Department of Planning, Housing and Infrastructure

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Wallaroo Solar Farm

State Significant Development Assessment Report (SSD-9261283)

June 2024

Acknowledgement of Country

The Department of Planning, Housing and Infrastructure acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and show our respect for Elders past and present through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Preface

This assessment report provides a record of the Department of Planning, Housing and Infrastructure's (the Department) assessment and evaluation of the State significant development (SSD) application for the Wallaroo Solar Farm located adjacent to the New South Wales (NSW) / Australian Capital Territory (ACT) border, lodged by Wallaroo Solar Farm 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

Wallaroo Solar Farm Pty Ltd (WSF) proposes to develop the Wallaroo Solar Farm (the project), a 100 megawatt (MW) solar farm with a 45 MW / 90 MW-hour (MWh) battery and associated grid connection infrastructure. The project is located on a 393 hectare site approximately one kilometre south of the rural area of Wallaroo and adjacent to the New South Wales (NSW) / Australian Capital Territory (ACT) border, in the Yass Valley local government area.

The site has historically been used for agricultural grazing and has been largely cleared of native vegetation. The project is located on the rural-urban fringe, with the ACT suburb of Dunlop located approximately 750 metres east of the site.

The Department exhibited the Environmental Impact Statement for the project for a period of 28 days between 24 May 2023 and 20 June 2023 and received 97 public submissions, including six from special interest groups (88 objections, five support and four providing comment). Yass Valley Council (Council) provided an objection during exhibition and the ACT Environment, Planning and Sustainable Development Directorate (ACT EPSDD) provided comment. Advice was also received from 11 government agencies.

The Department consulted with Council, the ACT EPSDD and relevant government agencies on key issues throughout its assessment, inspected the site and met with nearby sensitive receivers. None of the agencies or utility providers objected to the project, and they each recommended the implementation of appropriate mitigation and management measures.

In response to submissions, WSF undertook additional assessments and amended the project by reducing the solar array footprint, providing additional landscaping and including further operational solar array tracking controls as a means of mitigating potential impacts. The project amendments would lead to better outcomes and address key matters raised by the Department, agencies and in public submissions by reducing visual impacts, including glint and glare.

The key assessment considerations are energy security, land use compatibility 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 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 100 MW of renewable energy to the National Electricity Market, including a battery storage facility with a capacity of 45 MW / 90 MW-hour. 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 Department considers that the project represents an effective and compatible use of the land and that the site is suitable to accommodate the development. The siting of the project is consistent with the NSW Government's *Large Scale Solar Energy Guideline* (2022), as well as the *South East and Tablelands Regional Plan 2036*, which seeks to position the region as a hub of renewable energy excellence. The project would also maintain agricultural use of the land through ongoing grazing of the site, while limiting the potential for

residential development or other conflicting land uses, consistent with the recommendations of the *Yass Settlement Strategy 2036*.

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 site does not contain any mapped Biophysical Strategic Agricultural Land and has limited agricultural capability. The Department notes that WSF has committed to continue grazing concurrently with the operation of the solar farm where appropriate.

There are two residences within 500 m of the development footprint and six residences between 500 m and 750 m away. Beyond 750 m, there are rural residential properties to the north along Gooroomon Ponds Road and urban residential development to the east in the Canberra suburbs of Dunlop and MacGregor.

Despite the large number of residences located in proximity to the site, the Department considers that impacts on visual amenity and landscape character would be low. Site topography, the high density of dwellings within the urban residential area and existing and proposed vegetation screening would minimise views of the project from the surrounding area, consistent with the requirements of the *Large-Scale Solar Energy Guideline* (2022). Although views of sections of the solar array would still be possible from some residences and sections of the Bicentennial National Trail, the Department does not consider the broader landscape character of the area would be significantly affected.

Impacts to biodiversity would be minimal, with the project designed to avoid areas of native vegetation. No clearing of native vegetation is proposed for the project. The applicant has assumed presence on the site for the striped legless lizard, generating 167 species credits to be offset. This approach is supported by BCS. The Department considers that the project has been designed and refined to avoid and minimise biodiversity impacts and is acceptable subject to 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 12 to 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.

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 200 construction jobs, 5 operational jobs and contributions to Council of $150,000 on commencement of construction, then an annual payment of $55,000 through a voluntary planning agreement agreed to with Council. There would be broader benefits to the State through an injection of $166 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

1 Introduction

1.1 Project

1. Wallaroo Solar Farm Pty Ltd (WSF) proposes to develop the Wallaroo Solar Farm (the project), a 100 megawatt (MW) State significant development (SSD), adjacent to the New South Wales (NSW) / Australian Capital Territory (ACT) border, approximately one kilometre south of the rural area of Wallaroo in the Yass Valley local government area (LGA) (see **Figure 1**).

2. The project would include a 45 MW / 90 MW-hour (MWh) battery energy storage system (BESS), a substation and connection to an existing 132 kilovolt (kV) Transgrid transmission line, that crosses the southern end of the site. It also involves the upgrading and decommissioning of equipment over time.

3. Access to the site is proposed from the Barton Highway via Wallaroo Road, Gooroomon Ponds Road and Southwell Road. Construction of the project would commence in late 2025 with an anticipated construction period of approximately 12 to 18 months.

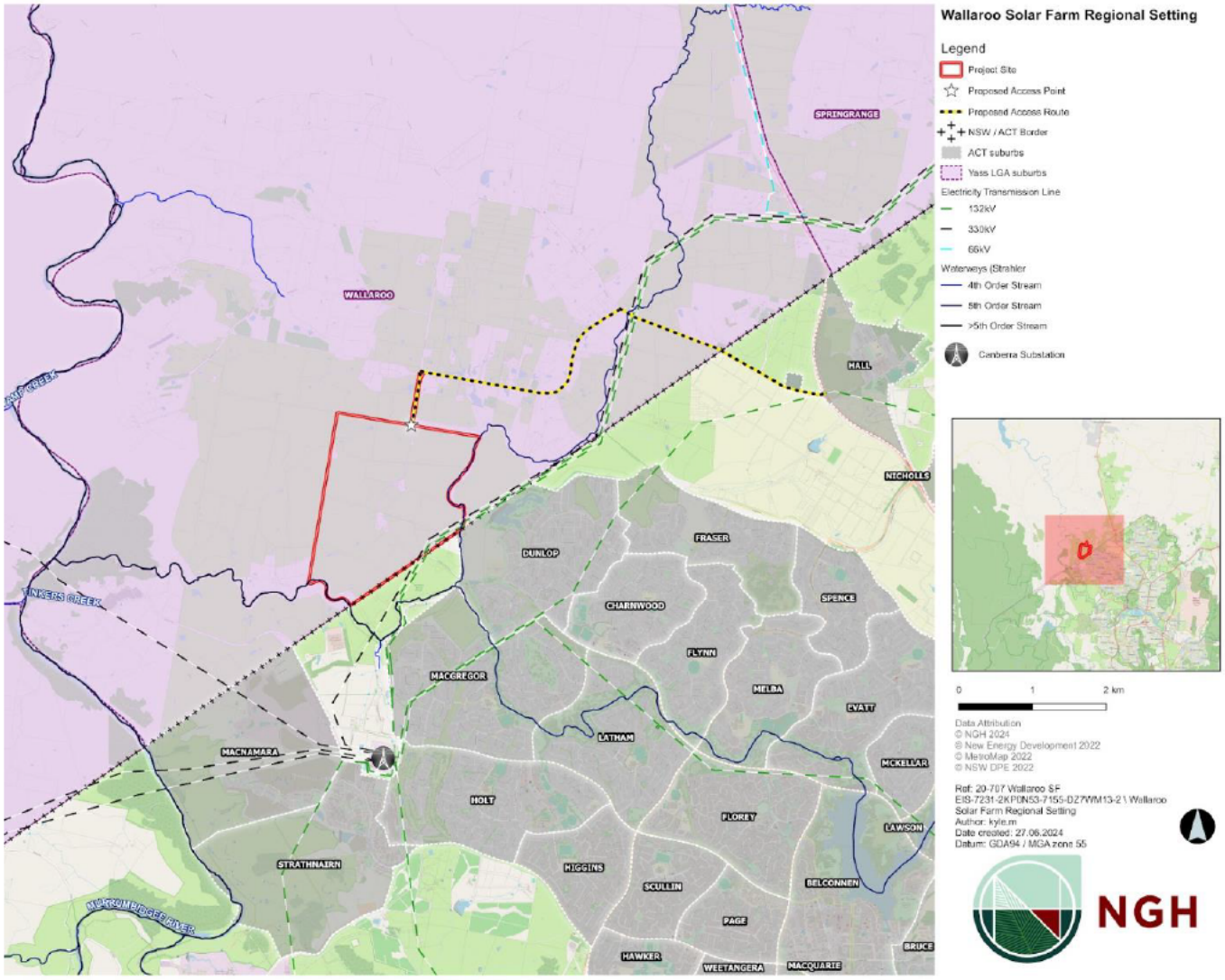


Figure 1 | Regional Context

4. The key components of the project are summarised in **Table 1**, depicted in **Figure 2** (as originally proposed) and **Figure 3** (as amended), and described in detail in the Environmental Impact Statement (EIS) and supporting documentation (see **Appendices A, E and F**).

Table 1 | Main aspects of the project

Aspect	Description
Project Summary	The project includes: • approximately 182,000 solar panels and associated mounting infrastructure (up to 4.7 m high) with a generating capacity of 100 MW; • 36 BESS containers with a combined capacity of up to 45 MW and a storage duration of up to 2 hours (90 MWh); • electrical collection and conversion systems, including inverter and transformer units, switchyard and control room, as well as underground and above ground cabling; • an on-site substation, connected to the existing 132 kV transmission line; • internal access roads, parking, operational infrastructure area, including operations and storage buildings, amenities and water tanks, and temporary construction compound.
Project Site	• Total site area: 393 ha • Development footprint: 165.45 ha
Site entry and access route	• The proposed access route is Barton Highway, Wallaroo Road, Gooroomon Ponds Road and Southwell Road. • Site access would be via an existing private access road over the subject land off the southern end of Southwell Road.
Road upgrades	• Minor upgrades to the east and southbound turning lanes of the Barton Highway/Wallaroo Road intersection (note these works are located within the ACT and are subject to separate approval). • Upgrade of the Gooroomon Ponds Road/Southwell Road intersection. • Sealing of Southwell Road from the Gooroomon Ponds Road intersection to the site access point.
Construction	• Construction period: approximately 12 to 18 months with a peak construction period of 6 months. • Construction hours: Monday to Friday 7 am to 6 pm, and Saturday 8 am to 1 pm.
Operation	• The expected operational life of the infrastructure is approximately 30 years. However, the project may involve infrastructure upgrades that may extend the operational life. • The solar farm and BESS would operate 24 hours a day, seven days a week.
Decommissioning and rehabilitation	The project includes decommissioning at the end of the project life, which would involve removing all infrastructure.
Subdivision	Subdivision proposed for Transgrid assets within the substation area.
Employment	Up to 200 construction jobs and up to 5 operational jobs.
Capital investment value	Approximately $166 million.

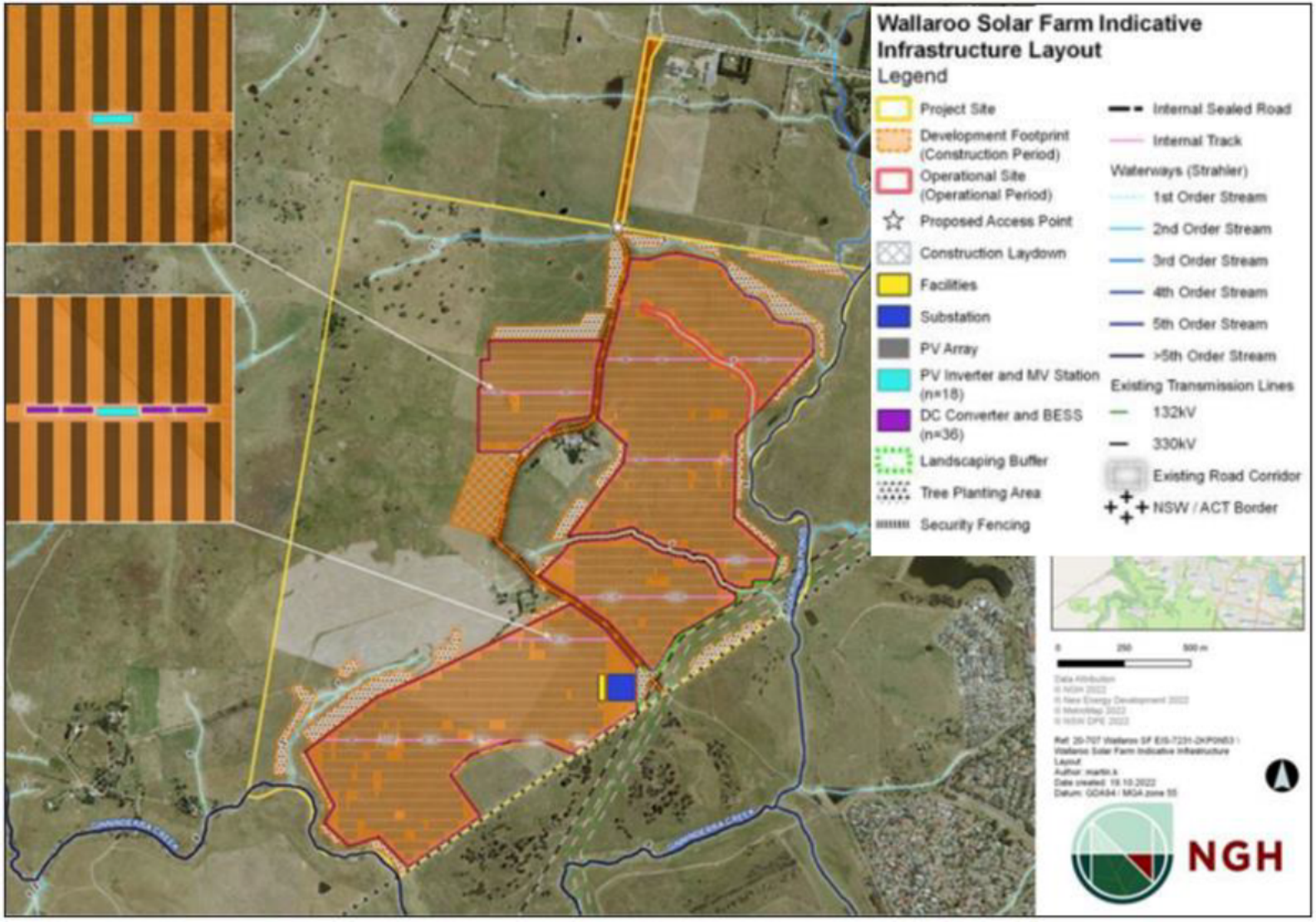


Figure 2 | Original Project

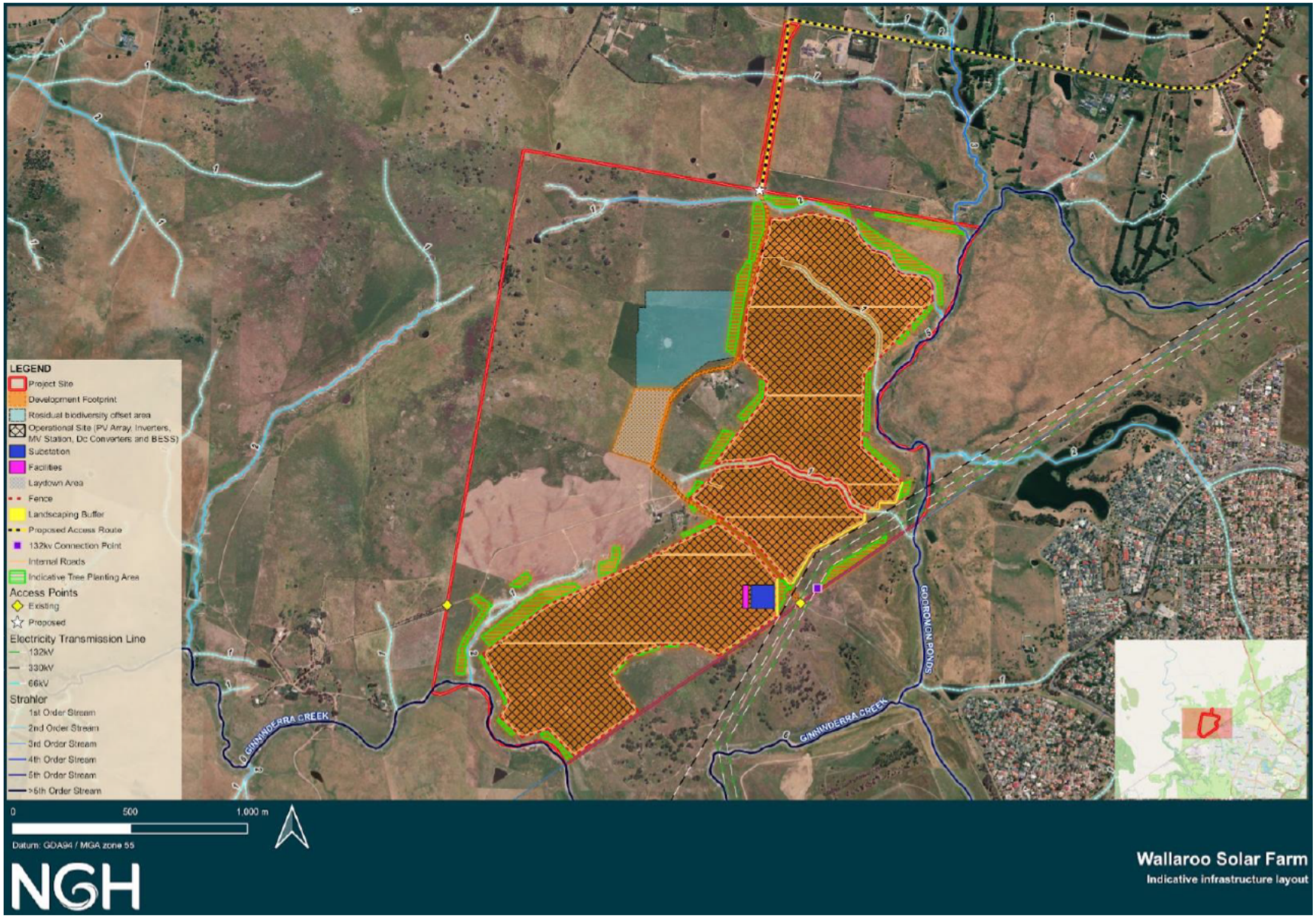


Figure 3 | Amended Project

2 Strategic Context

2.1 Site and surrounds

5. The site comprises two largely cleared agricultural lots zoned RU1 Primary Production, having been used for grazing and occasional cropping in the past. Surrounding land is also predominantly zoned RU1, with the exception of the C3 Environmental Management zone for Ginninderry Creek, the R1 General Residential zone for the proposed Ginninderry Estate to the south-west of the site and grassland reserves zoned NUZ3: Hills, Ridges and Buffer Areas within the ACT to the south-east, reserved for the purpose of conservation and recreation.

6. Access to the site would be via Southwell Road to the north of the project site, which is proposed to be sealed from the Gooroomon Ponds Road / Southwell Road intersection all the way to the site access as part of the proposed development.

7. Land within the site is generally flat to gently undulating and is predominantly cleared. The site does not contain any mapped Biophysical Strategic Agricultural Land (BSAL) and land within the development footprint is categorised as Land and Soil Capability (LSC) Class 4 (moderate to high limitations) and Class 5 (high limitations) following on site LSC verification.

8. Two named watercourses traverse the site. Ginninderra Creek is a 6th order stream that forms the south-western boundary of the site and Gooroomon Ponds Creek is a 5th order stream that runs along the eastern site boundary. Several smaller tributaries traverse the site and multiple farm dams are also located within the site.

9. The site sits on the rural-urban fringe. There are two residences within 500 m of the development footprint and six residences between 500 m and 750 m away. Beyond 750 m there are rural residential properties to the north along Gooroomon Ponds Road and to the east are the ACT residential suburbs of Dunlop and MacGregor.

10. 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

11. There are seven State significant renewable energy projects within 50 km of the project site, the closest being the approved Springdale Solar Farm approximately 17 km to the north-east (see **Table 2**).

12. Potential cumulative impacts at a regional level relate to the loss in agricultural land and traffic, which are discussed further in **section 5.2** and **section 5.4** respectively.

Table 2 | Nearby Renewable Energy Projects

Project	Capacity (MW)	Status	Approximate distance from the project (km)
Springdale Solar Farm	100	Approved	17 (north-east)
Yass Solar Farm	100	Proposed	36 (north)
Gunning Solar Farm	250	Under Assessment	42 (north)
Capital Wind Farm	141	Operational	44 (east)
Blind Creek Solar Farm	350	Approved	44 (east)
Capital 2 Wind Farm	144	Approved	45 (north-east)
Conroys Gap Wind Farm	30	Approved	46 (north-west)

2.3 Energy context

13. In 2023, NSW derived approximately 36% of its energy from renewable sources. The rest was derived from fossil fuels, including 61% from coal and 3% from gas. NSW is one of the nation's leaders in large-scale renewables, with 39 major operational projects and 54 under construction or planned to be under construction.

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

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

Table 3 | Energy Context

Policy / Year	Summary
Australia's Long Term Emissions Reduction Plan (2021)	Sets a pathway to net zero emissions by 2050 and affirms Australia's commitment to meeting its revised 2030 target (43% below 2005 levels).
Australian Energy Market Operator's 2024 Integrated System Plan (ISP)	Notes that: • without coal, investment is urgently needed to meet significantly increased electricity demand requiring a six-fold increase in large-scale variable renewable energy generation; a mix of solar and wind is needed, and they offer complementary daily and seasonal profiles; and • forecasts that there will be a demand for 83 GW of utility-scale wind and solar in the National Electricity Market by 2034-35, and 127 GW by 2049-50.

Policy / Year	Summary
NSW: ***Climate Change Policy Framework* (2016),** ***Transmission Infrastructure Strategy (2018),*** ***Electricity Strategy* (2019),** ***Electricity Infrastructure Roadmap* (2020),** ***Net Zero Plan Stage 1: 2020 – 2030* (2020) and *Implementation update* (2022),** ***South East and Tablelands Regional Plan 2036*** ***Local Strategic Planning Statement***	Relevant aspects of these policy documents include: • aims to achieve net zero emissions in NSW by 2050 and reduce emissions by 70% below 2005 levels by 2035; • notes that all coal fired power plants in NSW are scheduled for closure within the next twenty years; • regional goals to support the State's transition to lower emissions and Council goals to promote renewable energy production; • positioning the South East and Tablelands Region as a hub of renewable energy excellence; and • Identifying renewable energy as a priority growth sector for the region.

2.4 NSW Solar Guideline

16. The Department released the revised *Large-Scale Solar Energy Guideline* in August 2022 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.

17. WSF has considered the potential visual and landscape impacts of the project in accordance with the revised guideline and the Department considers the project is broadly consistent with the principles in the revised guideline.

18. 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

19. The project is classified as 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 (Planning Systems) 2021* (Planning Systems SEPP), as it is development for the purpose of electricity generating works with a capital investment value of more than $30 million.

20. 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 (the Commission) is the consent authority for the development as the project has received more than 50 unique public submissions by way of objection and Council objected during the exhibition period.

3.2 Amended application

21. In accordance with Clause 37 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation), a development application can be amended at any time before the application is determined. WSF sought to amend its application, the details of which are summarised in **section 4.6** of this report. Under the delegation from the Commission of 14 June 2022, the Director, Energy Assessments can agree to amendments to an application.

22. 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;
- WSF 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

23. The site is zoned as RU1 – Primary Production under the *Yass Valley Local Environmental Plan 2013* (the LEP), the provisions of which are discussed in **section 5.2**.

24. The project is permissible as electricity generating works with consent on any land in a prescribed rural, industrial or special use zone, including the RU1 zone, under clause 2.36 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP).

3.4 Integrated and other approvals

25. 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*).

26. 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**).

27. The project is not a controlled action under the *Environmental Protection and Biodiversity Conservation Act 1999*.

3.5 Mandatory matters for consideration

28. 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 WSF'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 environmental planning instruments (EPIs) in **Appendix H**. EPIs considered include:

- SEPP Resilience and Hazards 2021;
- SEPP Transport and Infrastructure 2021; and
- Yass Valley LEP.

4 Engagement

4.1 Department's engagement on the EIS

29. The Department publicly exhibited the EIS from 24 May 2023 and 20 June 2023, advertised the exhibition in the *Yass Valley Times* and *Canberra Times* and notified landowners adjacent to the project boundary.

30. The Department consulted with Council, the ACT Environment, Planning and Sustainable Development Directorate (ACT EPSDD) and relevant government agencies throughout the assessment. The Department also inspected the site on 22 February 2024, and met with surrounding landowners to further understand their concerns.

31. The Department notified and sought comment from Transgrid and Transport for NSW (TfNSW) in accordance with the Transport and Infrastructure SEPP, as discussed further in **section 4.43** of the report.

4.2 Summary of Council's submission

32. Council provided submissions objecting to the project during exhibition of the EIS and following receipt of the Submissions Report.

33. In summary, Council considered that the project:

- would be inconsistent with the *Yass Valley Settlement Strategy 2036*, which recommends a 5 km buffer along the Yass Valley/ACT border be maintained as productive rural land to prevent encroachment of intensive residential development;
- would not preserve the rural and landscape character of the area and is likely to negatively impact on the visual amenity of the area; and
- could cause potential contamination from damaged batteries.

34. However, Council has agreed to the general terms proposed by WSF for a voluntary planning agreement (VPA) should the project be approved.

4.3 Summary of advice received from government agencies

35. During exhibition of the EIS, the Department received advice from 12 government agencies. 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.

Table 4 | Summary of agency advice

Agency	Advice summary
Biodiversity Conservation and Science Group within NSW DCCEEW (BCS)	Requested further information and revisions to the Biodiversity Development Assessment Report (BDAR), including in relation to survey work for the striped legless lizard. Confirmed the updated BDAR is acceptable, and 167 species credits are required to be retired.
Transport for NSW (TfNSW)	Raised no concerns. Recommended conditions, including preparation of a Construction Traffic Management Plan prior to commencing construction.
Heritage NSW Group within NSW DCCEEW (Heritage NSW)	Requested updates to the Aboriginal Cultural Heritage Assessment (ACHAR) to include additional information, including consultation processes undertaken with Registered Aboriginal Parties (RAPs). Confirmed the updated ACHAR is adequate and concurs with its recommendations.
Water Group within NSW DCCEEW	Requested further information relating to water supply. Satisfied that the additional consultation undertaken by WSF with Council and Icon Water confirms commercial access to standpipes for the project is feasible and adequate supply is available to supply the project's construction and operational requirements.
DPI Agriculture	Provided recommendations for operational and decommissioning measures to maintain the agricultural use and capability of the land.
DPI Fisheries	Supports the proposed aquatic habitat mitigation measures and commended the proposed revegetation of riparian zones along Ginninderra Creek.
Crown Lands	Satisfied that NSW *Crown Land Management Act 2016* had been addressed and raises no concerns regarding the adjacent Crown waterways.
Fire & Rescue NSW (FRNSW)	Recommended preparation of a comprehensive Emergency Plan and Fire Safety Study.
NSW Rural Fire Service (RFS)	Recommended the requirement of a Bush Fire Emergency Management and Operations Plan, asset protection zones (APZs) and design requirements.
ACT Government – Environment, Planning and Sustainable Development (EPSDD)	Recommended various environmental management measures in respect of the Jarramlee Nature Reserve, bushfire management and controls, and ongoing consultation around potential visual impacts on sensitive receivers. Requirement for ongoing consultation with Transport Canberra and City Services regarding Barton Highway/Wallaroo Road intersection upgrade.
Transgrid	No comments.
Mining, Exploration and Geoscience (MEG)	No issues raised.

4.4 Summary of public submissions

36. During the exhibition period of the EIS, the Department received 97 unique submissions from the community, including six special interest groups (88 objections, five support and four comment).

37. 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 project site	Number of submissions
< 20 km	60
>20 km	37

38. Around 67% of submissions were received from residents located within 20 km of the site, primarily from the suburbs of Wallaroo, Dunlop and MacGregor. 33% were from residents located over 20 km from the site, including interstate submissions. Most submissions to the project typically focused on local impacts and matters related to the local community.

39. The key issues raised in public submissions are summarised in **Figure 4**. The most common matters raised in submissions include the following:

- land use compatibility: site selection, use of prime agricultural land, impacts on adjacent agricultural and residential activities;
- visual: impacts on the surrounding landscape, effectiveness of vegetation screening and glare caused by project.
- ecological and biodiversity impacts: removal of native flora, displacement of native fauna, impacts on soil and water quality.

40. Other issues raised in objections included land devaluation, contamination and pollution caused by toxic and heavy metals, traffic impacts (including safety and road degradation), and proximity of the solar farm to residential dwellings.

41. 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.

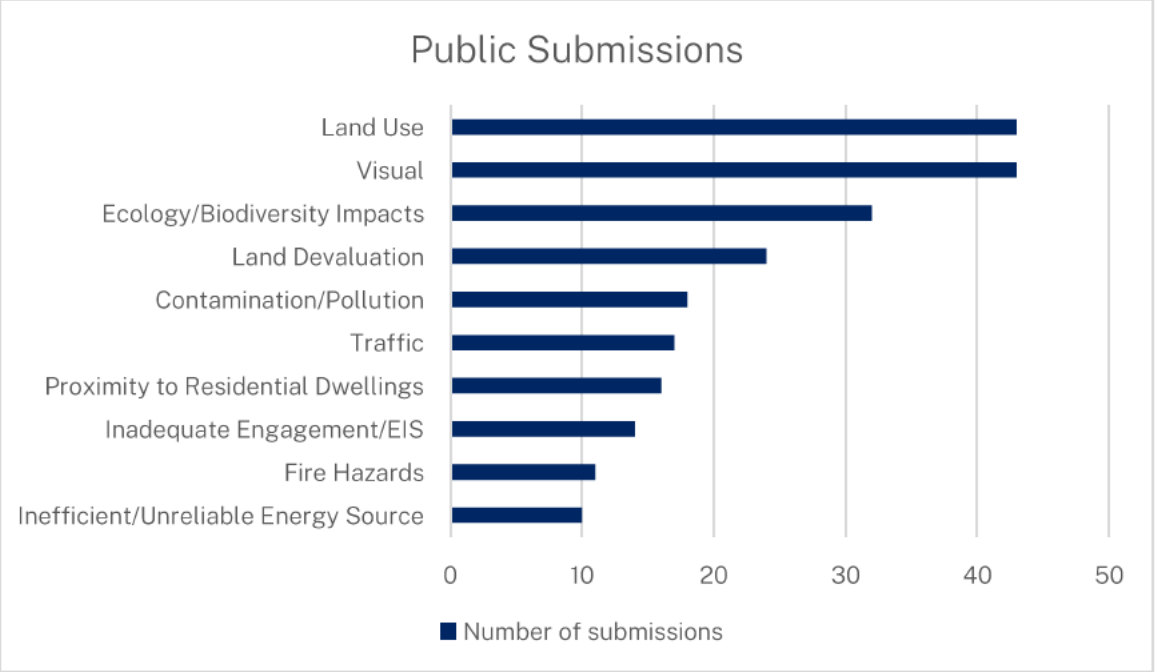


Figure 4 | Key Issues Raised in Public Submissions

4.5 Response to submissions

42. Following the public exhibition period, the Department asked WSF to respond to the issues raised in submissions and the advice received from government agencies.

43. WSF provided a Submissions Report (**Appendix D**) and additional information during the Department's assessment (see **Appendix F**).

44. The Department published the Submissions Report on the NSW planning portal and forwarded the Submissions Report to relevant government agencies, the ACT EPSDD and Council for comment.

4.6 Amendment report

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

Table 6 | Amendment comparison

Aspect	EIS Project	Amended Project	Difference
Study Area	393 ha	393 ha	-
Development Footprint	181 ha	165.45 ha	15.55 ha reduction
Operational Footprint	181 ha	139.19 ha	41.81 ha reduction
Targeted Capacity (Solar)	100 MW (AC)	100 MW (AC)	-
Targeted Capacity (BESS)	45 MW for 2 hours	45 MW for 2 hours	-
Construction Duration:	12 – 18 months	12 – 18 months	-
Construction Workforce	Up to 200 construction jobs and up to 5 operational jobs	Up to 200 construction jobs and up to 5 operational jobs	-
Operational Controls	A protocol would be developed in consultation with the aerodrome operator to avoid Flight Point 01 encountering potential 0.01hr of 'Yellow glare' from mid-January to late January between 5:00am – 5:15am for approximately 4-6 seconds per day by either: • Restricting flight activity, or • Modifying operation of PV Array 01 during this time period and/or scheduled aviation activities to avoid potential glare generation.	Not operating panels between 0° and ±5° between the hours of 5:30am and 8:30am to avoid all potential glare generation for all residential, road and aviation receivers	PV Array operational control proposed to mitigate potential glare.
Landscaping	Landscaping to the north of the north-western solar array area	Revised landscaping plan following removal of north-western solar array area to reduce operational site visibility	Revised Landscape Plan

5 Assessment

46. 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**) and visual impacts (**section 5.3**).

47. 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 5.4**.

5.1 Energy transition

48. 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.

49. The project is in an area with direct access to the transmission network with available capacity and abundant solar resources, on land where solar development is permissible with development consent under the Transport and Infrastructure SEPP.

50. With a generating capacity of 100 MW, the solar farm would generate enough electricity to power about 40,000 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. As such, the project would play an important role in:

- increasing renewable energy generation and capacity;
- firming the grid by including 45 MW / 90 MWh of energy storage; and
- contributing to the transition to a cleaner energy system as coal fired generators retire.

5.2 Land use compatibility

5.2.1 Local and strategic planning

51. The site is located on land within the RU1 Primary Production zone under the Yass Valley LEP, which is a prescribed non-residential land use zone in which the proposed development is permissible with consent under the Transport and Infrastructure SEPP (as discussed in **Section 3.3**). The project is generally consistent with the objectives of the RU1 zoning under the LEP, particularly those related to:

- encouraging 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 land uses within adjoining zones;
- encouraging the use of rural land for agriculture and other forms of development that are associated with rural industry or that require an isolated or rural location;

- ensuring that the location, type and intensity of development is appropriate, having regard to the characteristics of the land, the rural environment and the need to protect significant natural resources, including prime crop and pasture land; and
- preventing the subdivision of land on the fringe of urban areas into small lots that may prejudice the proper layout of future urban areas.

52. While the Yass Valley 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 key government strategic planning guidance, including the *South East and Tablelands Regional Plan 2036*, which includes a direction to position the region as a hub of renewable energy excellence.

53. The Department notes that Council has objected to the project on the basis of consistency with the *Yass Settlement Strategy 2036*. The strategy recommends that land within 5km of the Western Yass Valley – ACT Border, which includes the project site, should be maintained as productive rural land by restricting conflicting land uses and preventing encroachment of intensive residential development. The project would maintain agricultural use of the land through ongoing grazing of the site, while limiting the potential for residential development or other conflicting land uses to occur, in keeping with the Settlement Strategy.

54. 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 loss of agricultural land

55. The site is currently used for sheep and cattle grazing and has previously been used for occasional cropping.

56. 43 submissions objecting to the project raised concerns about establishing a solar farm on agricultural land.

57. At the request of the Department, WSF prepared a Soil and Land Assessment, including soil surveys verifying Land and Soil Capability, to assess the agricultural capability of the site. The assessment found that the soils within the site were of generally low fertility and structural integrity. The Land and Soil Capability of the site was classified as Land Class 4 and Class 5 following site verification.

58. Class 4 and 5 means the land has moderate and moderate-low capability, indicating that agricultural uses are largely restricted to moderate to low impact uses such as grazing and occasional cultivation for fodder crops. There is no mapped BSAL or State Significant Agricultural Land present within or surrounding the site.

59. Siting of the project has therefore avoided higher productivity agricultural land, an approach which is consistent with the *Large-Scale Solar Energy Guideline*'s focus on avoiding BSAL and land classes 1, 2 and 3 in site selection.

60. The project would not affect the inherent agricultural capability of the land due to the relatively low scale of the development and the ability to rehabilitate and return the site to agricultural use

following decommissioning. In addition, WSF has committed to continuing agricultural use of the site during operation, by continuing to graze stock on site where appropriate, and to restoring the Land Soil Capability of lands disturbed through decommissioning to existing land and soil capability. Accordingly, the Department has included requirements to maintain the site's current land capability, where practicable, during the construction and operation of the project. WSF would also 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 pre-existing productive capacity.

61. The Department considered potential cumulative impacts on agricultural land and notes that the project's development footprint combined with the other approved and/or operational SSD solar farms in the South East and Tablelands region of NSW would be approximately 1,471 ha. The loss of 1,471 ha of agricultural land represents a tiny fraction (0.04%) of the 3.3 million ha of land in the region currently used for agricultural output.

62. 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.

63. The potential loss of a small area of relatively low fertility 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.

64. The Department considers that the development would not fragment or alienate any resource lands in the LGA and is capable of being returned to agricultural use following decommissioning.

65. 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.

5.2.3 Surrounding land use compatibility

66. Submissions objecting to the project raised concerns about its compatibility with adjacent agricultural and residential land uses.

67. WSF prepared a Land Use Conflict Risk Assessment (LUCRA) as part of the EIS to assess the potential impacts of the project on land uses surrounding the site. The LUCRA concluded that potential impacts on surrounding land uses, including agriculture, rural residential land use, regional growth areas and transport, were manageable with the implementation of the proposed mitigation measures, including traffic management measures, landscape planting, solar grazing, weed management, rehabilitation and decommissioning plans and noise and dust mitigation.

68. In response to concerns from Council and ACT EPSDD, WSF also considered the compatibility of the project with the future urban release area of Ginninderry Estate south-west of the site. WSF concluded that the potential noise and visual impacts of the project on Ginninderry, if developed, would be acceptable.

69. The Department notes that the project's location aligns with the relevant technical and commercial factors required for selecting suitable sites for large-scale solar energy development under the NSW Government's *Large-Scale Solar Guideline 2022*, and based on the findings of the EIS, the project would not result in any unacceptable impacts on the local community or the environment.

70. Overall, the Department considers that the project would be unlikely to generate any significant land use conflicts and would be compatible with existing and future land uses.

5.3 Visual

71. Concerns about visual impacts were raised in 43 public submissions, including from a number of residents in proximity to the site within NSW and the ACT. These concerns included potential impacts on the visual landscape and scenic quality of the region, as well as glint and glare impacts.

72. WSF provided a Landscape and Visual Impact Assessment with the EIS, and additional photomontages assessing the amended application.

73. The Department visited the site and nearby non-associated residences to assess visual impacts and to further understand residents' concerns.

74. The Department has assessed the proposed development against the provisions of the *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.

5.3.1 Visual context

75. The project site is located within a largely cleared agricultural landscape that is heavily disturbed by grazing and occasional cropping with scattered rural dwellings. The project site has been extensively cleared of trees and has been highly modified by historic farming practices.

76. Land surrounding the project site is also predominantly cleared agricultural pasture land with generally flat to gently undulating topography, interrupted by isolated knobs and low hills. Several creeks and alluvial plains containing riparian corridors surround and intersect the site, as well as limited areas of remnant patchy woodlands on undulating hillsides.

77. Areas north of the site comprise low density rural residential lots, while approximately 750 m east of the development footprint is the urban residential areas of Dunlop and MacGregor.

78. The closest non-associated residences in NSW (R3 and R5) are located within 500 m of the development footprint. The closest non-associated residence within the ACT (R8) is located approximately 680 m from the development footprint (see **Figure 5**).

79. The Bicentennial National Trail is located immediately adjacent to the south-eastern boundary of the project site, while the West Belconnen Pond and parkland is located approximately 530m east of the development footprint, which are used for walking, biking and horse riding.

5.3.2 Visual mitigation

80. Following feedback from the Department, WSF proposed additional visual mitigations, including a reduction in the solar array area, and the addition of further screening vegetation.

81. Landscape planting would be provided at locations around the perimeter of the solar array to soften and fragment views of the project. The proposed landscape planting is shown in **Figure 6**, with further detail provided in the Landscape Treatment Strategy prepared as part of the EIS.

82. WSF has proposed the following avoidance and mitigation measures to reduce the potential visual impacts on surrounding receivers:

- amended the project to reduce the solar array area, reducing the visual impacts associated with the development;
- establishing vegetation screening between the project site and sensitive receivers;
- preparation and implementation of a landscape management plan to guide plant selection, planting locations and ongoing maintenance of the vegetation screening;
- use of fast-growing and native tree species as recommended by the Ginninderra Catchment Group, as well as planting of shrubs in consideration of biodiversity and pollinator benefits;
- solar array operating conditions limiting panel angles to between 0° and ±5° between the hours of 5:30am and 8:30am;
- use of neutral, non-reflective colours for on-site infrastructure; and
- construction compound lighting to be designed and operated in accordance with AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting.

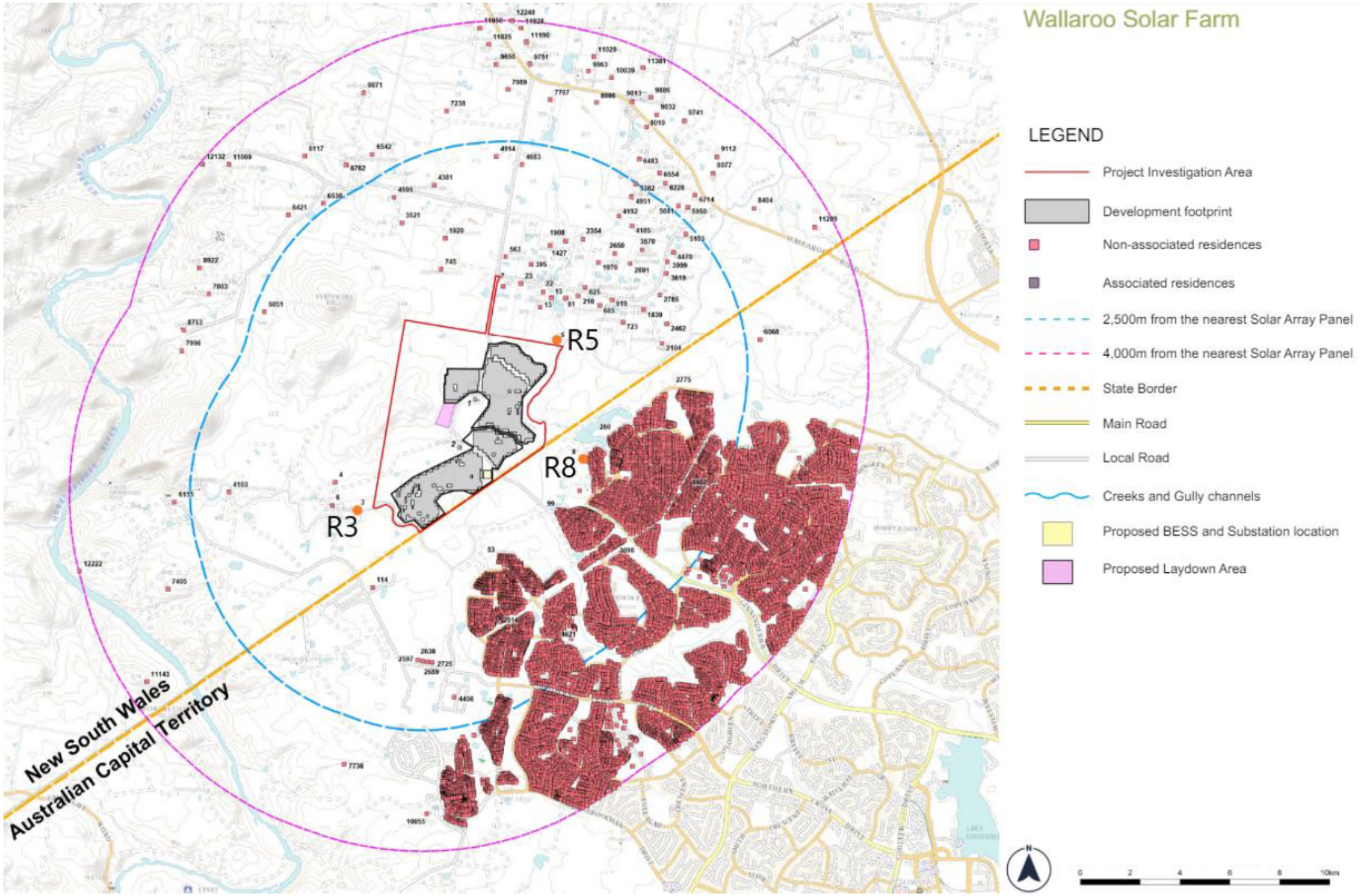


Figure 5 | Nearby non-associated residences

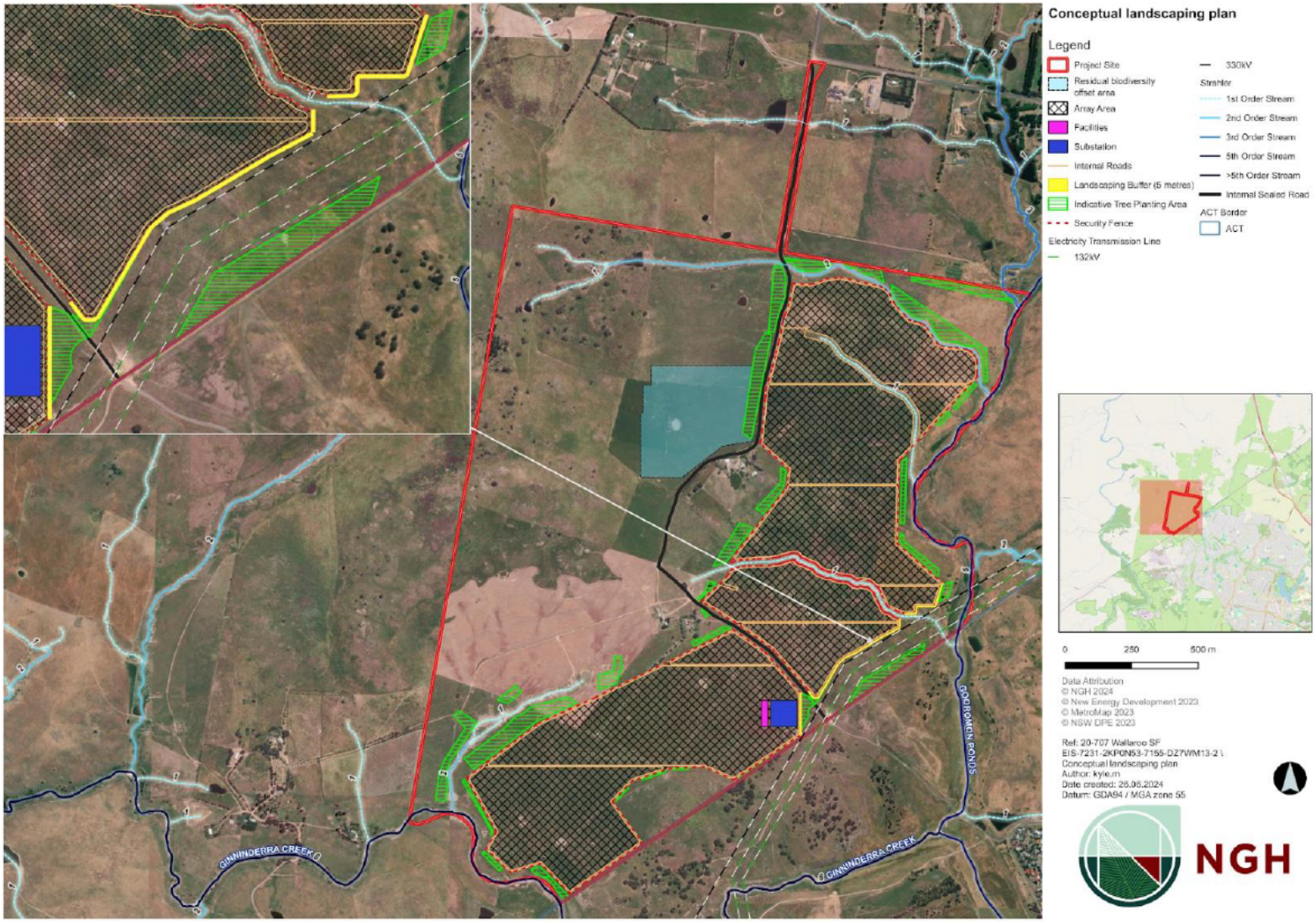


Figure 6 | Proposed Landscape Plan

5.3.3 Assessment

83. The Department has assessed the potential visual impacts of the project on the surrounding landscape character, residential receivers and public viewpoints and considers these impacts would be low. Further details of the Department's assessment are discussed in the following sections.

84. The Department considers 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.

Landscape

85. Public submissions highlight that the rural landscape is valued by the community for its scenic character.

86. The Department notes that the site topography and existing and proposed vegetation screening, would minimise views of the project from the surrounding area. Impacts on the local landscape have also been reduced through project design, including a reduction in the solar array extent.

87. 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 the development would have a limited impact beyond the project's immediate vicinity. Accordingly, the Department considers the project would have a limited impact on the broader landscape character of the region as a whole.

Residences

88. The Department acknowledges that there are a large number of residences located in proximity to the site. For this reason, consideration of the visual impacts of the project on the amenity and character of the area has been a focus for the Department,

89. 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 4.73 m high), the BESS 2.6m high, power conversion units 2.9m high, and substation.

90. Given the high density of dwellings in the ACT, views of the project for the majority of these residences would be blocked by surrounding urban structures.

91. 21 residential receptors were selected for detailed assessment, including five receptor locations representative of views from residential clusters within the ACT. Of the 21 receptors, four were identified as requiring photomontages for further detailed assessment of visual impacts.

92. Photomontages identified that one receptor representing the viewpoints of approximately 23 dwellings along James Harrison Street, would be exposed to a moderate visual impact pre-mitigation. Post-mitigation, this was reduced to a low visual impact (refer to **Figure 7**). The remaining receptors were assessed as having low or very low visual impact pre-mitigation.

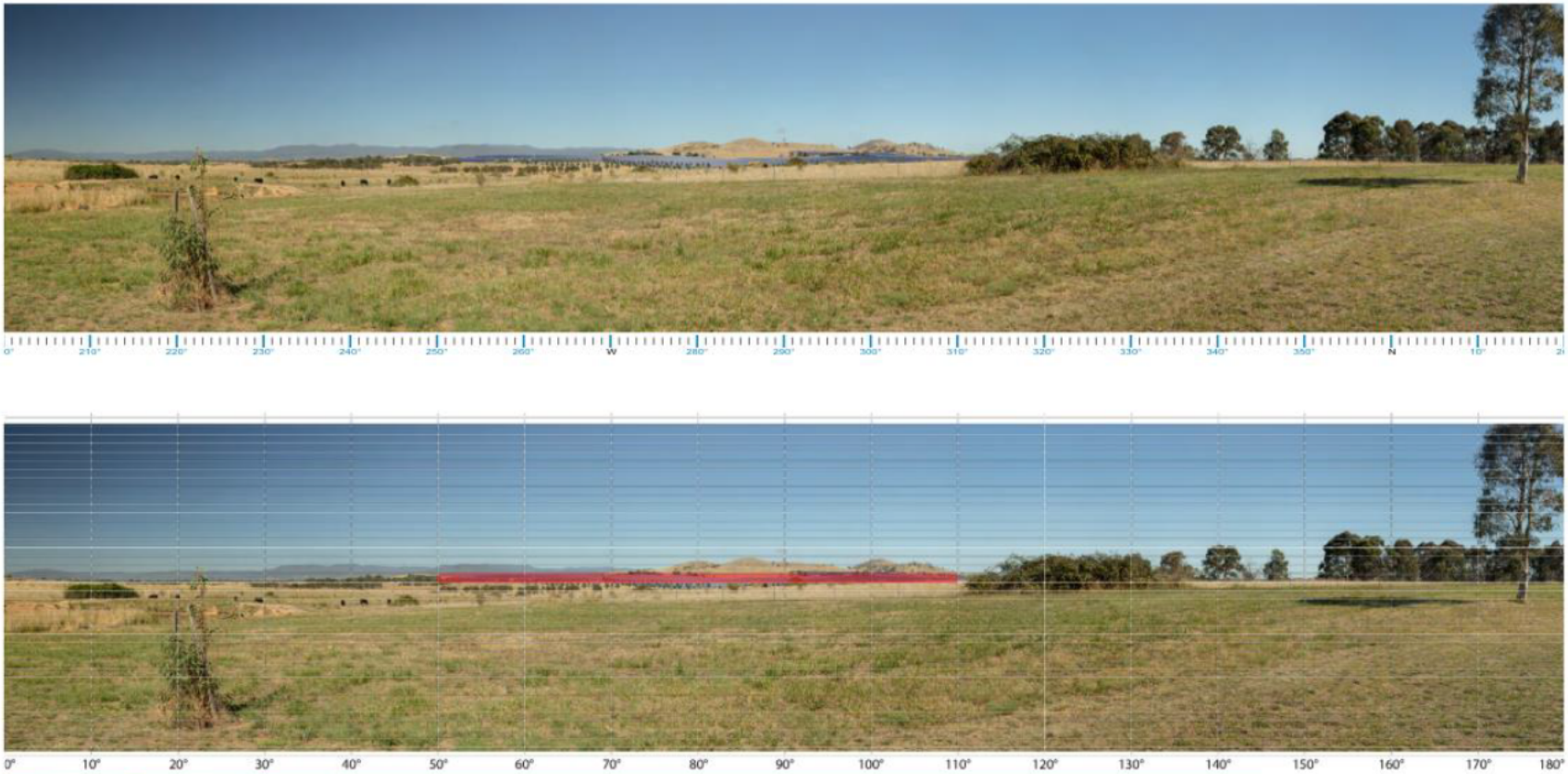
93. A summary of the visual impact assessment for each of the 21 residential receptor locations is provided in **Table 7**.

94. The Department considers that both the direct and cumulative visual impacts on all potentially affected residences would be low, very low or nil, due to the separation distance, the undulating topography of land surrounding the site, the high density of dwellings blocking views within residential areas and intervening existing and proposed vegetation, which is consistent with the requirements of the *Large-Scale Solar Energy Guideline* (2022) and accompanying *Technical Supplement - Landscape and Visual Impact Assessment*.

95. The Department has assessed the potential cumulative visual impacts from further renewables projects in the region. With the closest renewables project being Springdale Solar Farm, approximately 17km north-east of the WSF site, there would be no cumulative visual impacts due to distance, topography and intervening vegetation.

Photomontage 02- Mitigation - Visual Impact Rating: Low

Indicative Vegetation Screening at 5 years



Mitigation and Residual Impact Discussion

An assessment based on visual magnitude grid tool over the mitigated photomontage indicates a **Very Low** magnitude rating and a **Low** visual impact rating from this location.

Coordinates	Distance to development:	Viewpoint Type:	Viewpoint Sensitivity:	Scenic Quality:	Overall Sensitivity:	Occupied Cells:	Magnitude Rating:	Visual Impact Rating:
35°11'32.57"S 149° 0'49.16"E	660m	Representative Viewpoint	High	Moderate	High	6	Very Low	Low

Figure 7 | Post-mitigation photomontage - James Harrison Street representative viewpoint

Table 7 | Summary of visual impacts to residences

Receptor ID and (distance from development)	Receptor Type	WSF's visual impact rating	Department's assessment
5 (327m)	Residential	Low	• Topography would limit views of the solar array from the residence, resulting in low visual impacts. Proposed vegetation plantings would further mitigate views of the project.
260 (993m)	Representative (12 dwelling cluster accessed through Percy Begg Cct)	Low	• Existing vegetation surrounding West Belconnen Pond would fragment views of the solar array from residences along Percy Begg Cct, resulting in low visual impacts. Proposed vegetation plantings would further mitigate views of the project.
8 (680m)	Representative (23 dwelling cluster accessed through James Harrison St)	Pre-mitigation: Moderate Post-mitigation: Low	• Views to the majority of the project would be available to residences along James Harrison St. Existing roadside planting close to the residences would fragment these views. The unmitigated visual impact rating for these residences was assessed as moderate. • Screen planting is proposed along the eastern development footprint boundary, reducing the potential visual impact from moderate to low.
99 (899m)	Representative (27 dwelling cluster accessed through McDonnell Cl/Grove Pl/ Loxton Pl)	Low	• Topography and existing scattered vegetation along Ginninderra Creek would limit views of the project from Hugh McDonnell Cres. Potential views of elevated parts of the project would be available from residences. The visual impact rating for these residences was assessed as low. Proposed vegetation plantings would further mitigate views of the project.
53 (827m)	Representative (54 dwelling cluster accessed through Hilda Kincaid Cres/MacFarlane Burnet Ave/ Refshauge Cres/Hollos Cct)	Low	• Topography and existing scattered vegetation on the intervening paddocks and along Ginninderra Creek limit views of the project from this representative viewpoint, resulting in low visual impacts. Proposed vegetation plantings would further mitigate views of the project.

Receptor ID and (distance from development)	Receptor Type	WSF's visual impact rating	Department's assessment
114 (936m) **3 (471m)** **13 (549m)** **23 (767m)** **210 (950m)** **61 (860m)** **7 (695m)** **15 (724m)** **22 (732m)** **4 (723m)** **6 (754m)**	Residential	Low	• Topography and/or existing vegetation would limit the extent of the solar array visible from these residences, resulting in a low visual impact. Proposed vegetation plantings would further mitigate views of the project.

Public recreation areas and viewpoints

96. Ten public receptor viewpoints were assessed, including three viewpoints along the Bicentennial National Trail, one viewpoint from West Belconnen Pond and the remaining viewpoints from local roads and playgrounds.

97. The three Bicentennial National Trail viewpoints and the West Belconnen Pond viewpoint were all assessed as Recreational Areas in accordance with the *Large Scale Solar Guideline Technical Supplement*. The three Bicentennial National Trail viewpoints were identified as experiencing moderate visual impacts pre-mitigation (PM5, PM5A, PM6A). Post-mitigation, each of these viewpoints were assessed as experiencing low visual impacts. The remaining public receptor viewpoints were all assessed as experiencing low or very low visual impacts.

98. The project proposes establishing screen planting to mitigate views from the Bicentennial National Trail. Photomontages for each of the Bicentennial National Trail viewpoints are provided as **Figures 8 to 10**.

99. The project would not be visible from any major transport routes.

100. Overall, all public views are assessed as having low visual impacts.

Figure 8 | PM5 post-mitigation photomontage – Bicentennial National Trail

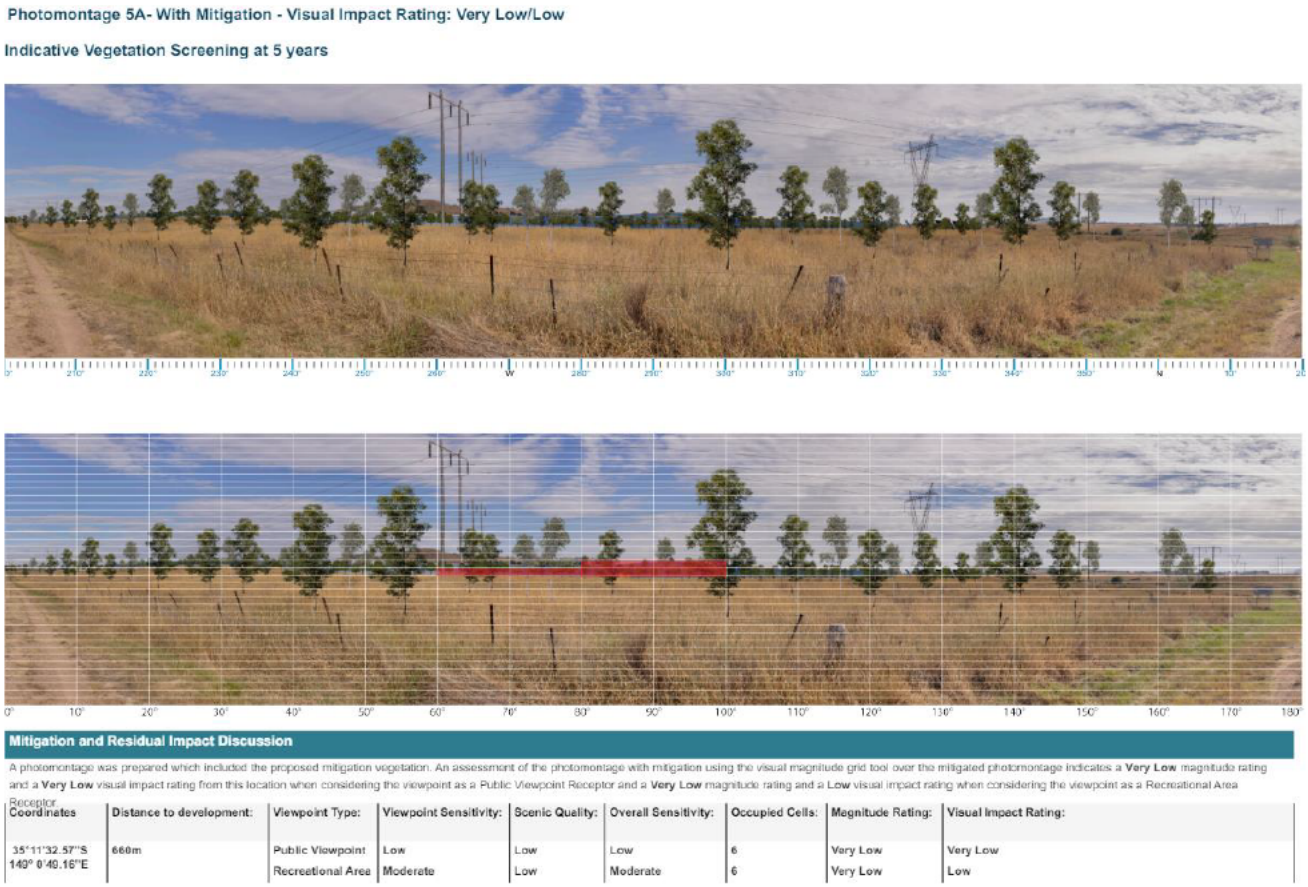


Figure 9 | PM5A post-mitigation photomontage– Bicentennial National Trail

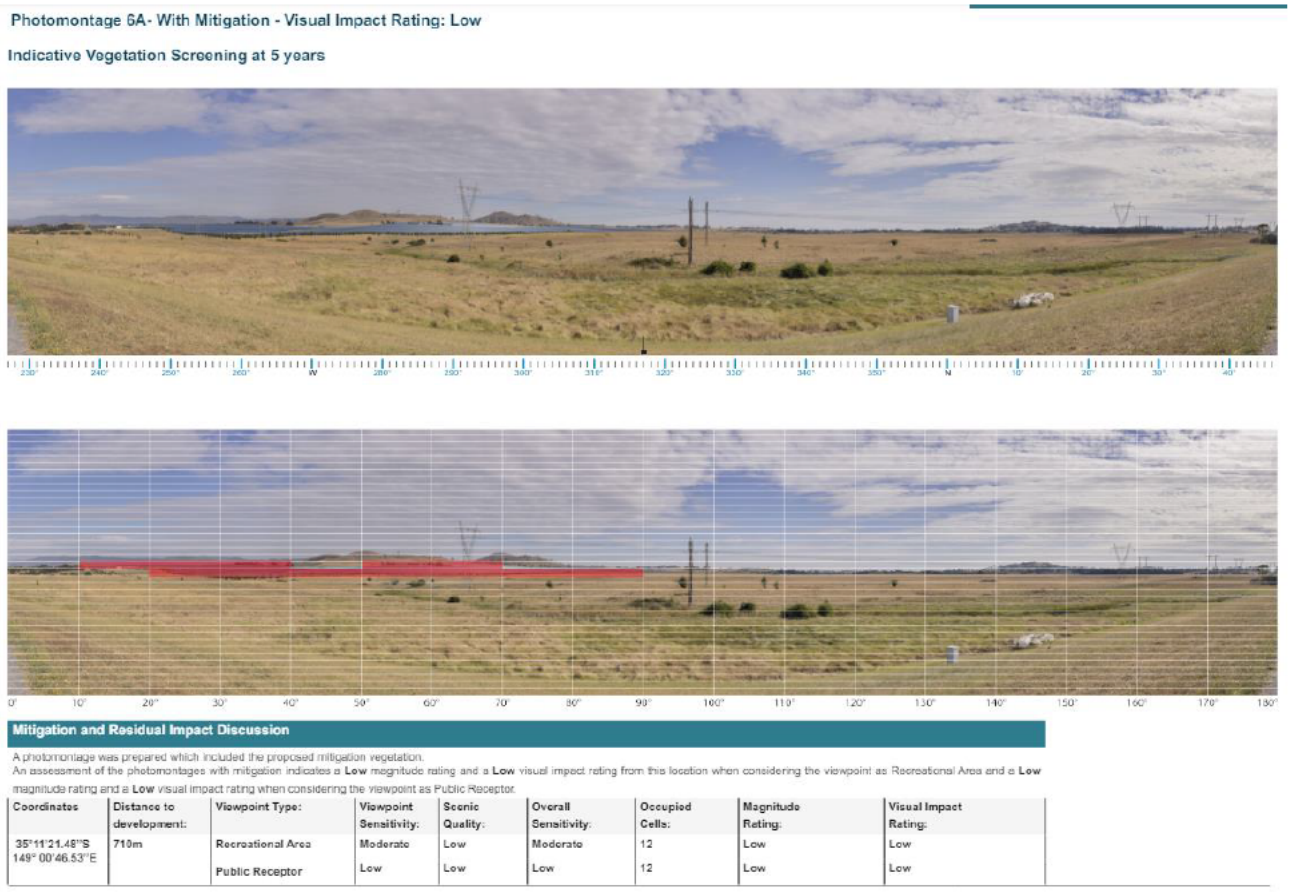


Figure 10 | PM6A post-mitigation photomontage – Bicentennial National Trail

Glint and Glare

101. 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.

102. WSF's glint and glare analysis, which is based on a worst-case scenario, identified the potential for moderate to high temporary glare to be experienced by 12 residential receptor locations, predominantly to the north east of the project site within NSW, and to the east of the project site within the ACT. The analysis also identified that 11 route receptors (Clendinnen Street, Gooroomon Ponds Road, Gordon Withnall Cres, James Harrison Street, Lance Hill Ave, Parkwood Road, Percy Begg Cct, Scurry Street, The Bicentennial National Trail, Toff Street and Waterworth Street) and one flight point (FP01), would have the potential to experience glint and glare.

103. At the request of the Department, WSF prepared an addendum glint and glare assessment to assess the effectiveness of additional operational controls to reduce potential glare. This included solar panel tracking controls to restrict panels operating at low angles (0° to 5°) between the hours of 5:30am and 8:30am to avoid potential glare generation.

104. The results indicated that by utilising these operational controls, no receptors would be unacceptably impacted by glint and glare, with low to nil glint and glare produced by this method.

105. The Department is satisfied that with the implementation of these measures, the project would not cause unacceptable glint or glare to nearby receivers.

5.3.4 Recommended Conditions

106. To address the potential residual visual impacts of the project, the Department has recommended a range of conditions requiring WSF to:

- establish and maintain the proposed vegetation buffer identified in **Figure 3** over the life of the project;
- limit the operation of solar panel backtracking to angles between 0° and ±5° between the hours of 5:30am and 8:30am;
- minimise the off-site visual impacts of the development and ensure the visual appearance of all ancillary infrastructure blends in as far as possible with the surrounding landscape;
- not mount any advertising signs or logos on site; and
- minimise the off-site lighting impacts of the development.

5.4 Other issues

107. The Department's consideration of other issues is summarised in **Table 8**.

Table 8 | Assessment of other issues

Issue	Recommended conditions
Biodiversity	
• The project site covers an area of 393ha, which includes a development footprint of 165.45 ha. • The site has been largely cleared of native vegetation for agricultural use. • Approximately 279.21ha of the project site is classified as non-native vegetation, with 89.46 ha comprising native vegetation. • The development footprint is located entirely within areas of non-native vegetation classified as Category 1 – Exempt land. All native vegetation has been avoided by the project. • Three PCTs occur within the project site, including two PCTs identified as threatened ecological communities (PCT 277 'Blakely's Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion' and PCT 282 'Blakeley's Red Gum – White Box – Yellow Box - Black Cypress Pine box grass/shrub woodland on clay loam soils on undulating hills of central NSW South Western Slopes Bioregion'). These areas have been avoided and do not result in the generation of any ecosystem credits. • BCS reviewed the BDAR and raised concerns around the survey efforts undertaken in relation to the Striped Legless Lizard, noting that the species is known to use nearby non-native vegetation similar to that present on the site. • In response, the applicant amended the BDAR to assume presence for the Striped Legless Lizard in 180.32ha of the Category 1 – Exempt land within the development footprint. 167 species credits have been generated by assuming presence for this species. • WSF has committed to a range of measures to avoid and further minimise impacts on native vegetation, including avoiding disturbance of 15 ha north-west solar array field removed from the amended project, temporary fencing to protect significant environmental features such as riparian zones during construction and additional vegetation plantings adjacent to the Jarramlee Nature Reserve to minimise off-site impacts associated with disturbance of soils and overland flows. • BCS was satisfied that the updated BDAR adequately addressed its previous comments. BCS supported the assumed presence and associated species credits to be offset and provided recommended conditions of consent. • Overall, the Department considers that the project appropriately avoids impacts to biodiversity values through sound project design and, subject to the implementation of recommended conditions, would not result in a significant impact on biodiversity, including no serious or irreversible impacts to biodiversity values.	• Retire the applicable biodiversity offset credits in accordance with the NSW Biodiversity Offsets Scheme. • Prepare and implement a Biodiversity Management Plan in consultation with BCS, including measures to protect and manage vegetation and fauna habitat.

Issue	Recommended conditions
Traffic	
• The project has the potential to impact local and site roads, primarily during construction. • Traffic accessing the site would do so via the Barton Highway. Vehicles would then utilise Wallaroo Road, Gooroomon Ponds Road and Southwell Road to enter the northern boundary of the project site. • The heavy vehicle transport route during construction would be coming from Port Botany and would be via Hume Highway, Federal Highway and Barton Highway. To avoid urban traffic conditions in Canberra it is most likely the over size and over mass (OSOM) vehicles would use an alternative northern access route from the Hume Highway via Yass Valley Way and then the Barton Highway. • The main increase in traffic volumes would occur during the construction period, with the site generating up to 90 vehicle movements a day during peak construction including 32 heavy vehicle movements. In addition, approximately six OSOM vehicles would access the site during construction. Operational traffic would be infrequent and generally minimal. • Overall, the proposed transport route has sufficient capacity for the predicted traffic generation. • After consulting with Council, road upgrades would be required for the Southwell Road and Gooroomon Ponds Road intersection and would include sealing a portion of Southwell Road. Additional permits for B-Double use and road weight limit exceedances would be required for Wallaroo Road and Gooroomon Ponds Road. Temporary changes to weight limits for project traffic are to be supported by a geotechnical review of the structural adequacy of the pavement for endorsement by Council's local traffic committee. • After consulting with Transport Canberra and City Services (TCCS), the Barton Highway and Wallaroo Road intersection would require minor widening to the westbound and southbound turning lanes, with detailed design established in future consultation with TCCS and would be subject to a separate ACT approvals process. • In response to concerns raised regarding existing weight limits on culverts on Gooroomon Ponds Road, consultation with Council was undertaken and established that weight limits on Gooroomon Ponds Road can be temporarily lifted for project traffic subject to dilapidation reports and commitments to progressive remediation of any impacts to Wallaroo Road, Gooroomon Ponds Road and Southwell Road. • The Department has consulted with TfNSW, Council and TCCS on the conditions of consent and considers that, subject to the recommended upgrades and conditions of consent, the project would not result in significant impacts to the road network capacity, efficiency or safety.	• Undertake the relevant road upgrades to intersections and site access. • Restrict the number of vehicles during construction, upgrading and decommissioning to the peak volumes identified. • Prepare and implement a traffic management plan. • Undertake an independent dilapidation survey to assess the condition of Wallaroo Road, Gooroomon Ponds Road and Southwell Road, between Barton Highway and the site access point, prior to and following completion of construction, upgrading and decommissioning activities. • Repair and/or make good any development-related damage to Wallaroo Road, Gooroomon Ponds Road and/or Southwell Road in consultation with the relevant road authority.

Issue	Recommended conditions
Heritage	
Aboriginal Cultural Heritage • One public submission raised concerns about potential impacts on Aboriginal cultural heritage. • WSF commissioned a survey of the site with representatives from six Registered Aboriginal Parties (RAPs). • The results of a surface and subsurface testing program identified 18 previously unrecorded sites, comprising 13 isolated finds and five artefact scatters of Low to Moderate archaeological value. • The development footprint was refined to avoid impacts to nine stone artefact sites. WSF has committed to salvaging the remaining sites if they cannot be avoided following detailed design work. • Buffers have been provided around the culturally sensitive landscape adjacent to Ginninderra Creek with the exception of two creek crossings. • If Aboriginal artefacts or skeletal material are identified during construction of the project, all work would cease and an unanticipated finds procedure would be implemented, as committed to by WSF in the EIS. • With these measures, the Department and Heritage NSW considers that the project would not significantly impact the Aboriginal heritage values of the locality. **Historic Heritage** • There are no items of historical heritage within or in close proximity to the site. • The assessment concluded that there would be no impact on any listed heritage item. • Council raised no concerns regarding historic heritage. • The Department is satisfied that the project would not have any adverse impacts on any items of historic heritage significance.	• Ensure the development does not cause any direct or indirect impacts on any items located outside the approved development footprint. • Salvage and relocate Aboriginal items in consultation with RAPs. • Prepare and implement an Aboriginal Cultural Heritage Management Plan in consultation with RAPs. • Cease any works and notify the NSW Police and Heritage NSW if human remains are identified over the life of the project.
Erosion and sediment control	
• Four public submissions raised concerns about potential soil and erosion impacts. • WSF has committed to preparing a Surface Water Management Plan including an Erosion and Sediment Control Plan to manage any potential impacts on surface water during construction. WSF has also committed to stabilising any areas of existing erosion on site prior to commencing construction. • The Department considers that erosion and sedimentation risks can be effectively managed through the implementation of best practice management measures outlined in the *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004).	• Minimise soil erosion in accordance with the *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004).

Issue	Recommended conditions
Water	
Surface Water • The project is located within the Murrumbidgee Catchment, and the site contains two second order streams (Gooroomon Ponds Creek and Ginninderry Creek), along with a number of smaller unnamed tributaries. • Construction of the project has potential for runoff or changes to surface water drainage. • 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. • Water quality impacts during operation are expected to be minimal with runoff from the site continuing to follow existing drainage patterns. **Flooding** • The site is subject to minor flooding during high rainfall events and high flows within tributaries and existing dams. • As the proposed site infrastructure would be located outside the primary flow paths, flood impacts are considered to be minor in all modelled events and there is not predicted to be a significant impact on existing flood behaviour as a result of the proposed works. • Parts of the site may be at risk of temporary minor flooding during high rainfall, which may pose a safety risk to onsite workers. WSF 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. • The Department has recommended conditions of consent requiring the development ensure the solar panels and ancillary infrastructure do not cause any increased water being diverted off the site or alter hydrology off site. **Groundwater** • The project requires minimal excavation for slab footings and limited excavation depths of up to 2.5 m for the substation, therefore interaction with groundwater is not predicted. • Based on the above, the Department considers the project would have a negligible impact on groundwater resources. **Fish habitat** • WSF has committed to implementing aquatic habitat mitigation measures, including the revegetation of riparian zones along Ginninderra Creek.	• Design, construct and maintain the project to reduce impacts on surface water and flooding at the site. • Ensure all works are undertaken in accordance with *Guidelines for Controlled Activities on Waterfront Land* (NRAR, 2018) and *Policy and Guidelines for Fish Habitat Conservation and Management* (2013) and the proposed aquatic habitat mitigation measures. • Infrastructure with the potential to cause pollution to waterways in the event of flooding (i.e. inverters and BESS components) be located with a minimum 500 mm freeboard above the maximum 1% AEP flood level. • WSF is to notify the Department of the final water supply sources following detailed design and prior to the commencement of construction.

Issue	Recommended conditions
• The Department and DPI Fisheries are satisfied the project would result in minimal impact to fish habitat, subject to the implementation of the proposed mitigation measures. **Water Supply** • The project would require up to 56 megalitres (ML) of water across the construction period, 40 ML of which would be for road construction and dust suppression and 16 ML would be potable water for the construction workforce. WSF has consulted with Council and Icon Water to confirm commercial access to standpipes is feasible and adequate supply is available for purchasing and vehicle cartage to supply the project. The final water supply source is to be determined prior to construction commencing. • The project would require minimal water during operation. • DPE Water is satisfied that sufficient access to viable water supplies is available. • Subject to the recommended conditions, the Department considers that the project would not result in significant impacts on water resources.	
Waste	
• WSF has identified waste treatment facilities capable of accepting the majority of waste streams produced by the development within the Yass Valley LGA and the nearby ACT. • The final quantities of waste and waste treatment facility locations to treat each specific waste stream is to be specified prior to construction. • The Department is satisfied that waste produced in association with the development is capable of being effectively managed.	• Prepare a Waste Management Plan for the construction, operation and decommissioning phases of the project.
Noise	
• Seven public submissions expressed concern about the noise impacts of the project during construction and operation. • Noise generated during construction, upgrading and decommissioning activities is predicted to be below the 'highly noise affected' criterion of 75 dB(A) in the EPA's *Interim Construction Noise Guideline* (the ICNG) at all non-associated residential receivers and construction is limited to daytime hours. • Excluding road upgrade works, construction noise would also not exceed the noise management level of 45 dB(A) for all non-associated residential receivers. • During road upgrade works, construction noise management levels would potentially be exceeded at ten non-associated residential receivers within 700 m of the Southwell Road upgrade location and one non-associated residential receiver	• Minimise noise generated by the construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG.

Issue	Recommended conditions
within the ACT during the Barton Highway upgrade works. The predicted exceedances are however based on the three loudest plant and equipment operating concurrently close to the corresponding receiver. Notwithstanding the short duration of these works (2-3 days for works within 700m of a residence), noise management practices would be implemented to reduce noise levels during these works, such as daily periods of respite from noisy activities. • Operational noise levels are predicted to be negligible and below the lowest intrusive criteria in the *NSW Noise Policy for Industry* (EPA, 2017) at all non-associated receivers, and for the Ginninderry future urban land release area within the ACT. • Road traffic noise during construction and operation would comply with the relevant criteria in the EPA's *Road Noise Policy*. • Given the large separation distances involved, the potential for vibration from construction works to impact any surrounding non-associated receivers would be very low. • WSF has committed to developing a Construction Noise Management Plan to guide construction, including consultation with affected receivers, implementation of noise mitigation measures and a complaints management procedure. • The Department is satisfied that construction and operational noise impacts can be managed within relevant criteria.	• Restrict construction hours to Monday to Friday, 7 am – 6 pm and Saturday, 8 am – 1 pm. • Comply with operational noise limits established in accordance with the *NSW Noise Policy for Industry* (EPA, 2017) at any non-associated residence. • Undertake compliance noise monitoring within three months of commencing operation.
Dust	
• 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. • 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 WSF 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.	• Monitor and minimise dust generated over the life of the project
Hazards and risks	
• The site is mapped as bushfire prone land. WSF prepared a bushfire impact assessment and would be required to comply with the RFS's *Planning for Bushfire Protection 2019*. • WSF state that the project would not present a substantial bushfire threat or represent an unacceptable hazard in the event of a bushfire affecting the project site, subjecting to the implementation of mitigation measures set out within the EIS, including: - adequate setbacks, access and firefighting facilities are maintained on site;	• The BESS must not exceed the proposed total capacity of 45 MW across the project site and must be installed in an arrangement consistent with the EIS.

Issue	Recommended conditions
- control of grass fuels including maintenance of groundcover beneath panels in addition to an area around the BESS and other ancillary infrastructure; - Proper design and maintenance of equipment - application of best practice and technical standards • 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: - measures including APZs in accordance with *Planning for Bushfire Protection 2019*; - preparation of a Fire Safety Study in consultation with FRNSW; - development and implementation of a comprehensive Emergency Plan; • WSF prepared a Preliminary Hazard Analysis (PHA) in accordance with relevant guidelines, including the *Hazard Industry Planning Advisory Paper No. 4 & 6* and *Victorian Big Battery Fire Statement of Technical Findings* (Energy Safe Victoria, 2021). The PHA concluded that the risk profile of the project was tolerable and that there was negligible risk of off-site consequences associated with project. • WSF committed to preparing a Bush Fire Management Plan, Fire Safety Plan and Emergency Response Plan for the project. • The project would comply with the *International Commission on Non-Ionizing Radiation Protection* (INCIRP) guidelines for electric, magnetic and electromagnetic fields. • Subject to the recommended conditions, the Department, FRNSW and RFS are satisfied that risks associated with the project would be minimal.	• Prepare a Fire Safety Study and an Emergency Plan for the development. • Ensure the project complies with the relevant asset protection requirements in the RFS's Planning for *Bushfire Protection 2019* and Standards for APZs. • All chemicals, fuels and oils to be stored in accordance with Australian Standards and EPA requirements.
Subdivision	
• WSF requires subdivision to create a 1 ha lot for the proposed substation, which is required for Transgrid operation. • The proposed subdivision would create a lot below the LEP minimum lot size of 40 ha. However, the LEP allows for subdivisions below the minimum lot size if the consent authority is satisfied the subdivision: - would not adversely affect the use of the surrounding land for agriculture; - is necessary for the ongoing permissible use; - would not increase rural land use conflict; and - is appropriate having regard to the natural and physical constraints affecting the land. • The Department considers that the subdivision should be approved for the following reasons: - it would not result in the creation of any additional dwelling entitlements on the subdivided lot;	• Subdivide the proposed land in accordance with requirements of the EP&A Act, EP&A Regulation and the *Conveyancing Act 1919* (NSW).

Issue	Recommended conditions
- it is consistent with the key objectives of the RU1 zone as it would encourage diversity and primary industry enterprises; - it is necessary for the operation of the substation and would minimise conflict between land uses; - the project is a permissible use in the RU1 zone; - the substation is an appropriate use of the land and its location has had regard to the natural and physical constraints affecting the land.	
Accommodation and workforce	
• Up to 200 workers would be required during the peak construction period. • Given the proximity of the project to the major population centres of Canberra, Queanbeyan and Yass, it is expected that the majority of workers (80%) would be local and therefore not require accommodation. WSF has committed to maximising local employment to reduce pressure on local accommodation and services. • WSF has identified capacity within the City of Canberra to sufficiently house the anticipated 40 non-local construction workers entering the area, however has also committed to developing an Accommodation and Employment Strategy in consultation with key local stakeholders to avoid negatively impacting on tourism opportunities, vulnerable populations who are utilising temporary accommodation, and residents seeking housing. • Council and the ACT EPSDD did not raise any concerns regarding workforce accommodation. • The Department considers that with the implementation of an Accommodation and Employment Strategy, potential impacts on housing and short-term accommodation availability can be appropriately managed.	• Prepare an Accommodation and Employment Strategy for the project in consultation with Council, with consideration to prioritising the employment of local workers
Community benefit	
• 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 200 construction workers would be required during the 6-month peak construction period; - expenditure on accommodation and business in the local economy by workers who would reside in the area; - the procurement of goods and services by WSF and associated contractors; and - the development and implementation of a Local Participation Plan in consultation with key local stakeholders would maximise the involvement of local people and businesses while also mitigating potential local impacts. • The Department considers that the project would not result in any significant or widespread reduction in land values in areas surrounding the project.	• WSF implement its offer to enter into a VPA with Council. • Prepare an Accommodation and Employment Strategy for the project in consultation with Council, with consideration to prioritising the employment of local workers

Issue	Recommended conditions
• The Department notes that the Insurance Council of Australia is not aware of any instances where Insurance Council members have been unable to provide insurance or have increased premiums as a result of a farm (or a neighbouring property) hosting energy infrastructure. • Further, WSF has reached an in-principle agreement with Council to enter into a VPA. The VPA consists of: - a lump sum payment of $150,000 on commencement of construction; and - an annual payment of $55,000 during operation of the project. • WSF has also committed to utilising the Localvolts platform to provide discounted renewable energy to local residents. • Noting the above, the Department considers that the project would provide economic benefits for the local community and region.	
Cumulative Impacts	
• An assessment has been completed with reference to the *Cumulative Impact Assessment Guidelines for State Significant Projects*. Potential cumulative impacts have been identified with Springdale Solar Farm, Yass Solar Farm, Gunning Solar Farm, and Rye Park Solar Farm due to their proximity to the project site. • WSF has undertaken a cumulative impact assessment considering potential traffic impacts, noise impacts, visual impacts, biodiversity, land compatibility, and pressure on accommodation, facilities, goods and services. • The relative distances of each project in respect of one another, as well as the staggered timeline of development largely negates potential cumulative impacts. WSF has also indicated that there is potential for positive cumulative economic effects from the construction of multiple developments in the area for local businesses and employees. • The Department has recommended various conditions that require consideration of potential cumulative impacts, including a requirement to prepare an Accommodation and Employment Strategy and Traffic Management Plan. • Subject to the implementation of the recommended conditions, the Department is satisfied that the project has been designed to minimise potential cumulative impacts.	• Prepare an Accommodation and Employment Strategy for the project in consultation with Council. • Prepare a Traffic Management Plan for the development in consultation with TfNSW, Yass Valley Council, and Transport Canberra.
Decommissioning and rehabilitation	
• 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.	• Include rehabilitation objectives requiring the site to be rehabilitated within 18

Issue	Recommended conditions
• The *Large-Scale Solar Energy Guideline* 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). • WSF has acknowledged Council concerns regarding contamination from battery storage, and has proposed a suite of management plans be developed to ensure site and project specific responses are provided to avoid potential contamination. • 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.	months of cessation of operations.

6 Evaluation

108. The Department has assessed the development application, EIS, Submissions Report, Amendment Report and additional information and has carefully considered:

- submissions received from members of the community;
- comments provided by Council and the ACT EPSDD; and
- advice received from State and local Government agencies.

109. The Department has also considered the objectives of the EP&A Act, including Ecologically Sustainable Development principles, and relevant considerations under section 4.15(1) of the EP&A Act. The Department has given consideration to WSF's evaluation of the project's merits against applicable statutory and strategic planning requirements.

110. The site is wholly located on land zoned RU1, where electricity generating works are permissible with consent under the provisions of the Transport and Infrastructure SEPP. The site is located in an area traditionally used for agricultural practices adjacent to the ACT border. The site has good solar resources, direct access to the regional road network and the electricity network via the Transgrid transmissions lines that traverse the site with available capacity. The key constraint for the site is its proximity to the urban area of Dunlop and rural residential area of Wallaroo.

111. The project has been designed to largely avoid key constraints, including amenity impacts to nearby non-associated residences, agricultural land, watercourses, biodiversity and Aboriginal heritage sites. Notably, the project has avoided all impacts to native vegetation through sound project design. Any residual impacts would be relatively minor and can be managed through the recommended conditions of consent.

112. 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. The siting of the project is consistent with key government strategic planning guidance, including the *Large Scale Solar Energy Guideline* (2022) and the *South East and Tablelands Regional Plan 2036*, which seeks to position the region as a hub of renewable energy excellence. The project would also maintain agricultural use of the land through ongoing grazing of the site, while limiting the potential for residential development or other conflicting land uses to occur, consistent with the recommendations of the *Yass Settlement Strategy 2036*.

113. The project would not result in any significant reduction in the overall agricultural productivity of the region. Following decommissioning, the site could return to agricultural production as the inherent agricultural capability of the land would not be affected in the long term.

114. Despite the large number of residences located in proximity to the site, the Department considers that impacts on visual amenity and landscape character would be low, due to the undulating topography and vegetation providing screening, additional vegetation screening proposed by the

applicant, proposed operating conditions, and setbacks from solar arrays and the public road network. Although views of sections of the solar array would still be possible from some residences and sections of the Bicentennial National Trail, the Department does not consider the broader landscape character of the area would be significantly affected.

115. To address the residual impacts including traffic and transport, Aboriginal heritage, 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.

116. 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.

117. 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 100 MW of clean electricity, which is enough to power approximately 40,000 homes, and 45 MW of energy storage to dispatch energy to the grid when the energy generation from renewable resources is limited.

118. 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.

119. 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**).

120. This assessment report is hereby presented to the Commission to determine the application.

Prepared by:

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Recommended by:

[redacted] 27/06/2024

Iwan Davies
Director
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[redacted] 27/06/2024

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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/wallaroo-solar-farm

Appendix H – Consideration of community views

The Department publicly exhibited the EIS from 24 May 2023 to 20 June 2023, advertised the exhibition in the Yass Valley Times and Canberra Times and notified landowners adjacent to the project boundary. The Department received 97 unique submissions from the community, including 88 objections, five support and four comment.

The Department consulted with government agencies, Yass Valley Council and the ACT Environment, Planning and Sustainable Development Directorate 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, visual amenity, impacts on ecology and biodiversity, and land devaluation.

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

Issue	Consideration
Compatibility of the proposed land use • Loss of agricultural land • Impacts on neighbouring agricultural activities (including weeds, pests, soil and erosion) • Impacts on neighbouring residential land use	**Assessment** • The site is zoned RU1- Primary Production under the Yass Valley LEP, where the project is permitted with consent under the Transport and Infrastructure SEPP. • The site was classified as Land Class 4 and Class 5, being land of moderate and moderate-low capability, indicating that agricultural uses are largely restricted to moderate to low impact uses such as grazing and occasional cultivation for fodder crops. There is no mapped BSAL or State Significant Agricultural Land present within or surrounding the site. • The potential cumulative impacts of the project and other approved and/or operational SSD solar farms on agricultural land in the South East and Tablelands region of NSW would be approximately 1,471 ha. The loss of 1,471 ha of agricultural land represents a tiny fraction (0.04%) of the 3.3 million ha of land in the region currently used for agricultural output. • The site would continue to be used for grazing purposes during operation and is to be returned to agricultural use following decommissioning. Accordingly, the Department is satisfied that the project would not result in any significant reduction in agricultural productivity of the region or of local agribusiness. • Measures would be implemented to manage potential impacts on adjoining agricultural operations, including strict land management measures to control weeds, erosion and sediment controls, and noise and dust controls. • Impacts on neighbouring residential land uses have been assessed and predicted to be minimal, with noise levels predicted to meet relevant criteria, and all visual receptors assessed as experiencing low to very low visual impacts post-mitigation. **Recommended Conditions:** • Restore land capability to pre-existing use. • Restore the groundcover of the site following construction or upgrading, maintain the groundcover with appropriate perennial species and manage weeds. • Minimise any soil erosion associated with the construction, upgrading or decommissioning of the development. • Ensure that the development does not cause any water pollution. • Ensure that noise associated with the construction, operation, upgrading and decommissioning of the project complies with the relevant noise criteria. • Minimise dust generated by the development.
Visual Amenity • Impacts on landscape views and rural character • Glint and glare impacts	**Assessment** • The project has been designed to minimise potential impacts on surrounding receivers and has been amended to reduce the extent of the solar array, reducing visual impacts. • All residential and public viewpoint locations within 4km of the development footprint were assessed as experiencing low to very low visual impacts following the

Issue	Consideration
	implantation of mitigation, including planting of a vegetation buffer around the project boundary. • WSF has committed to establishing the vegetation buffer prior to commencing operations and maintaining it throughout the life of the project. • The potential for glint and glare at nearby receptors and the public road network has been mitigated through the implementation of an operational control on the solar array panels. • 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 the development would have a limited impact beyond the project's immediate vicinity. Accordingly, the Department considers the project would have a limited impact on the visual landscape character of the region as a whole. **Recommended Conditions:** • Minimise and mitigate the off-site visual impacts of the development, including the potential for any glare or reflection. • Limit the operation of solar panel backtracking to angles between 0° and ±5° between the hours of 5:30am and 8:30am. • Establish and maintain a vegetation buffer to minimise views from nearby receivers. • Ensure the visual appearance of all ancillary infrastructure blends in with the surrounding landscape, where reasonable and feasible.
Impacts on Ecology and Biodiversity • Wildlife and vegetation impacts • Erosion and soil impacts	**Assessment** • The project has been designed so that no clearing of native vegetation is required. • The proposed development would generate 167 species credits under the BC Act to be offset for the Striped Legless Lizard, which has been assumed present at the site. • Overall, the Department considers that the project is unlikely to result in a significant impact on biodiversity values. **Recommended Conditions:** • WSF must not clear any native vegetation or fauna habitat located outside the approved disturbance areas. • Retire the applicable biodiversity offset credits. • Prepare and implement a Biodiversity Management Plan in consultation with BCS.
Land Devaluation • Concern for the potential devaluation of properties in proximity of the solar farm	• The project is permissible within the land zoning and is consistent with relevant environmental planning instruments and energy policy framework. • The site is considered suitable for the development due to its good solar resources, direct access to the regional road network and the electricity network. • The project is not predicted to result in any unacceptable offsite impacts to the amenity or safety of the surrounding environment or community, and is considered to be compatible with surrounds land uses.

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 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. WSF 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 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.

Summary
Consideration of the sustainable management of built and cultural heritage (Object 1.3(f)) is also provided in section 5.4 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.
State significant development
Under Section 4.36 of the EP&A Act the project is 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 and Council objected to the application.
Environmental Planning Instruments (EPIs)
The *Yass Valley Local Environmental Plan 2013* (the LEP) applies to the extent of determining the permissibility of the project. The project is located in the RU1 land use zone under the LEP and is permissible with consent under the provisions of the Transport and Infrastructure SEPP. In accordance with the Transport and Infrastructure SEPP, the Department has given written notice of the project to Transgrid and TfNSW (s2.48). The Department has considered the advice received and, where appropriate, developed conditions of consent to address the recommendations and advice of these authorities. The Department considers that such conditions would provide appropriate protection for public infrastructure. The development does not have frontage to any classified roads (s2.119). WSF completed a preliminary risk screening in accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP) and confirmed the project was not categorised as potentially hazardous or potentially offensive development (Ch 3). A preliminary hazard analysis (PHA) prepared for the project concluded the risk profile of the project was tolerable and that there was negligible risk of off-site consequences associated with project. WSF has committed to implementing all controls recommended by the PHA. Accordingly, the Department is satisfied that the proposed development is not potentially hazardous or potentially offensive development and does not pose an unacceptable risk to community or environment. The Department has also considered the contaminated land provisions of the Resilience and Hazards SEPP (Ch 4), noting that 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. WSF has committed to implementing management plans which would minimise the potential for contamination of the site associated with the development.