

STATE SIGNIFICANT DEVELOPMENT ASSESSMENT *Hillston Solar Project (SSD 7955)*

1. BACKGROUND

Overland Sun Farming Pty Ltd (the Applicant) proposes to develop a new 85 megawatt (MW) solar farm (the project) near Hillston (see **Figure 1**) in the Carrathool Shire Council local government area.

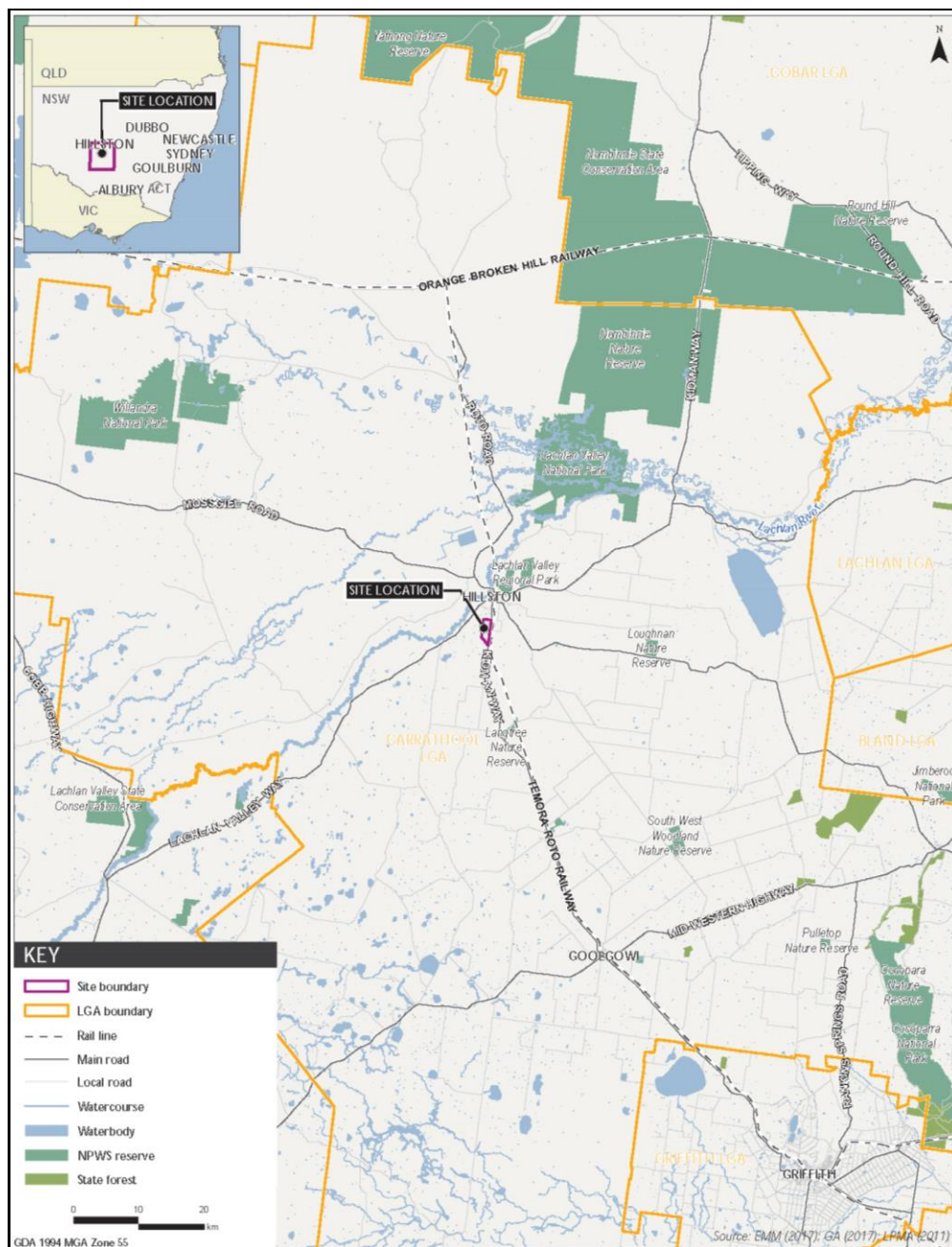


Figure 1: Regional Context

1.1 Project setting

The project is located on a 393 hectare (ha) site along Kidman Way, around 3.5 kilometres (km) south of Hillston, in the Riverina region of south-western NSW.

The site is immediately to the south of Essential Energy's Hillston Substation and adjacent to the Temora-Roto railway line, which is located on the opposite side of Kidman Way. Hillston Airport, operated by Carrathool Shire Council is located 2.1 km north of the site.

The site is located within the floodplain of the Lachlan River on relatively flat land that has largely been cleared for agricultural purposes. The site is zoned RU1 – Primary Production and is currently used for cropping.

There are 20 residential dwellings located within 3 km of the site, with the nearest dwelling located approximately 700 metres (m) north of the development footprint.

The development footprint within the site is 293 ha and has been designed to minimise clearing of the remnant vegetation present in isolated patches and along the boundaries of the site (see **Figure 2**). The project would result in the removal of 1.88 ha of native vegetation, however this vegetation is not listed as threatened or vulnerable under the NSW *Threatened Species Conservation Act 1995* (TSC Act).

1.2 Project description

The project involves the construction of a new solar farm with an initial capacity of 85 MW. It also involves any upgrading or decommissioning of infrastructure and equipment in the future. While the capacity of the proposed solar farm may increase over time as technology improves, the footprint of the development would not increase.

The key components of the project are summarised in **Table 1**, depicted in **Figure 2** and described in detail in the environmental impact statement (EIS) for the project (see **Appendix B**).

Table 1: Major components of the project

Aspect	Description
<i>Project summary</i>	<p>The project includes:</p> <ul style="list-style-type: none"> • approximately 300,000 solar panels mounted on single axis-tracker frames (2 m high) and 38 inverter stations (2.5 m high) • a switchboard building and onsite substation; • internal access tracks, staff amenities, offices, car parking, laydown areas, security fencing; • a 300 m overhead transmission line (21 m high) connecting the onsite substation to Essential Energy's Hillston Substation; and • vegetation screening along Kidman Way and north western boundary.
<i>Project area</i>	393 ha (with a 293 ha development footprint)
<i>Access route</i>	Access to site would be off Kidman Way, with significant portions of heavy vehicle deliveries coming from Melbourne via either the Mid-Western Highway and/or Kidman Way.
<i>Site entry</i>	Northern and southern entry points off Kidman Way.
<i>Road upgrades</i>	Two new intersections on Kidman Way for the northern and southern entry points.
<i>Operational life</i>	<ul style="list-style-type: none"> • The expected operational life of the initial infrastructure is approximately 30 years. However, the project may involve infrastructure upgrades that could extend the operational life. • The project also includes decommissioning at the end of the project life, which would involve removing all above ground infrastructure.
<i>Construction traffic and timeframe</i>	<ul style="list-style-type: none"> • The total construction period would last for up to 12 months, with a four-month peak construction period, and would include a maximum of 45 light and 28 heavy vehicles a day during the peak period and up to 30 light and 16 heavy vehicles a day during the non-peak period. • Four oversized vehicle movements are also required. • Construction hours would be limited to Monday to Friday 7am - 6pm, and Saturday 8am - 1pm.
<i>Hours of operation</i>	<ul style="list-style-type: none"> • The solar farm would operate during the day. • Daily operations and maintenance by site staff would be undertaken Monday to Friday 7am to 6pm and Saturday 8am - 1pm.
<i>Employment</i>	Up to 150 construction jobs and 5 operational jobs.
<i>Capital investment value</i>	\$100 million

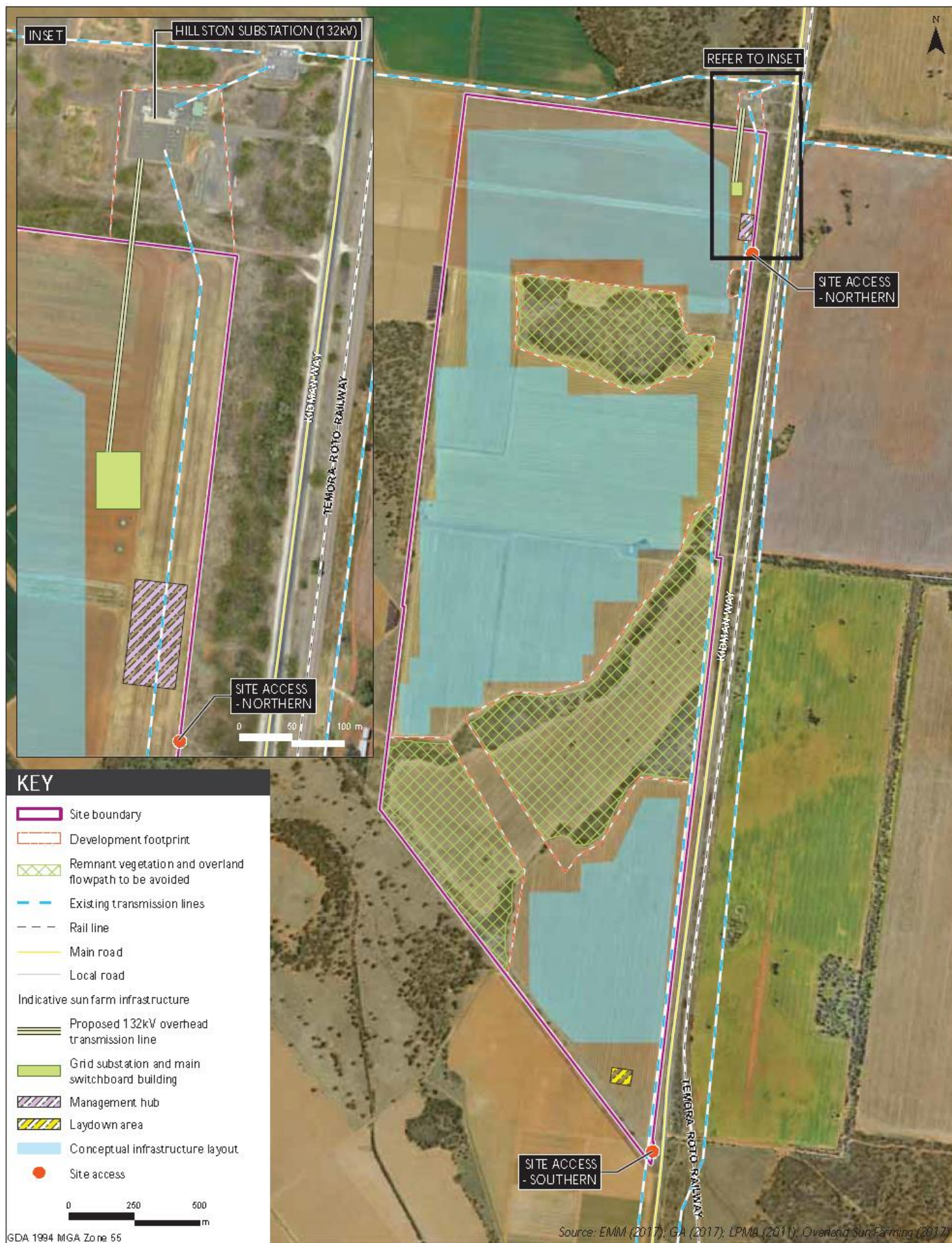


Figure 2: Project Layout

1.3 Strategic context

In 2016, NSW derived approximately 19.6% of its energy from renewable sources. The rest was derived from fossil fuels, including 75.8% from coal and 4.6% from gas. However, there are currently no plans for the development of new coal power stations in NSW, and the development of renewable energy sources, like wind and solar farms, is experiencing rapid growth.

This is highlighted in the recently released *Independent Review into the Future Security of the National Electricity Market* (the Finkel Review), which outlines a strategic approach to ensuring an orderly transition from traditional coal and gas fired power generation to renewable energy with lower emissions. It notes that Australia is heading towards zero emissions in the second half of the century.

The *United Nations Framework Convention on Climate Change* (UNFCCC) has adopted the Paris Agreement, which aims to limit global warming to well below 2°C, with an aspirational goal of 1.5°C. Australia's contribution towards this target is a commitment to reduce greenhouse gas emissions by 26% to 28% below 2005 levels by 2030.

One of the key initiatives to deliver on this commitment is the Commonwealth Government's *Renewable Energy Target* (RET). Under this target, more than 20% of Australia's electricity would come from renewable energy by 2020. It is estimated that an additional 6,000 MW of new renewable energy capacity will need to be built by 2020 to achieve the *Renewable Energy Target*.

The *NSW Climate Change Policy Framework*, released in November 2016, sets an aspirational objective for NSW to achieve net zero emissions by 2050. The NSW Government also has a *Renewable Energy Action Plan*, which promotes the development of renewable energy in NSW.

NSW is currently leading Australia in large-scale solar, with four major operational projects, including the largest solar farm in Australia.

With an initial capacity of 85 MW, the project would generate enough power for around 32,000 homes, and is therefore consistent with both the Commonwealth's *Renewable Energy Target* and NSW's *Renewable Energy Action Plan*.

2. STATUTORY CONTEXT

2.1 State Significant Development

Under the *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, the project is classified as State Significant Development (SSD) as it is an electricity generating activity with a capital investment value of more than \$30 million.

Consequently, the Minister for Planning is the consent authority for the development. However, under the Minister's delegation of 11 October 2017, the Executive Director, Resource Assessments and Business Systems, may determine the development application as there were less than 25 objections and a political donations disclosure statement has not been made.

2.2 Environmental planning instruments

The provisions of the *Carrathool Local Environment Plan (LEP) 2012* are discussed in **section 4.1** of this report.

Under the *SEPP (Infrastructure) 2007*, the project is permissible as it involves development for the purposes of electricity generating works. In accordance with the Infrastructure SEPP, the Department has given written notice of the project to Essential Energy as the electricity supply authority for the area and the John Holland Rail group which operates and maintains the Temora-Roto railway line on behalf of Transport for NSW. Essential Energy provided landowner's consent for the development application and has entered into a Connection Services Investigation Agreement with the Applicant.

The Department has considered the provisions of *SEPP No. 55 – Remediation of Land*. A preliminary assessment of the land found no contaminated land within the project site, and the Department is satisfied the site is suitable for the development.

2.3 Other approvals

Under the *Roads Act 1993*, the project requires approvals from the Roads and Maritime Services (RMS) and Council for the proposed road upgrades. Under Section 89K of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the assessment of the impacts of these upgrades is integrated into the planning approval process, and the conditions of these approvals must be consistent with the conditions of any development consent.

The Department has consulted with the RMS and Councils during the assessment process. The RMS and Councils have no objections to the project subject to conditions. The Department has considered these conditions and incorporated them into the recommended conditions of consent to address these matters (see **Appendix A**).

3. CONSULTATION

The Department publicly exhibited the EIS from 15 July 2017 until 13 August 2017. Nine submissions were received on the project, including nine from public authorities and one from a member of the public.

3.1 Agency submissions

The Office of Environment and Heritage (OEH) noted that the project is a good example of how impacts to biodiversity, flooding and Aboriginal cultural heritage can be avoided by refining the project design with input from subject matter experts. OEH is also satisfied with the Applicant's proposed biodiversity offset strategy to address the clearance of up to 1.88 ha of native vegetation (see **section 4.2**).

RMS has recommended requirements for the intersection upgrades and establishment of a landscaping buffer along Kidman Way which the Department has incorporated into the conditions of consent. The Applicant has confirmed it agrees with these requirements in the Response to Submissions.

Carrathool Council initially raised some concerns about the level of consultation undertaken with users of the Hillston Airport and asked the Department to consider its community contributions plan. The Department has addressed these matters in **sections 4.4** and **4.6** respectively.

The Department of Primary Industries (DPI) advised that the height of the proposed access road and electrical infrastructure located within the proposed floodway should be assessed against the *Lachlan River Hillston Floodplain Management Plan, Lake Brewster to Whealbah (2005)*, which the Department has considered in **section 4.6**.

The Division of Resources and Geoscience (DRG) provided comments stating that the project aligns with the NSW Government policy to increase renewable energy generation, jobs and investment in the State.

The John Holland Rail group, acting on behalf of Transport for NSW requested that the Department ensures that any stormwater flow toward the rail corridor would remain at pre-development levels. The Department has addressed matters associated with roadside drainage in **section 4.3**.

The recommendations from other public authorities are discussed in the relevant sections of this report.

The Applicant provided a response to all matters raised in submission on the project (see **Appendix D**).

3.3 Public submissions

One submission was received objecting to the project, primarily raising concerns about the impact of solar energy on grid reliability and prices. These matters are addressed in **section 4.5** below.

4. ASSESSMENT

The Department has undertaken a comprehensive assessment of the merits of the project. This report provides a detailed discussion of the five key issues below, including the compatibility of the proposed land use, biodiversity, traffic, local contributions and workforce accommodation, and energy security.

The Department has also considered the full range of potential impacts associated with the project and has included a summary of the conclusions relating to these in **section 4.6**.

4.1 Compatibility of proposed land use

Provisions of the Carrathool LEP

The site is located wholly within the RU1 Primary Production zone under the Carrathool LEP.

The RU1 zone includes various land uses that are both permitted with consent and without consent. As a solar farm is not expressly listed as permitted with or without consent, it is a prohibited land use under a strict reading of the LEP zoning table.

However, based on a broader reading of the LEP, and consideration of the objectives of the RU1 zone and other Council strategic documents, the Department is satisfied that there is no clear intention to prevent the development of a solar farm on the project site.

Firstly, the Carrathool LEP expressly references the Infrastructure SEPP and acknowledges that electricity generating works and solar energy systems are regulated by the Infrastructure SEPP, rather than the LEP. As described above, a solar farm is permitted with consent under the Infrastructure SEPP.

Secondly, the project is consistent with the objectives of the RU1 zone, particularly in relation to:

- encouraging diversity in primary industry enterprises; and
- minimising fragmentation and alienation of resource lands.

The proposed development would not fragment or alienate any resource lands during its operation as it has generally low impacts and it could be easily returned to agricultural land in the future once decommissioned, whilst managed grazing may also occur during operations. Further, Council supports the development of the project subject to the implementation of appropriate environmental mitigation measures.

Thirdly, whilst the Shire is still predominantly agricultural based, the region has diversified greatly from broadacre crops and large grazing pursuits to irrigation crops and poultry farm developments. The proposed solar farm would encourage a new element of agricultural enterprise and contribute to a more diverse local industry, which is a goal of the *Carrathool Shire Council Community Strategic Plan (Towards 2030)*.

Potential impacts on agricultural land

The project site is located in the Riverina region of NSW where agriculture is the major economic driver in the region. The site is not mapped Biophysical Strategic Agricultural Land.

The site covers a 393 ha area currently used for broadacre cropping. While the agricultural output from the site would be reduced by the development of the solar farm, the land represents a very small fraction of the agricultural output of the region with 3,759 square kilometres of land zoned as RU1 within Carrathool Shire and 44,627 square kilometres of agricultural land available in the wider Riverina region. The loss of cropping land from the project would result in a negligible reduction in the overall productivity of the region.

Furthermore, the inherent agricultural capability of the land would not be affected by the projects due to the relatively low scale of the developments. Managed grazing may be used to maintain the height of ground cover during operations and the land returned to agricultural use following decommissioning.

Neither DPI – Agriculture nor Council has raised concerns that the operation of the projects would compromise the long-term use of the land for agricultural purposes.

The potential loss of a small area of cropping 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 in relation to reducing greenhouse gas emissions; and
- the economic benefits of solar energy in an area with good solar resources and capacity in the existing electricity infrastructure.

Based on these considerations, the Department is satisfied that the proposed solar farm represents an effective and compatible use of the land within the region.

In addition, the Department has recommended suitable conditions to maintain the productivity of the agricultural land during the construction and operation and to fully reinstate the agricultural capacity of the land following decommissioning of the project.

4.2 Biodiversity

The project site consists of predominantly flat agricultural land with remnant vegetation present in isolated patches within cropped paddocks and along the Kidman Way road reserve (see **Figure 3**).

Two endangered ecological communities (EECs) listed under the TSC Act were mapped within the Kidman Way road reserve. No threatened flora species were recorded on site during targeted surveys undertaken in November 2016. The development footprint has been designed to avoid the EECs and to minimise vegetation clearance to the greatest extent possible.

Nevertheless, two scattered hollow bearing trees and up to 1.88 ha of native vegetation would be cleared for the project, comprising:

- 0.09 ha of Belah/Black Oak – Western Rosewood – Wilga woodlands of central NSW including the Cobar Peneplain Bioregion (LA106);
- 1.29 ha of Black Box – Lignum woodland wetland of the inner floodplains in the semi-arid (warm) climate zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion) (LA108); and
- 0.50 ha of Black Box open woodland wetland with chenopod understorey mainly on the outer floodplains in south-western NSW (mainly Riverina Bioregion and Murray Darling Depression Bioregion) (LA110).

Under the transitional arrangements of the recently commenced *Biodiversity Conservation Act 2016*, offsets for this project are to be assessed under the existing NSW *Biodiversity Offset Policy for Major Projects* and the *Framework for Biodiversity Assessment* (FBA). The Department has recommended conditions requiring the biodiversity impacts to be offset in accordance with the NSW *Biodiversity Offset Policy*.

The Applicant has calculated the ecosystem offset credits required in accordance with the FBA, and OEH has confirmed that the loss of 1.88 ha of native vegetation would require 81 ecosystem credits to be retired.

The Department has recommended a condition requiring the Applicant to prepare a Biodiversity Management Plan prior to commencement of construction. This plan would outline the proposed monitoring, management and rehabilitation measures that would be implemented throughout the life of the development.

Subject to the recommended conditions, the Department and OEH are satisfied that the project could be undertaken in a manner that maintains or improves the biodiversity values of the locality over the medium to long term.

4.3 Traffic and transport

The project site would be accessed via Kidman Way, with most heavy vehicle deliveries coming from the Port of Melbourne via Griffith. Some heavy vehicle deliveries from the north would travel via Kidman Way and use a heavy vehicle bypass through an industrial area around the eastern side of Hillston, avoiding the town centre.

There is an unnamed access track located along the northern boundary of the site connecting Kidman Way and Lachlan Valley Way. Project related traffic would not use this road except when constructing the transmission line connecting the site to the Hillston Substation.

The main increase in traffic volumes associated with the project would occur during the 12-month construction period, including a peak period of four months and a non-peak period of eight months. There may also be a minor increase in traffic volumes during periods of upgrading or decommissioning of infrastructure and equipment in the future. There would be negligible traffic during operation.

The estimated maximum daily vehicle movements during peak construction would be 45 light vehicles and 28 heavy vehicles. Up to four oversized vehicle movements would be required to transport the substation equipment. Operation of the project would on average generate four light and two heavy vehicle movements a day.

Due to the presence of a floodway and large vegetated areas through the middle of the site, the Applicant has proposed two site entry points off Kidman Way (see **Figure 2**). The floodway also traverses Kidman Way and the Temora-Roto railway corridor through a series of culverts and the existing roadside drainage network.

In order to meet RMS requirements, the Applicant would be required to construct and maintain a new Basic Right Turn (BAR) and Basic Left Turn (BAL) treatment at its intersections with Kidman Way. A sealed access track would also be constructed to connect the new intersections with the project site.

The Department has recommended conditions of consent requiring the Applicant to:

- upgrade the intersection of the two site entry points along Kidman Way in accordance with RMS requirements;
- remove all existing access driveways with the exception of the two proposed site entry points;
- ensure the length of vehicles accessing the site does not exceed 26 m;
- ensure that the number of vehicles does not exceed:
 - 28 heavy vehicle movements a day during construction, upgrading and decommissioning;
 - four oversized vehicle movements in total during construction, upgrading and decommissioning; and
 - two heavy vehicle movements a day during operations;
- prepare and implement a Traffic Management Plan with a particular focus on traffic during construction, decommissioning and upgrading in consultation with RMS and Carrathool Shire Council; and
- ensure the project does not reduce the capacity of the roadside drainage network and to prevent water from proceeding onto, or ponding within the carriageway of Kidman Way and the railway corridor.

Subject to the recommended conditions, the Department, RMS, John Holland Rail and Council are satisfied that the project would not result in significant impacts on road network capacity, efficiency or safety.

4.4 Local contributions and workforce accommodation

A consent authority has a right to require monetary contributions from a developer under sections 94 and 94A of the EP&A Act when a development is likely to require the provision of, or increase the demand for, public amenities and public services within the area. However, contributions under sections 94 and 94A can only be made in accordance with the provisions of a contributions plan made by the relevant council.

Carrathool Council requested that consideration be given to their Section 94A Contributions Plan and where relevant, applied to this development. Council's Contributions Plan provides examples of types of development that require high levels of itinerant labour and may place additional demands on Council's public facilities and services. These include mining ventures, commercial development, industrial development, major agricultural ventures and intensive residential developments.

While a solar farm does not strictly fit the description of any of these developments, this project would require a workforce of up to 150 people during its peak construction period and therefore warrants consideration for contributions or traffic impacts.

The Department has carefully considered the potential impacts of the construction workforce associated with the project and believes there are strong reasons against the need for Section 94A contributions.

Firstly, it is unlikely that the project would create any significant additional demand on accommodation facilities due to a number of factors including:

- most of the workforce (i.e. 90 workers – 60%) is likely to commute from the nearby City of Griffith area;
- the remainder of the workforce (i.e. 60 workers – 40%) would be drawn from existing residents within the local community where possible; and
- the timing of construction would take into consideration the region's major festivals and annual events.

In addition, the Department has recommended a condition requiring the Applicant to prepare an Accommodation and Employment Strategy in consultation with Council to ensure these measures are effectively implemented. Council supports this condition.

Secondly, there would be no increased demand on Council's public road and traffic network as the requisite road upgrades and repairs would be undertaken at the expense of the Applicant. The Department has recommended conditions requiring road upgrades and the implementation of a Traffic Management Plan to manage any repairs of local road infrastructure.

Thirdly, the project would only have a large workforce for a very limited time, particularly in comparison to the other types of development that are identified in Council's Section 94A Contributions Plan. The construction workforce of 150 people would only be required for a peak period of up to four months and would be reduced to only five employees during the operation of the project.

Subject to the recommended conditions, the Department is satisfied that the provision of accommodation for workers can be adequately managed, and would not result in increased demand on Council's public amenities or services, nor any requirement for developer contributions.

4.5 Energy security

Concerns were raised in the public submission that the project, or a combination of the project and a range of other renewable energy projects, could have an adverse impact on energy security in NSW and increase electricity prices.

These concerns were expressed at a high level, and were not supported by any detailed evidence showing how variable energy generators in general could affect energy security and/or electricity prices, or how this project in particular would do that.

This makes it difficult, if not impossible, for the Department to evaluate these concerns in any meaningful way, particularly in the context where it is required to look at the planning merits of this particular project. Any such evaluation, however, would need to have regard to the broader strategic context on these matters.

First, there is strong policy support - at both the Commonwealth and State level - for the increased development of renewable energy projects to ensure a greater proportion of electricity is generated by renewable energy and to reduce greenhouse gas emissions associated with electricity generation.

Second, NSW forms part of the National electricity market (NEM). This market is complex, and is governed by a robust statutory framework – at both Commonwealth and State level – covering the regulation of electricity generation, distribution and pricing.

In the Department's view, the likelihood of the project having an adverse impact on energy security or electricity prices in NSW is extremely low, given that it would only add 85 MW of capacity to the NEM, which at this stage has a total generation capacity of over 47,000 MW.

Further, any incremental or cumulative impacts associated with the potential intermittency of renewable energy projects could be mitigated through the operation of the electricity market.

4.6 Other issues

The Department's consideration of other issues is summarised in **Table 2**.

Table 2: Other issues

Issue	Consideration	Recommendations
Visual	<ul style="list-style-type: none"> The proposed solar farm is a relatively low-lying development with panel heights of up to 2 m. The photovoltaic panels are designed to absorb rather than reflect sunlight and the project would not cause a noticeable glare compared to other building surfaces. The site is set in a semi-rural setting with 12 residences located within 2 km of the site and the nearest residence located approximately 700 m north. The presence of existing vegetation provides screening for most residential locations, except for views from a single residence (R17) and the southern portion of the site along Kidman Way. The Applicant has committed to providing visual impact mitigation measures for R17 to reduce the visibility of the project from this residence. Vegetative screening would also be established along the southern portion of the site to minimise distraction of motorists travelling on Kidman Way. None of the nearby landowners objected to the project. 	<ul style="list-style-type: none"> Prior to construction, prepare a Landscaping Plan for the site in consultation with RMS, OEH, Council and R17 which includes a detailed description of measures to ensure effectiveness of the vegetation buffer, including a monitoring and reporting program. Prior to operations, establish and maintain a mature vegetation buffer along the western boundary of the northern portion of the site and along Kidman Way at the southern portion of the project site. Ensure that external lighting is minimised and complies with the relevant Australian Standards. Prohibit any signage or advertising on the development, unless for safety purposes.

Issue	Consideration	Recommendations
	<ul style="list-style-type: none"> There would be no significant visual impacts on nearby residences or road users. 	
Soil and Water	<ul style="list-style-type: none"> The project would require around 25 megalitres (ML) of water during construction and around 3 ML per year during operation. Water would be sourced from an existing well on the property adjacent to the project site which currently has 1300 ML of allocation per annum. Any potential erosion and sedimentation risks associated with the project can be effectively managed using best practice construction techniques. The majority of the floodway has been avoided by the Applicant, with the exception of a connecting corridor between the northern and southern half of the development footprint (see Figure 2). The <i>Lachlan River Hillston Floodplain Management Plan Lake Brewster to Whealbah</i> (the FMP) provides hydraulic criteria for works located within the floodplain, with a maximum afflux of (0.15 – 0.2 metres) and maximum flow velocity of 0.7 metres per second on the floodplain. Final layout plans must be provided to the Department prior to the commencement of construction. The Applicant would be required to demonstrate the hydraulic criteria set out in the FMP has been met. DPI Water advised that whilst no guidelines specific to development within floodplains is available, the principles outlined in the <i>Guidelines for Controlled Activities on Waterfront Land</i> (DPI Water) can be applied to ensure the development does not impede on the surface flow of the floodway located within the project site. 	<ul style="list-style-type: none"> Ensure the capacity of the existing roadside drainage network is maintained. Prohibit water pollution. Undertake activities in accordance with OEH's <i>Managing Urban Stormwater: Soils and Construction</i> (Landcom, 2004) manual and with the <i>Guidelines for Controlled Activities on Waterfront Land</i> (DPI Water). Ensure the design and construction of the access road and all infrastructure within the designated floodplain corridor does not impede the floodway and meets the hydraulic criteria provided in the FMP. Ensure the capacity of the existing roadside drainage network is maintained.
Noise	<ul style="list-style-type: none"> The proposed construction, upgrading and decommissioning activities are predicted to comply with the noise management levels in the <i>Interim Construction Noise Guideline</i> (ICNG). The Department considers construction noise can be minimised by implementing the noise mitigation work practices set out in Tables 5 and 8 of the ICNG. There would be negligible noise during operation. 	<ul style="list-style-type: none"> Minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with best practice requirements outlined in the ICNG. Restrict construction hours to Monday to Friday 7 am - 6 pm, and Saturday 8 am - 1 pm.
Heritage	<ul style="list-style-type: none"> Five Aboriginal sites consisting of an artefact scatter, isolated find and three modified trees were identified during field surveys of the site. The project design process has avoided impacts to all known Aboriginal sites. OEH confirms that the project poses no known direct threat to Aboriginal Cultural Heritage and no further assessment would be required prior to construction. 	<ul style="list-style-type: none"> Protect all heritage items on site from any impact. Prepare a Chance Finds Protocol. Cease works and notify NSW Police and OEH if human remains are identified over the life of the project.
Aviation	<ul style="list-style-type: none"> Hillston Airport is approximately 2.2 km north of the site with the runway positioned in an east-west orientation. The Civil Aviation Safety Authority (CASA) advised that the project is not runway aligned and therefore unlikely to present a hazard to aircraft operations. CASA's experience to date is that despite the large number of solar farms being developed around Australia, some on airports themselves, there have been no pilot reports of glare or of any safety issues or concerns related to these solar farms. 	<ul style="list-style-type: none"> No recommendations.
Hazards	<ul style="list-style-type: none"> The project would comply with the National Health and Medical Research Council standards for electro-magnetic fields. The fire risks can be suitably controlled through the implementation of standard fire management procedures. The Applicant has committed to maintaining Asset Protection Zones and preparing a bushfire management plan to manage fire risk. The RFS reviewed the plans and documents in the EIS and raised no concerns or issues in relation to bush fire. 	<ul style="list-style-type: none"> Ensure that the development contains at least a 10 m APZ and complies with the relevant asset protection requirements in the RFS's <i>Planning for Bushfire Protection 2006</i>, and is equipped to respond to any fires on site. Prepare an Emergency Response Plan in consultation with RFS and Fire & Rescue NSW.
Minerals	<ul style="list-style-type: none"> There are no current titles on or adjacent to the site. 	<ul style="list-style-type: none"> No recommendations.

5. CONCLUSION

The Department has assessed the development application, the EIS, the submissions and the Applicant's Response to Submissions (see **Appendices B, C and D**), and additional information provided by the Applicant and relevant government agencies. The Department has considered the objectives of the EP&A Act and the relevant considerations under section 79C in its assessment of the project.

The Department considers the site to be appropriate for a solar farm as it has good solar resources on a site and available capacity on the existing electricity network. In addition, the site is relatively flat and has been largely cleared for agricultural purposes. There are very few landowners in close proximity to the proposed solar farm and none of the nearby landowners have objected to the project.

The project would not result in any significant reduction in the overall agricultural productivity of the region. Additionally, the site could be easily returned to agricultural uses after the project is decommissioned and the inherent agricultural capability of the land would not be affected.

The project would assist in transitioning the electricity sector from coal and gas-fired power stations to renewable energy sources. It would generate up to approximately 188,000 MWh of clean electricity annually, which would power about 32,000 homes and save up to 180,000 tonnes of greenhouse gas emissions per year. It is therefore consistent with the goals of the Commonwealth RET and the NSW *Renewable Energy Action Plan*.

The Department is satisfied that the project achieves a reasonable balance between maximising the efficiency of the solar resource development and minimising the potential impacts on surrounding land users and the environment. The project would also stimulate economic investment in renewable energy and provide flow-on benefits to the local community through job creation and capital investment.

On balance, the Department believes that the project is in the public interest and should be approved, subject to conditions.

6. RECOMMENDATION

In accordance with section 89E of the *Environmental Planning and Assessment Act 1979*, it is recommended that the Executive Director, Resource Assessments and Business Systems, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **approves** the State significant development application for the Hillston Solar Farm (SSD 7955); and
- **signs** the attached development consent and recommended conditions of consent (**Appendix A**).

Recommended by:


23/10/17

Anthony Ko
Planner
Resource and Energy Assessments

Recommended by:


25/10/17

Clay Preshaw
Director
Resource and Energy Assessments

7. DECISION

The recommendation is: Approved Not approved by:


26/10/17

David Kitto
Executive Director, Resource Assessments and Business Systems
as delegate of the Minister for Planning

APPENDIX A:

Recommended Conditions of Consent

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7955

APPENDIX B:

Environmental Impact Statement

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7955

APPENDIX C:

Submissions

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7955

APPENDIX D:

Response to Submissions

See website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7955
