in low or no visual impacts. Proposed vegetation plantings would further reduce views.</li> <li>SSF: None of these residences, with the exception of R14 and R23 would have any views of SSF or OGSF. R14 (850 m south of SSF) and R23 (1.26 km south of SSF) would have limited views of SSF, interrupted by vegetation surrounding the residences and intervening topography.</li> </ul>
<b>R201</b> (1.55 km southwest)	Low	<ul style="list-style-type: none"> <li>Existing vegetation on site, including riparian vegetation and established wind break plantings, intervening topography to the east, and the proposed vegetation plantings. At a distance of 1.55 km, the residence would have distant fragmented views of the project, resulting in low visual impacts.</li> <li>SSF (1,878 m to the north): Intervening topography and existing vegetation northwest of the residence would obscure views.</li> <li>Note: R201 was initially incorrectly assessed by OSD from a shed on the landowner's property, which is referred to as R4 in the EIS. This was corrected in additional information provided by OSD.</li> </ul>

## Glint and Glare

144. While photovoltaic panels are designed to absorb rather than reflect sunlight, the Department recognises that some project components have the potential to generate glare or reflection, including the galvanised steel used for the solar panel mounting framework, but that this diminishes over time.
145. OSD's glint and glare analysis, which is based on a worst case scenario, identified the potential for temporary glare to be experienced by nine residential receivers (R3, R5, R7, R10, R11, R14, R15, R40, R200 and R201) and eight route receptors. The proposed vegetation planting would assist in preventing glare for five of the residences identified (R3, R7, R10, R14 and R201), and the existing well-established intervening vegetation would shield or minimise views of the development from the four remaining residences and the public road network.
146. The Department has recommended conditions requiring the applicant to minimise the off-site visual impacts of the development, including the potential for any glare or reflection, and to ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape. Subject to the recommended conditions, the Department is satisfied that the project would not cause significant glint or glare to nearby receivers.

### 5.5.4 Recommended Conditions

147. To address the residual visual impacts, the Department has recommended a range of stringent conditions requiring OSD to:
- establish and maintain the proposed vegetation buffer along sensitive parts of the site as identified in **Figure 2**, which must be:
    - planted prior to commencing operations;
    - comprised of species that are native to the area, including species representative of PCT510 and/or PCT 567;
    - maintained along the common boundary of the National Park, including setbacks for bushfire management purposes and access between the vegetation buffer and the existing National Park fence line, in consultation with NPWS;
    - designed and maintained in accordance with RFS's *Planning for Bushfire Protection 2019* (or equivalent); and
    - properly maintained with appropriate weed management;
  - minimise off-site visual impacts of the development, including potential for glare or reflection;
  - ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape;
  - not mount any advertising signs or logos on site, except where this is required for identification or safety purposes; and
  - minimise the off-site lighting impacts of the development, and ensure that any external lighting is installed as low intensity lighting (except where required for safety or emergency purposes), does not shine above the horizontal and complies with *Australian/New Zealand Standard AS/NZS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting*.
148. The site selection and project design is consistent with the Department's Large-Scale Solar Energy Guideline, particularly in avoiding sites with high visibility such as those on prominent or high ground positions, or sites which are located in a valley with elevated nearby residences with views toward the site. In particular, the development footprint has been located away from non-associated residences and Blue Hole Picnic Area and the Threlfall Walking Track within the National Park.

149. The Department considers that OSD has adequately reduced the potential visual impacts of the project to an acceptable level, while largely maintaining the proposed solar power generating capacity. OSD has advised that the removal of solar array areas and setting back infrastructure would only reduce the generation capacity of the project by 40 MW.

## 5.6 Other issues

150. The Department's consideration of other issues is summarised in **Table 11**.

**Table 11 | Assessment of other issues**

Issue	Recommended conditions
<b>Heritage</b>	
<p><b>Aboriginal Cultural Heritage</b></p> <ul style="list-style-type: none"> <li>• Four public submissions raised concerns about the project’s impacts on Aboriginal cultural heritage.</li> <li>• OSD has undertaken survey of the project site in consultation with Registered Aboriginal Parties (RAPs), including subsurface test excavations at all potential archaeological deposits (PADs) proposed to be impacted.</li> <li>• Surveys identified a total of 70 Aboriginal heritage sites, including 33 isolated finds, 21 artefact scatters (and associated PADs), seven cultural trees, six contemporary scarred trees, two scarred trees and one unfired clay and grass bowl within the site. The project would avoid 48 items, with exclusion zones to be established to protect these items, including cultural and modified trees, areas of PAD and other Aboriginal sites.</li> <li>• It was identified that six sites would be subject to direct impacts and eight sites would be subject to indirect impacts by the project. Four of these sites were collected during the testing program and would be reburied with salvaged surface artefacts once the salvage of remaining sites has occur prior to commencing construction. All but three sites have a low scientific significance. The three sites with moderate scientific significance that would be subject to impacts would be avoided through detailed design and included as exclusion zones within the development footprint.</li> <li>• The two sites of high scientific significance (both scarred trees) would not be impacted by the project.</li> <li>• If Aboriginal artefacts or skeletal material are identified during construction of the project, all work would cease and an unexpected finds procedure would be implemented, as committed to by OSD in the EIS.</li> <li>• With these measures, the Department and Heritage NSW considers that the project would not significantly impact the Aboriginal heritage values of the locality.</li> </ul> <p><b>Historic Heritage</b></p> <ul style="list-style-type: none"> <li>• OSD assessed the potential impacts to two heritage listed items located directly south of the site: <ul style="list-style-type: none"> <li>– Gondwana Rainforests of Australia (UNESCO World Heritage listed, National Heritage listed and State Heritage Register); and</li> <li>– Gara River Hydro-Electric Scheme.</li> </ul> </li> <li>• The assessment concluded that there would be no impact on any listed heritage item.</li> <li>• In addition, OSD undertook assessment of impacts on three unlisted heritage items of potential local heritage significance (a surveyors tree, cottage site and the Gara Homestead), all located outside the development footprint. The assessment concluded that there would be no impacts on the surveyors tree or cottage site, and only a minor impact on the Gara Homestead, having views of the project.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure the development does not cause any direct or indirect impacts on any items located within exclusion zones or outside the approved development footprint.</li> <li>• Salvage and relocate Aboriginal items in consultation with RAPs.</li> <li>• Prepare and implement an Aboriginal Cultural Heritage Management Plan in consultation with RAPs.</li> <li>• Cease any works and notify the NSW Police and Heritage NSW if human remains are identified over the life of the project.</li> </ul>

<ul style="list-style-type: none"> <li>• Heritage NSW is satisfied that the project would not have significant heritage impacts, provided that effective screen planting between site and the National Park is established to mitigate any potential visual impacts on the Gondwana Rainforests, which OSD has agreed to.</li> <li>• The Department is satisfied that the project would not have any adverse impacts on State, National or World heritage items within or near the site.</li> </ul>	
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<b>Erosion and sediment control</b>	
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<ul style="list-style-type: none"> <li>• Twenty-one public submissions raised concerns about potential soil and erosion impacts.</li> <li>• The Gara River intersects with the Commissioners Waters at the south-western boundary of the site and continue to flow south through the National Park. NPWS raised concerns regarding potential downstream impacts to the National Park.</li> <li>• OSD has committed to preparing Erosion and Sediment Control Plans to manage any potential impacts for works on waterfront land or where drainage directs water flow towards the National Park.</li> <li>• Any potential long-term erosion impacts, including those to the National Park, would also be mitigated and managed through the implementation of a Soil and Water Management Plan (SWMP) and Ground Cover Management Plan.</li> <li>• NPWS is satisfied that potential impacts to the National Park could be effectively managed with the implementation of a SWMP.</li> <li>• The Department considers that any erosion and sedimentation risks associated with the project can be effectively managed by following the <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004).</li> </ul>	<ul style="list-style-type: none"> <li>• Minimise any soil erosion in accordance with the <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004) manual and ensure the project is constructed and maintained to avoid causing erosion on site.</li> </ul>
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<b>Water</b>	
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<b>Surface Water</b>	
<ul style="list-style-type: none"> <li>• The site falls within the Gwydir Murray Darling Basin Catchment area and contains 37 dams, two named watercourses (Gara River and Commissioners Waters), one named tributary (Lambing Gully) and several unnamed tributaries.</li> <li>• Construction of the project has potential to alter surface water drainage patterns and soil disturbance may lead to sediment being present in runoff.</li> <li>• The potential for adverse water quality impacts would be managed through a Soil and Water Management Plan and an Erosion and Sediment Control Plan. With the implementation of these measures the Department considers there would be limited impacts to surface water.</li> <li>• Water quality impacts during operation are expected to be minimal with runoff from the site continuing to follow existing drainage patterns to ephemeral waterways.</li> </ul>	<ul style="list-style-type: none"> <li>• Design, construct and maintain the project to reduce impacts on surface water and flooding at the site.</li> <li>• Ensure all works are undertaken in accordance with <i>Guidelines for Controlled Activities on Waterfront Land</i> (NRAR, 2018) and <i>Policy and Guidelines for Fish Habitat Conservation and Management</i> (2013).</li> <li>• Upgrade the Gara Road Causeway at Gara River in consultation with DPI Fisheries.</li> <li>• Prepare a Soil and Water Management Plan in consultation with DPE Water, Council and NPWS.</li> </ul>
<b>Flooding</b>	
<ul style="list-style-type: none"> <li>• The site is not significantly affected by floods, however roads within the site may be cut off for short periods by flooding of the Gara River, Commissioners Waters and their tributaries. Most infrastructure would be located outside the floodplain, meaning there would be no change to the maximum flood level and peak velocity resulting from the project.</li> <li>• The project would not have a significant impact on flood behaviour for the 1% AEP event, with flood level, depths, velocities and hazards remaining largely unchanged.</li> </ul>	

- Parts of the site may be at risk of temporary minor flooding during high rainfall, which may pose a safety risk to onsite workers. OSD has committed to developing a flood response plan to manage this risk, and would be required to identify specific emergency exit routes to be used in the case of flood in their Emergency Plan.

**Groundwater**

- Due to the relatively shallow depth of local groundwater resources, minimal excavation for slab footings and limited excavation depths (approximately 2 - 3 m) is proposed.
- The project is therefore not expected to adversely affect groundwater resources.

**Fish habitat**

- The Gara River crosses Gara Road near the centre of the site. OSD has committed to upgrading the Gara Road Causeway(including removing the existing causeway), which would be designed in consultation with DPI Fisheries and in accordance with *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (NSW Fisheries 2003) and the *Policy and Guidelines for Fish Habitat Conservation and Management* (Update 2013)
- The Department and DPI Fisheries are satisfied the project would result in minimal impact to fish habitat subject to the protection of buffer zone widths to riparian corridors and that waterway crossings incorporate best practice design features to maintain fish passage.

**Water Supply**

- The project would require up to 96 megalitres (ML) of water across the construction period, largely for dust suppression on unsealed tracks and for the construction of new roads. Water for construction would be supplied by a licenced river offtake, which OSD would access by obtaining a water access license under section 56 of the *Water Management Act 2000*.
- DPE Water is satisfied that sufficient water entitlement and access to viable water supplies is available.
- The project would require up to 1 ML of water per year during operation, sourced from on-site water tanks and farm dams.
- Subject to the recommended conditions, the Department considers that the project would not result in significant impacts on water resources.

**Noise**

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| <ul style="list-style-type: none"> <li>• Public submissions expressed concern about the noise impacts of the project including cumulative impacts from several solar farms in the locality.</li> <li>• Noise generated during construction, upgrading and decommissioning activities are predicted to be well below the 'highly noise affected' criterion of 75dB(A) in the EPA's <i>Interim Construction Noise Guideline</i> (the ICNG) at all non-associated residential receivers and construction is limited to daytime hours. Construction noise would also not exceed the noise management level of 45 dB(A) for all non-associated residential receivers.</li> <li>• The operational noise levels are also predicted to be below the lowest intrusive criteria in the <i>NSW Noise Policy for Industry</i> (EPA, 2017) at all non-associated receivers.</li> <li>• OSD has committed to developing a Noise Management Plan to implement noise mitigation work practices.</li> <li>• Road traffic noise during construction and operation would comply with the relevant criteria in the EPA's <i>Road Noise Policy</i>.</li> </ul> | <ul style="list-style-type: none"> <li>• Minimise noise generated by the construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG.</li> <li>• Comply with the noise management levels as derivd from the <i>NSW Noise Policy for Industry</i> (EPA, 2017) at any non-associated residence.</li> </ul> |
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<ul style="list-style-type: none"> <li>• Vibration impacts from construction works would not impact any surrounding non-associated receivers and no operation ground vibration sources were identified.</li> <li>• The Department is satisfied that construction and operational noise impacts would be limited and has recommended conditions requiring OSD to minimise noise during the entire life cycle of the project.</li> </ul>	<ul style="list-style-type: none"> <li>• Restrict construction hours to Monday to Friday, 7 am – 6 pm and Saturday, 8 am – 1 pm.</li> </ul>
<b>Dust</b>	
<ul style="list-style-type: none"> <li>• Construction of the project involves earthworks for site preparation, vegetation clearance, trenching for cables and construction of access tracks. Other sources of dust would include vehicles travelling on unsealed roads and wind-blown emissions during operations.</li> <li>• The Department is satisfied that dust generated during construction of the project would be managed via the use of water trucks and additional stabilising techniques, which OSD has committed to, as well as developing a process for monitoring dust on-site and weather conditions, to alter management measures as required in a proactive and reactive manner.</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor and minimise dust generated from the lifecycle of the project from construction, operation and decommissioning.</li> </ul>
<b>Hazards and risks</b>	
<ul style="list-style-type: none"> <li>• A small portion of the development footprint (3.4%) is mapped as bushfire prone land. OSD prepared a bushfire impact assessment and would be required to comply with the RFS's <i>Planning for Bushfire Protection 2019</i>.</li> <li>• The Department considers that the bushfire risks can be suitably controlled through the implementation of standard fire management procedures and recommendations made by FRNSW and RFS, including: <ul style="list-style-type: none"> <li>• measures including asset protection zones (APZs) in accordance with <i>Planning for Bushfire Protection 2019</i>;</li> <li>• preparation of a Fire Safety Study in consultation with FRNSW;</li> <li>• development and implementation of a comprehensive Emergency Plan;</li> </ul> </li> <li>• OSD undertook a preliminary risk screening in accordance with <i>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</i>. The screening concluded that the transport and storage of hazardous materials for the projects would not exceed the relevant risk screening thresholds and the project is not considered to be potentially hazardous.</li> <li>• OSD committed to preparing a Bush Fire Management Plan, Fire Safety Plan and Emergency Response Plan for the project.</li> <li>• The project would comply with the <i>International Commission on Non-Ionizing Radiation Protection (ICNIRP)</i> guidelines for electric, magnetic and electromagnetic fields.</li> <li>• Subject to the recommended conditions, the Department, FRNSW and RFS are satisfied that risks associated with the project would be minimal.</li> </ul>	<ul style="list-style-type: none"> <li>• The BESS must not exceed the proposed total capacity of 50 MW across the project site and must be installed in an arrangement consistent with the EIS.</li> <li>• Prepare a Fire Safety Study and an Emergency Plan for the development.</li> <li>• Ensure the project complies with the relevant asset protection requirements in the RFS's <i>Planning for Bushfire Protection 2019</i> and Standards for APZs.</li> <li>• All chemicals, fuels and oils to be stored in accordance with Australian Standards and EPA requirements.</li> </ul>
<b>Accommodation and workforce</b>	
<ul style="list-style-type: none"> <li>• Up to 300 workers would be required during the peak construction period.</li> <li>• OSD has committed to source workers from the local community to reduce accommodation and service pressures. OSD's assessment concluded that there is sufficient accommodation in Armidale and Guyra for the accommodation workforce.</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare an Accommodation and Employment Strategy for the project in consultation with Council, with consideration to prioritising the</li> </ul>

- The Department is satisfied that there is sufficient accommodation in the Armidale region, noting that the regional city of Armidale is located 14 km from the site.
- There is the potential for construction of the project to overlap with the construction of the approved Stringybark Solar Farm, Olive Grove Solar Farm and Tilbuster Solar Farm, and the proposed Armidale BESS and Eathorpe BESS projects. Should this occur, a peak workforce of up to 785 construction personnel may be required in the region.
- Council did not raise any issues about workforce accommodation.
- While the Department considers there is sufficient workers accommodation for this project, to manage the potential cumulative impacts associated with multiple projects in the region and to encourage the employment of locally sourced workers, the Department has recommended that OSD be required to develop an Accommodation and Employment Strategy in consultation with Council. The Strategy would require OSD to:
  - prioritise employment of local workers;
  - propose measures to ensure there is sufficient accommodation for the workforce associated with the project;
  - consider cumulative impacts with other projects in the area; and
  - monitor and review the effectiveness of the strategy, including regular monitoring during construction.

employment of local workers and consideration of the cumulative impacts associated with other State significant development projects in the area.

### Community benefit

- Twenty-nine public submissions raised concerns regarding the economic impact of the project, including lack of employment opportunities following construction, impacts on land values and opportunity cost of agriculture-based jobs.
- The Department considers that, in addition to its contribution to energy transition, the project would generate direct and indirect benefits to the local community, including:
  - up to 300 construction workers would be required during the 6 to 9 month peak construction period;
  - expenditure on accommodation and business in the local economy by workers who would reside in the area; and
  - the procurement of goods and services by OSD and associated contractors.
- While OSD has advised that the project would utilise accommodation within the Armidale Regional LGA and has committed to sourcing workers from the local region where possible, the Department has recommended a condition requiring OSD to prepare an Accommodation and Employment Strategy (as discussed above) to prioritise these matters.
- The Department considers that the project would not result in any significant or widespread reduction in land values in areas surrounding the project.
- As discussed above, the landowner would be able to continue agricultural practices on remainder of the site and OSD intends to support sheep grazing within the development footprint concurrently with the operation of the solar farm.
- Further, OSD has reached an in-principle agreement with Council to enter into a Voluntary Planning Agreement (VPA). The VPA consists of:
  - a lump sum payment of \$2,790,000 on commencement of construction;
  - an annual payment of \$139,500 for 20 years from commencement of construction;
  - an agreement to assist Council with purchasing solar panels and steel components at OSD's corporate rates;

- OSD implement its offer to enter into a planning agreement with Council.
- Prepare an Accommodation and Employment Strategy for the project in consultation with Armidale Regional Council, with consideration to prioritising the employment of local workers.

<ul style="list-style-type: none"> <li>- annual sponsorship of Project Zero30 of \$20,000 for 10 years from commencement of construction; and</li> <li>- the provision of four electric vehicle charging stations at agreed locations no later than commencement of operation.</li> </ul> <ul style="list-style-type: none"> <li>• Noting the above, the Department considers that the project would have a positive socio-economic impact on the local community.</li> </ul>	
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<b>Subdivision</b>	
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<ul style="list-style-type: none"> <li>• OSD requires three subdivisions for the project, with the boundaries of Lot 2 DP1206469 and Lot 5 DP253346 being modified by the proposed subdivision.</li> <li>• Therefore, five separate lots will be created to accommodate the project’s infrastructure. These include: <ul style="list-style-type: none"> <li>- Lot A – to be retained by the existing landowner (208ha);</li> <li>- Lot B – to enable connection to 132kV easement, to be incorporated into an expanded Lot 5 DP253346 (26.5ha);</li> <li>- Lot C – substation (2.4ha);</li> <li>- Lot D – solar farm (668ha); and</li> <li>- Lot E – BESS (3ha).</li> </ul> </li> <li>• The proposed subdivision of the lots would be below the minimum lot size of 200 ha and prohibited under a strict reading of the LEP. Under Section 4.38(3) of the EP&amp;A Act, development consent for the project can be granted despite the subdivision component of the application being prohibited by the LEP.</li> <li>• The Department considers that the subdivision should be approved as it: <ul style="list-style-type: none"> <li>- is necessary for the operation of the substation, the battery and the ancillary facilities;</li> <li>- would not result in any additional dwelling entitlements on the subdivided lots; and</li> <li>- is consistent with the key objectives of the RU1 zone as it would encourage diversity and primary industry enterprises and minimise conflict between land uses.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Subdivide the proposed land in accordance with requirements of the EP&amp;A Act, EP&amp;A Regulation and the <i>Conveyancing Act 1919</i> (NSW).</li> </ul>
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<b>Decommissioning and rehabilitation</b>	
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<ul style="list-style-type: none"> <li>• The operational life of a large-scale solar project is likely to range between 20 to 30 years, however they have the potential to operate for a long period of time if solar panels are upgraded over time, which would be permitted under the recommended conditions of consent.</li> <li>• The <i>Large-Scale Solar Energy Guideline</i> identifies four key decommissioning and rehabilitation principles for circumstances where an applicant ceases operating a project, which are the removal of project infrastructure, returning the land to its pre-existing use, including rehabilitating and restoring the pre-existing LSC Class where previously used for agricultural purposes, and the owner/operator of the project should be responsible for the decommissioning and rehabilitation and this should be reflected in an agreement with the host landowner(s).</li> <li>• With the implementation of objective-based conditions and monitoring requirements, which are consistent with these key principles, the Department considers that the solar farm would be suitably decommissioned at the end of the project life, or within 18 months if operations cease unexpectedly, and that the site be appropriately rehabilitated.</li> </ul>	<ul style="list-style-type: none"> <li>• Include rehabilitation objectives requiring the site to be rehabilitated within 18 months of cessation of operations.</li> </ul>
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## 6 Evaluation

151. The Department has assessed the development application, EIS and supporting documents provided by OSD, advice from Council and government agencies, submissions and considered the relevant considerations under Section 4.15 of the EP&A Act.
152. The site is wholly located on land zoned RU1, where electricity generating works are permissible with consent. The site is located in the New England REZ, an area traditional associated with agricultural practices, with 11 non-associated residences located within 2 km of the development footprint, has good solar resources, direct access to the regional road network and the electricity network via the two Transgrid transmissions lines that traverse the site with available capacity.
153. The project has been designed to largely avoid key constraints, including amenity impacts to nearby non-associated residences, agricultural land, watercourses, remnant native vegetation and Aboriginal heritage sites. Any residual impacts would be relatively minor and can be managed through the recommended conditions of consent.
154. The project would not result in any significant reduction in the overall agricultural productivity of the region, and it would avoid all areas of BSAL. Following decommissioning, the site could return to agricultural land as the inherent agricultural capability of the land would not be affected in the long term. The Department considers that there would be no significant visual impacts on surrounding residences, due to distance from non-residences or intervening topography and vegetation providing screening, setbacks from solar arrays and the public road network.
155. To address the residual impacts including traffic and transport, surface water, flooding, erosion and hazards, the Department has recommended a range of stringent conditions, developed in consultation with agencies and Council, to ensure these impacts are effectively minimised, managed or offset.
156. The Department considered the submissions made through the exhibition of the project and the issues raised by the community and agencies during consultation. These matters have been addressed through changes to the project and the recommended conditions of consent.
157. Importantly, the project would assist in transitioning the electricity sector from coal and gas-fired power stations to low emissions sources and is consistent with the goals of the NSW's *Climate Change Policy Framework*, the *Net Zero Plan Stage 1: 2020 – 2030*. It would have a generating capacity of 215 MW of clean electricity, which is enough to power approximately 82,000 homes, and 50 MW of energy storage to dispatch energy to the grid when the energy generation from renewable resources is limited.
158. The Department considers that the project achieves an appropriate balance between maximising the efficiency of the solar resource development and minimising the potential impacts on surrounding land users and the environment. Through job creation and capital investment and a planning agreement with Council, the project would also stimulate economic investment in renewable energy and provide flow-on benefits to the local community.
159. On balance, the Department considers that the project is in the public interest and is approvable, subject to the recommended conditions of consent (see **Appendix G**).
160. This assessment report is hereby presented to the Independent Planning Commission to determine the application.

**Prepared by:**

Natasha Homsey, Principal Planning Officer  
Elisha Dunn, Senior Environmental Assessment Officer

**Recommended by:**



20/09/2023

Iwan Davies  
**Director**  
**Energy Assessments**



20/09/2023

Clay Preshaw  
**Executive Director**  
**Energy, Resources and Industry**

# Appendices

## Appendix A – Environmental Impact Statement

## Appendix B – Submissions

## Appendix C - Agency advice

## Appendix D - Submissions Report

## Appendix E - Amendment Report

## Appendix F - Additional Information

## Appendix G – Recommended Development Consent

Appendices A to G available at: <https://www.planningportal.nsw.gov.au/major-projects/projects/oxley-solar-farm>

## Appendix H – Consideration of community views

The Department exhibited the Environmental Impact Statement (EIS) for the project from 17 March 2021 until 14 April 2021 and received 76 unique submissions from the community (75 objections and one comment) and one submission from a special interest group (one objection).

The Department consulted with government agencies and Armidale Regional Council throughout the assessment process.

The key issues raised by the community (including in public submissions) and considered in the Department’s Assessment Report include land use compatibility, biodiversity impacts and visual impacts on surrounding landowners, road users and Oxley Wild River’s National Park.

Other issues are addressed in detail in the Department’s Assessment Report.

Issue	Consideration
<b>Compatibility of the proposed land use</b> <ul style="list-style-type: none"><li>Loss of agricultural land</li><li>Impacts on neighbouring agricultural activities</li></ul>	<b>Assessment</b> <ul style="list-style-type: none"><li>Land within the development footprint is primarily Class 5 land (low to moderate capability), with a small percentage being Class 4 (moderate capability) and Class 6 (low capability).</li><li>The cumulative loss of agricultural land for this project and other approved solar projects in the region represents a very small fraction (0.07%) of the 7.9 million ha of land being used for agricultural output in the New England North West region, therefore resulting in a negligible reduction in the overall productivity of the region.</li><li>The site would be returned to agricultural use following decommissioning.</li></ul>

Issue	Consideration
<p>(including weeds, pests, soil and erosion)</p>	<ul style="list-style-type: none"> <li>• Agricultural operations of adjoining landholders would not be impacted as weeds would be controlled through strict land management measures, erosion and sediment risks can be managed effectively by implementing a control plan, water pollution is not permitted, and noise and dust would not be significant.</li> <li>• The site would also support local agriculture by potentially allowing sheep grazing, and as a result, the Department is satisfied that the project would not result in any significant reduction in agricultural productivity of the region or of local agribusiness.</li> <li>• The site is located on land zoned RU1- Primary Production under the Armidale LEP and the project is permitted with consent within this zone, due to the Infrastructure SEPP.</li> <li>• The project is consistent with the New England North West and Armidale Regional Plan's.</li> <li>• The site is located in the New England REZ, which was declared due to its abundant solar resources and direct access to the electricity grid at a location with available network capacity.</li> </ul> <p><b>Recommended Conditions:</b></p> <ul style="list-style-type: none"> <li>• Restore land capability to pre-existing use.</li> <li>• Restore the groundcover of the site following construction or upgrading, maintain the groundcover with appropriate perennial species and manage weeds within the groundcover.</li> <li>• Minimise any soil erosion associated with the construction, upgrading or decommissioning of the development.</li> <li>• Ensure that the development does not cause any water pollution, as defined under Section 120 of the POEO Act.</li> <li>• Ensure that noise associated with the construction, operation, upgrading and decommissioning of the project complies with the relevant noise criteria.</li> <li>• Minimise dust generated by the development.</li> </ul>
<p><b>Visual Amenity</b></p> <ul style="list-style-type: none"> <li>• Impacts on landscape views and rural character</li> <li>• Glint and glare impacts</li> </ul>	<p><b>Assessment</b></p> <ul style="list-style-type: none"> <li>• The closest non-associated residence (R5) is located approximately 615m northeast from the development footprint.</li> <li>• The project has been designed to minimise potential impacts on surrounding receivers and has been amended to increase the setback of solar panels from the nearest receivers.</li> <li>• Of the 11 non-associated residences within 2 km of the development footprint, the visual reports concluded that five would have no views of the project and six would experience low visual impacts.</li> <li>• OSD has committed to consulting with these landowners to implement vegetation planting to assist in reducing residual impacts from these residences.</li> <li>• The solar panels would be relatively low lying (maximum of 4 m) and ancillary infrastructure such as maintenance buildings and substations would be a maximum of 6 m in height.</li> <li>• The potential for glint and glare at nearby receptors and the public road network is limited by the existing established intervening vegetation and the proposed screen planting.</li> </ul> <p><b>Recommended Conditions:</b></p> <ul style="list-style-type: none"> <li>• Minimise and mitigate the off-site visual impacts of the development, including the potential for any glare or reflection.</li> <li>• Establish and maintain a vegetation buffer to minimise views from nearby receivers.</li> <li>• Implement the mitigation measures (vegetation screening and on-site boundary planting) to limit visual impacts to non-associated receivers within the project locality.</li> <li>• Ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in with the surrounding landscape, where reasonable and feasible.</li> </ul>

Issue	Consideration
<p><b>Impacts on the National Park</b></p> <ul style="list-style-type: none"> <li>• Amenity impact</li> <li>• Fire risk</li> <li>• Weeds, pests, soil and erosion</li> </ul>	<p><b>Assessment</b></p> <ul style="list-style-type: none"> <li>• The site is located adjacent to the Oxley Wild Rivers National Park.</li> <li>• Amendments to the project provide a 1,285 m and 1,165 m setback of solar farm infrastructure from Blue Hole Picnic Area and the Threlfall Walking Track within the National Park. With these amendments and the proposed vegetation screening, no amenity impacts would occur.</li> <li>• Project amendments also minimise the risk of potential fire impacts on the site and surrounding land, including the National Park.</li> <li>• OSD has committed to developing and implementing an Erosion and Sediment Control Plan and Groundcover Management Plan, which would mitigate downstream impacts into the Gara River within the National Park.</li> <li>• Weeds would be controlled through strict land management measures.</li> </ul> <p><b>Recommended Conditions</b></p> <ul style="list-style-type: none"> <li>• Establish landscape screening along the common boundary of the National Park, including setbacks for bushfire management purposes, in consultation with NPWS.</li> <li>• Minimise any soil erosion associated with the development and implement a Soil and Water Management Plan in consultation with NPWS.</li> <li>• Ensure that the development does not cause any water pollution.</li> <li>• Ensure that noise associated with the project complies with the relevant noise criteria.</li> </ul>
<p><b>Biodiversity Impacts</b></p> <ul style="list-style-type: none"> <li>• Wildlife and vegetation impacts</li> <li>• Erosion and soil impacts</li> </ul>	<p><b>Assessment</b></p> <ul style="list-style-type: none"> <li>• The project site is characterised by cleared farmland, and of the 268 ha development footprint would clear 92.78 ha of native vegetation, 90.71 ha of which is derived native grassland.</li> <li>• OSD designed the project to avoid disturbance of native vegetation where practicable.</li> <li>• Amendments to the project significantly reduced impacts to Box Gum Woodland (woodland vegetation) and hollow-bearing trees.</li> <li>• Potential weed invasion would be minimised by the retention of ground cover. A Groundcover management plan would therefore be implemented to resist erosion and weed impacts.</li> <li>• Due to the setback distances from waterways there will be no significant adverse water quality impacts on waterways and aquatic wildlife in the locality.</li> <li>• OSD has committed to developing and implementing a Wildlife Corridor Connectivity Enhancement Plan to improve connectivity in specific areas throughout the life of the project.</li> </ul> <p><b>Recommended Conditions:</b></p> <ul style="list-style-type: none"> <li>• OSD must not clear any native vegetation or fauna habitat located outside the approved disturbance areas.</li> <li>• Prepare and implement a Biodiversity Management Plan.</li> <li>• Offset residual impacts of the project in accordance with the <i>NSW Biodiversity Offset Scheme</i>.</li> </ul>

## Appendix I - Statutory considerations

### Objects of the EP&A Act

In line with the requirements of Section 4.15 of the EP&A Act, the Department's assessment of the project has given detailed consideration to a number of statutory requirements. These include:

- the objects found in Section 1.3 of the EP&A Act; and
- the matters listed under Section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all these matters in its assessment of the project and has provided a summary of this assessment below.

#### Summary

##### Objects of the EP&A Act

The objects of most relevance to the Consent Authority's decision on whether to approve the project are found in Section 1.3(a), (b), (c), (e) and (f) of the EP&A Act.

The Department considers the project encourages the proper development of natural resources (Object 1.3(a)) and the promotion of orderly and economic use of land (Object 1.3(c)), particularly as the project:

- is a permissible land use on the subject land;
- is located in a logical location for efficient solar energy development;
- is able to be managed such that the impacts of the project could be adequately minimised, managed, or at least compensated for, to an acceptable standard;
- would contribute to a more diverse local industry, thereby supporting the local economy and community;
- would not fragment or alienate resource lands in the LGA; and
- is consistent with the goals of NSW's *Climate Change Policy Framework* and *Net Zero Plan Stage 1: 2020 – 2030 and Implementation update (2022)* and would assist in meeting Australia's renewable energy targets whilst reducing greenhouse gas emissions.

The Department has considered the encouragement of Ecologically Sustainable Development (ESD) (Object 1.3 (b)) in its assessment of the project. This assessment integrates all significant socio-economic and environmental considerations and seeks to avoid any potential serious or irreversible environmental damage, based on an assessment of risk-weighted consequences.

In addition, the Department considers that appropriately designed SSD solar facility development, in itself, is consistent with many of the principles of ESD. OSD has also considered the project against the principles of ESD. Following its consideration, the Department considers that the project can be carried out in a manner that is consistent with the principles of ESD.

Consideration of environmental protection (Object 1.3(e)) is provided in section 5.3 of this report. Following its consideration, the Department considers that the project could be undertaken in a manner that would at least maintain the biodiversity values of the locality over the medium to long term and would not significantly impact threatened species and ecological communities of the locality. The Department is also satisfied that any residual biodiversity impacts could be managed and/or mitigated by imposing appropriate conditions and retiring the required biodiversity offset credits.

Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is also provided in section 5.6 of this report. Following its consideration, the Department considers the project would not significantly impact the built or cultural heritage of the locality, and any residual impacts can be managed and/or mitigated by imposing appropriate conditions.

## Summary

### State significant development

Under Section 4.36 of the EP&A Act the project is considered a State Significant Development.

Under Section 4.5(a) of the EP&A Act and Clause 1(b) of Section 2.7 of the Planning Systems SEPP, the Independent Planning Commission is the consent authority for the development as the project received more than 50 unique public submissions by way of objection.

### Environmental Planning Instruments (EPIs)

The Armidale LEP applies and is discussed in sections 3.3 and 5.2 of this report, particularly regarding permissibility and land use zoning. As discussed in Section 5.2, while the project would be prohibited under the LEP, it is permissible under the Infrastructure SEPP. In accordance with the Infrastructure SEPP, the Department has given written notice of the project to Transgrid and TfNSW.

OSD completed a preliminary risk screening in accordance with *SEPP No. 33 – Hazardous and Offensive Development* and confirmed the project was not categorised as potentially hazardous or potentially offensive development. The Department has also considered the provisions of *SEPP No. 55 – Remediation of Land*. The site is not listed as a contaminated site in the NSW EPA Contaminated Land Record and list of NSW contaminated sites. Given the site has historically been used for agricultural uses, the Department considers the site would be suitable for the proposed development.