

COUNCIL JRPP ASSESSMENT REPORT COVER SHEET

Panel Reference	JRPP Ref 2017WES003 DA 20/2017.
DA Number	20/2017
LGA	Leeton Shire Council
Proposed Development	Solar Energy System (Photovoltaic)
Street Address	Lot 2 DP 1226897 and Lot 91 DP 751742, 176 Fivebough Road, Leeton
Applicant	Photon Energy Engineering Australia Pty Ltd
Owner	Leeton Shire Council
Date of DA Lodgement	16 March 2017
Number of Submissions	Seven (7)
Recommendation	Approval, subject to conditions
Regional Development Criteria (Schedule 4A of the EP&A Act)	Private infrastructure and community facilities over \$5 million
List of all relevant s79C(1)(a) matters	<ul style="list-style-type: none"> • <i>State Environmental Planning Policy No. 55 – Remediation of Land</i> • <i>State Environmental Planning Policy (Infrastructure) 2007</i> • <i>State Environmental Planning Policy (State and Regional Development) 2011</i> • <i>Leeton Local Environmental Plan 2014</i>
List all documents submitted with this report for the Panel's consideration	Appendix 1 – Assessment Report attachments Appendix 2 – Draft Conditions of Consent Appendix 3 – Development plan & documentation Appendix 4 – Notification & Advertising Information
Report prepared by	Garry Stoll
Report date	Date 30 August 2017

Summary of s79C matters

Have all recommendations in relation to relevant s79C matters been summarised in the Executive Summary of the assessment report?

Yes / No

Legislative clauses requiring consent authority satisfaction

Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? e.g. *Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*

Yes / No / Not Applicable

Clause 4.6 Exceptions to development standards

If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?

~~Yes / No /~~ Not Applicable

Special Infrastructure Contributions

Does the DA require Special Infrastructure Contributions conditions (S94EF)?

Yes / No / Not Applicable

Conditions

Have draft conditions been provided to the applicant for comment?

Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the assessment report

Yes / ~~No~~

LEETON SHIRE COUNCIL
ASSESSMENT REPORT DA 20/2017
PROPOSED 25.77 MW SOLAR ENERGY DEVELOPMENT
LOT 2 DP 1226897 & LOT 91 DP 751742
FIVEBOUGH ROAD LEETON

JRPP Ref 2017WES003 DA 20/2017.

Report: Development Application DA 20/2017 - Solar Energy System (Photovoltaic)

Property: Lot 2 DP 1226897 and Lot 91 DP 751742, 176 Fivebough Road, Leeton

Applicant: Photon Energy Engineering Australia Pty Ltd

Date: 30 August 2017

File: DA 20/2017

1. EXECUTIVE SUMMARY

Council has received a Development Application for a 25.77 megawatt (MW) solar photovoltaic (PV) farm on Lot 2 DP 1226897 and Lot 91 DP 751742, 176 Fivebough Road, Leeton. The proposal meets 3 of the criterion for regional development under State Environmental Planning Policy (State and Regional Development) 2011 and Schedule 4A of the Environmental Planning and Assessment Act 1979 in that the development:

- has a capital investment value (CIV) over \$20 million (cl3)
- is Council related development with a CIV over \$5million(cl4(b))
- is private infrastructure development with a CIV over \$5 million(cl6)

The proposed development has been assessed against applicable Environmental Planning Instruments (EPI's) and their relevant provisions. As detailed within the section 79C assessment found within this report, the proposal is considered to be generally consistent with applicable provisions. Likely impacts of the proposal and the suitability of the site for the proposed development have been considered in detail, as also outlined within the section 79C assessment.

Council advertised and notified the proposal to neighbours and relevant government agencies. The notification period was 21 March to 17 April 2017. A public meeting on the proposal was also convened by the applicant on 6 April 2017 during the notifications/exhibition period. A total of seven (7) written submissions were received. The matters raised have been considered and addressed within this report.

The proposed development is not considered to be prejudicial to the public interest.

Approval of the proposed development, subject to conditions is recommended.

2. PROPOSED DEVELOPMENT

2.1 Summary

Council has received a Development Application for a 25.77 megawatt (MW) solar photovoltaic (PV) farm on Lot 2 DP 1226897 and Lot 91 DP 751742, 176 Fivebough Road, Leeton (**Attachment 1**).

The proposed development described in the Statement of Environmental Effects (SEE) involves:

Construction of:

- 82,000-102,000 x PV panels each sized approximately 2m x 1m with panels fixed-tilted at 30 degrees towards north, arranged in spatial groups separated by internal access and maintenance corridors.
- 22 x central inverters sized approximately 3m (h) x 4.5m (l) x 1.5m (w) each having 1000kW capacity and step up transformers;
- Property access, internal maintenance tracks, temporary car parking and set out area.
- Installation of a shipping container 6.1m(l) x 2.5m(w) x 2.9m (h) for the storage of maintenance equipment.
- Erection of boundary security cyclone fencing up to 2.4m in height.
- Boundary vegetation screening.
- Livestock facilities.

The proposal requires the upgrading of existing 11kV power lines to 33kV from Brady Way in Leeton to the subject land. This is subject to separate assessment and approval of Essential Energy and is not subject to consideration by this development application.

2.2 Category of Development

The proposal meets 3 of the criterion for regional development under State Environmental Planning Policy (State and Regional Development) 2011 and Schedule 4A of the Environmental Planning and Assessment Act in that the development:

- has a capital investment value (CIV) over \$20 million (cl3)
- is Council related development with a CIV over \$5million(cl4(b))
- is private infrastructure development with a CIV over \$5 million(cl6)

2.3 Permissibility of the Proposal

Clause 34(7) of the Infrastructure SEPP enables the development of a solar energy system on the land with development consent.

The proposal is not advertised development under s29A of the Environmental Planning and Assessment ACT 1979 (EPA Act) and Leeton Shire Council does not have a DCP or notification policy requiring the notification of this development.

2.4 Land to Which this Development Relates

The development application refers to (part) Lot 1 DP 1056420 and Lot 91 DP 751742.

Since lodgement of the development application, the subdivision of Lot 1 DP 1056420 has been registered with NSW Land and Property Information. The land to which the development relates is now identified as Lot 2 DP 1226897 and Lot 91 DP 751742 which comprises an area 36.26 ha.

The land is situated on the south side of Fivebough Road approximately 1.6km north east of the Leeton Post Office.

The land is within approximately 420m (distance from boundary to boundary) south of the RAMSAR listed Fivebough wetland.

2.5 Property and History

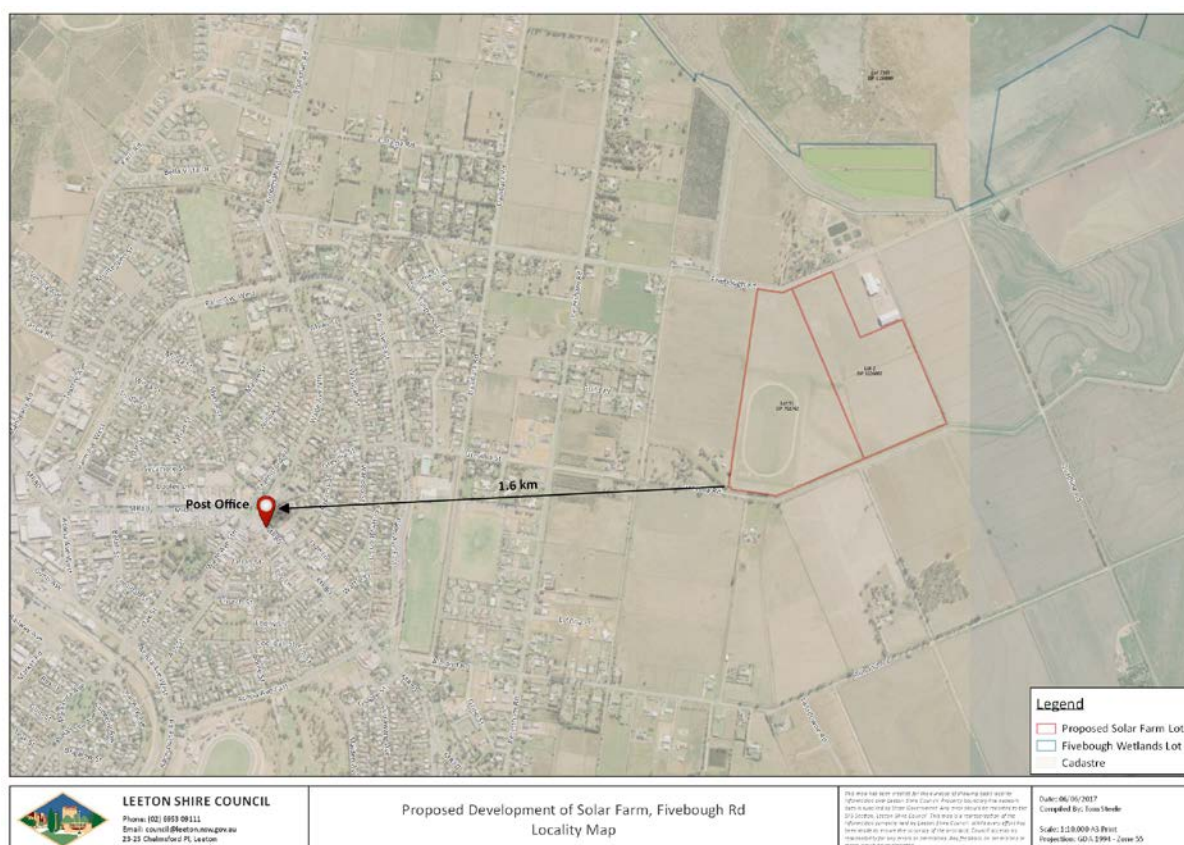
The land comprises Lot 91 DP 751742 and Lot 2 DP 1226897 together, having an area of 36.26 ha and is zoned RU1 under the Leeton Local Environmental Plan 2014.

Adjoining the western boundary of the site is land that is zoned R2 Low Density Residential.

There are eight (8) existing dwellings situated to the west of the proposed development which are within approximately 155 metres to 380 metres from the western boundary of the proposed development.

There is one (1) existing dwelling situated to the south of the proposed development. This dwelling is approximately 120 metres from the southern boundary of the proposed development.

There is one (1) existing dwelling situated to the north west of the proposed development. This dwelling is approximately 298 metres from the northwest corner of the proposed development.



The land was originally part of irrigation Farm 112. In 1999, Council purchased the land, then comprising of 40.3 ha along with the 161 ML water entitlements to cater for future industrial development. The intention was to provide for larger rural industrial development such as food processing industries or other value adding enterprises.

In 2002 Council subdivided a 2 ha parcel on the north eastern corner which was subsequently sold and developed for Lucerne stockfeed. In 2012 Council subdivided another 2 ha parcel to the owner of the first 2 ha lot, with the land only recently registered.

Since 2010 Lot 1 DP 1056420 has been leased as a non-irrigable holding for grazing and watering of livestock. Lot 91 DP 751742 and Lot 2 DP 1226897 have also been leased and for grazing and a private horse training track.

In mid-2015 Photon Energy approached the council to find out whether the Council had any land that they could potentially lease or purchase to develop a solar farm. A number of alternative sites were considered by Photon including two separate parcels north of Fivebough Road and adjacent to the sewage treatment plant.

On 29 June 2016 Council resolved to invite expressions of interest for the sale or the lease of the subject land. Council decided on 28 September 2016 to sell the land to Photon Energy and the transaction is currently in the process of being finalised.

2.6 Characteristics of the Land

i) Elevation and gradient

The land is generally flat with minimal grades (<0.25%) at an elevation of around 135.6m AHD.

ii) Geology, geomorphology and soils

The Narrandera Geological map identifies the land as Quaternary floodplains of black and red clayey silt, sand and gravel. The landscape comprises Murrumbidgee Scalded Plains (Mitchell, v 3) that has been modified through irrigated agricultural development.

iii) Surface hydrology

A Murrumbidgee Irrigation supply channel is located adjacent to the Grevillea Road southern boundary supplying land to the north. A Murrumbidgee Irrigation drainage channel is located on part of the western boundary and the south side of Grevillea Road.

Internal drains have been constructed along the eastern and western boundaries and centrally through the property, creating separate irrigable paddocks. The land has not been irrigated for many years. Surface runoff discharges to Fivebough Road via an internal western drain.

There are four (4) existing dams currently used as stock watering points:

- near the property frontage towards Fivebough road,
- south west of the trotting track,
- in the south east corner of lot 91 and
- near the central-eastern boundary of lot 2.

iv) Groundwater

The land is bisected by two groundwater management areas: the Lower Murrumbidgee Groundwater Management Area at the north east and the Lachlan Fold Belt at the south west.

The Lower Murrumbidgee includes good quality shallow and deep water sources which provide for beneficial and consumptive uses, requiring protection. The Groundwater

vulnerable area layer, in Leeton Local Environmental Plan 2014, covers the majority of Lot 2 DP 1226897 and part of Lot 91 DP 751742.

v)Vegetation

On site vegetation has been modified through clearing, cropping and grazing. The understorey comprises some native cover such as windmill grass along with various pest plant species including Bathurst Burr.

2.7 Existing land Use

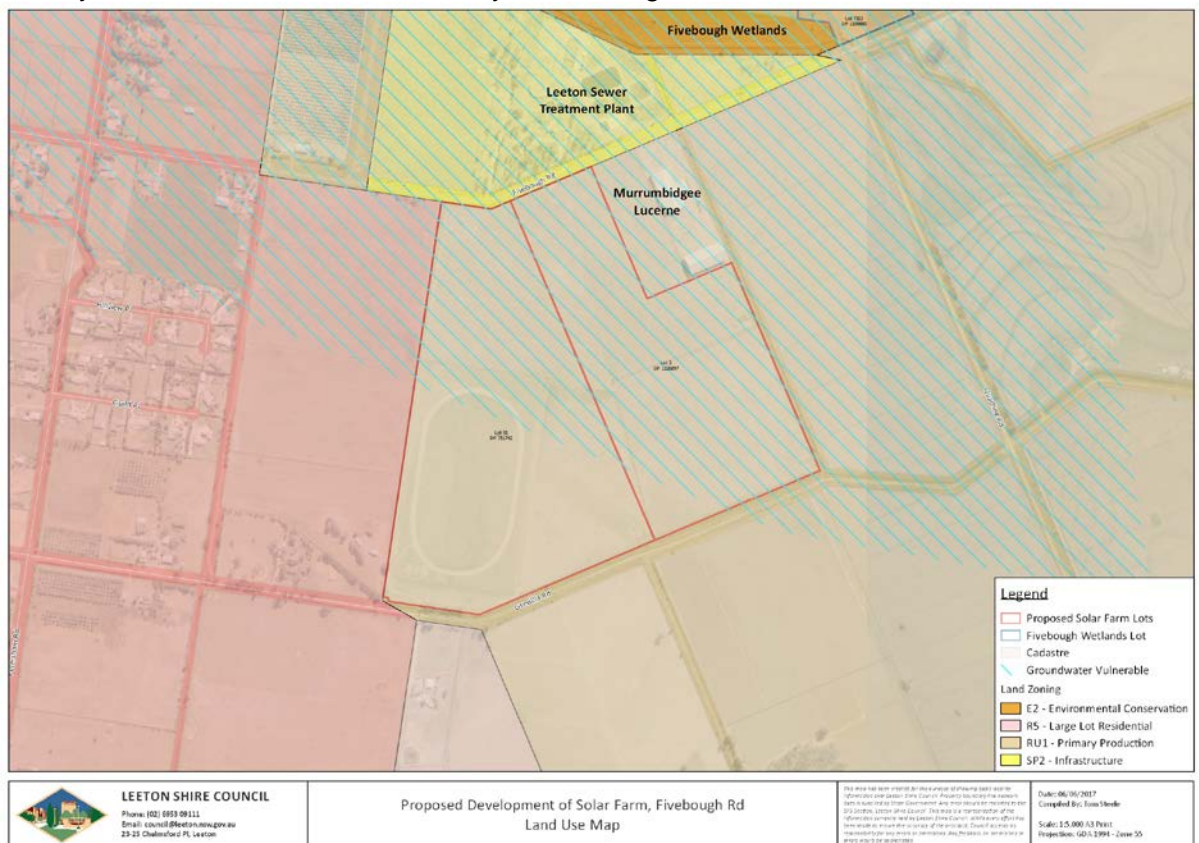
During Council's ownership, the land has been leased for the grazing of sheep and used as a private horse training track.

2.8 Adjoining Land uses

Immediately north of Fivebough Road is the Leeton Sewage Treatment Plant (STP). Immediately north of the STP is the Fivebough Wetland, a crown parcel that is part of the Ramsar listed Fivebough wetlands.

Irrigated broad acre farms are located to the south and east of the site with the established Murrumbidgee Lucerne rural industry and a vacant rural industrial parcel immediately situated to the north east.

Adjoining along the western boundary of Lot 91 is an area of undeveloped R2 Low density residential land that is currently used for agriculture.



2.9 Access

The land has three existing accesses: two from Fivebough Road and one from Grevillea Road.

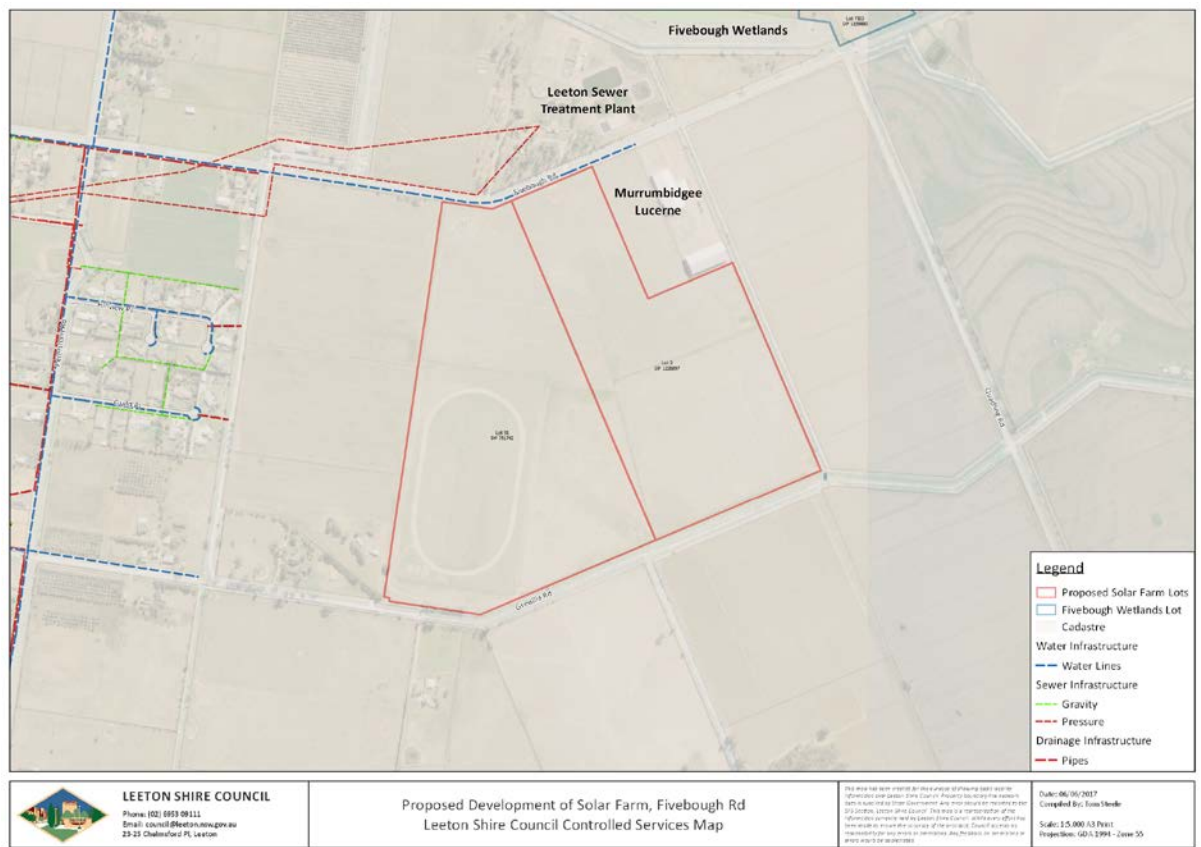
2.10 Services

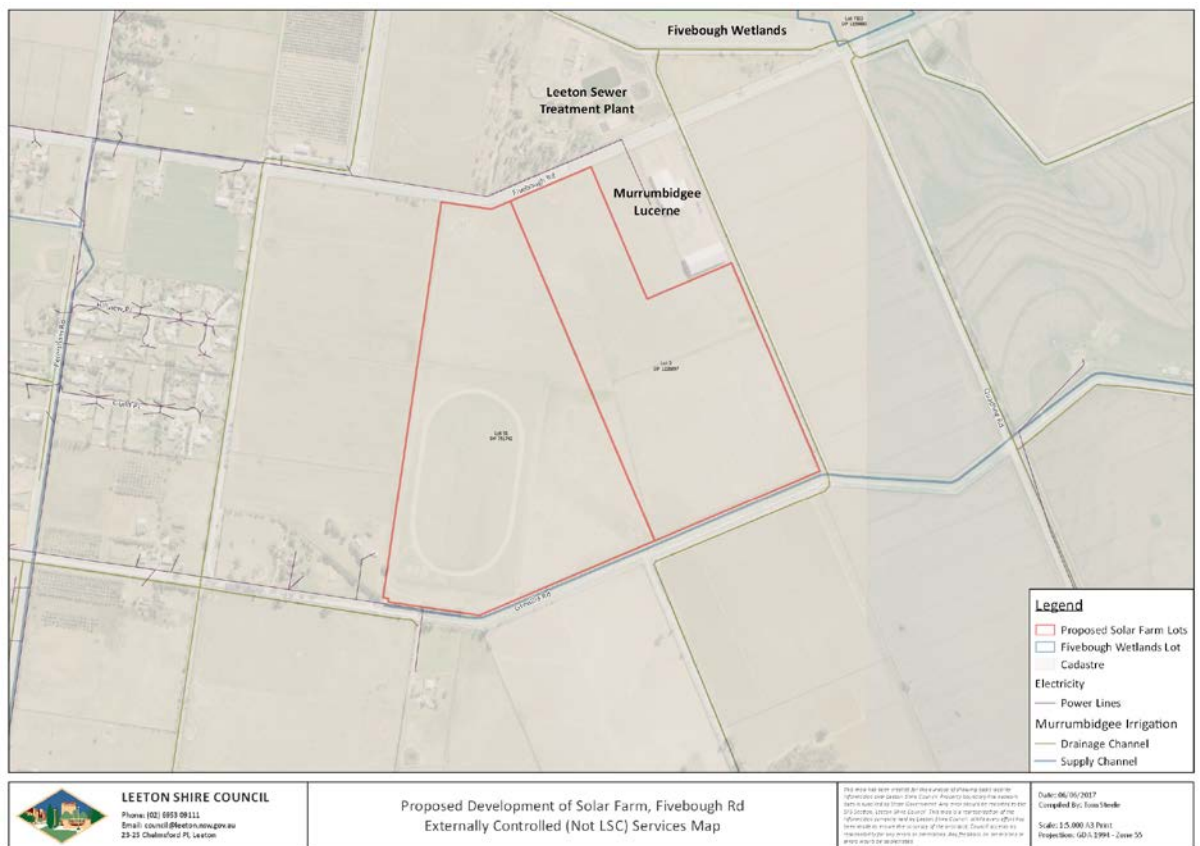
The land has a 100mm PVC reticulated water supply and hydrant on the southern side of Fivebough Road. The land does not have access to a reticulated sewer system.

Fivebough Road is a local access road 5m wide with an 80km speed limit.

Grevillea Road is a local access road and has a 50km limit. It is a gravel road for a distance of 650m the intersection with Petersham Road to the south western part of the land, with the remainder of the road being only a dry weather road with limited access. It is constrained by an earthen Murrumbidgee Irrigation supply channel located on the northern side of Grevillea Road and a drainage channel along the southern side. A drainage channel also exists along the eastern boundary towards Fivebough Wetland.

Essential Energy have existing overhead 11kV power lines along the Fivebough Road frontage.





3. STATUTORY AND POLICY FRAMEWORK

3.1 Commonwealth Legislation

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides protection for matters of national environmental significance. Any actions that may impact a matter of national environmental significance are controlled actions and require approval from the Commonwealth Government Minister of the Environment.

The EPBC Act is designed to protect and manage matters that are nationally significant and include wetlands of national significance.

A protected matters search was conducted for the site on 21 April 2017. This report identified a site of national environmental significance within a 1km central point of the land subject to the development. The protected matters report identifies one Ramsar wetland (Fivebough), 17 threatened species and 20 migratory species have the potential to be impacted by the proposal. None of the endangered ecological communities are present.

In relation to this development and the application of the EPBD Act, any action including the construction and management of a project that has or is likely to have a significant impact which has a chance of greater than 50% chance of happening, being an impact which is important or of consequence in regard to its context or intensity on or near an area or matter of national environmental significance, will require approval under the EPBD Act.

The EPBD Act sets out the following significant impact criteria as a guide when assessing the impact of actions on Listed Threatened species, Listed Migratory species and Wetlands of International Importance. The Proponent has provided an assessment undertaken by Cumberland Ecology on the impact of the proposed development on each of these matters.

A copy of the Cumberland Ecology assessment and additional information provided from Cumberland Ecology can be found in **Attachment 2**.

Given this assessment the proponent has chosen not to refer the proposal in this instance to the Federal government Department of Sustainability, Environment, Water, Population and Communities for advice on whether the proposal is a controlled action.

3.2 NSW State Legislation

3.2.1 *Environmental Planning and Assessment Act 1979*

Section 5A Significant effect on threatened species, populations or ecological communities, or their habitats

Section 5A of the EP&A Act requires that in the administration of sections 78A, 79B and 79C of the Act a decision is required to be made as to whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats. In making this decision there is a requirement to consider any assessment guidelines and the matters contained within subsection (2) commonly referred to as the 'seven part test'.

The assessment guidelines of relevance are the Department of Environment and Climate Change, Threatened Species Assessment Guidelines, the Assessment of Significance, 2007.

The SEE submitted with the Development Application includes a *Threatened Species Assessment* that concludes that there is not likely to be a significant impact on threatened species. This is further discussed in the Section 79C assessment.

Section 79B Consultation and concurrence

Section 79B(3)(b) of the EP&A Act provides development consent cannot be granted for development that is likely to significantly affect a threatened species, population or ecological community or its habitat without the concurrence of the Chief Executive of the Office of Environment and Heritage or, if a Minister is the consent authority, unless the Minister has consulted with the Minister administering the Threatened Species Conservation Act 1995.

In this case, the *Threatened Species Assessment* concludes that there is not likely to be a significant impact on threatened species and, on this basis, concurrence is not required.

Note: in relation to Sections 5A and 79B(3)(b), these sections of the EP&A Act were repealed on 25 August 2017 in light of the commencement of the Biodiversity Conservation Act 2016, which commenced on the same date. These provisions of the EP&A Act however are considered to still apply to the proposal as the application is considered to be a 'pending or interim planning application' as per the Biodiversity Conservation (Savings and Transitional) Regulation 2017.

Section 79C Evaluation

In determining a development application, the consent authority must take into consideration matters referred to in Section 79C(1) of the *Environmental Planning and Assessment Act 1979* as relevant to the development.

S79C(1)(a) Matters for consideration – General

(i) *Any environmental planning instrument.*

State Environmental Planning Policies (SEPPs)

State Environmental Planning Policy No. 55 – Remediation of Land

Under Clause 7 of the SEPP and in accordance with Councils Contaminated Land Management Policy, Council must consider whether the land is contaminated and whether the land is suitable for the proposed use. The subject land is not listed on Council's Potentially Contaminated Lands Register.

The proposed development of the land as a solar farm would not lead to unacceptable public health or environmental risks which requires further assessment and or remediation. Therefore, no further investigations in relation to contamination are required.

State Environmental Planning Policy (Infrastructure) 2007

Part 3 Division 4 - Electricity Generating Works or Solar Energy Systems

Clauses 33 to 39 of the SEPP relates to development for the purpose of electricity generating infrastructure including solar energy systems and wind turbines.

The proposal is defined as a solar energy system being an electricity generating work in a prescribed rural zone. Clause 34 (1) enables development of solar energy systems on any land in a prescribed zone with consent.

In accordance with Clause 45 of the Infrastructure SEPP 2007, the local electricity supply authority (Essential Energy) was notified of the Application due to the presence of overhead power lines in the vicinity of the development site.

No submission or comments were received about the proposal from Essential Energy during the notification period. Essential Energy did later advise the Council by telephone that they were liaising with the proponent about the requirements for network upgrading.

State Environmental Planning Policy (State and Regional Development) 2011

Under Schedule 1, Clause 20 of the SEPP, the proposal is not State Significant Development as the development will have a capital investment value of less than \$30 Million and is not proposed in an environmentally sensitive area.

The Western JRPP is the consent authority and not the Minister under Section 89D of the Environmental Planning and Assessment Act, 1979.

Local Environmental Plans

Leeton Local Environmental Plan 2014

The following clauses of *Leeton Local Environmental Plan 2014* are relevant to the proposal;

Clause 1.2 - Aims of plan

- (a) to encourage sustainable economic growth and development,*
- (b) to preserve rural land for all forms of primary production,*
- (c) to identify, protect, conserve and enhance Leeton's natural assets,*
- (d) to identify and protect Leeton's built and cultural heritage assets for future generations,*
- (e) to allow for the equitable provision of social services and facilities for the community,*

- (f) to provide housing choices for the community,
- (g) to minimise land use conflicts and adverse environmental impacts,
- (h) to promote ecologically sustainable development

The proposal would be consistent with the aims of the plan in that it would:

- Contribute towards renewable resources, greenhouse savings and ecologically sustainable development at a local and global level;
- During its construction and life, facilitate economic growth and development and not result in land use conflicts.

Clause 2.2 - Zoning of land to which plan applies

The land is zoned RU1 Primary Production

Clause 2.3 - Zone objectives and land use table

The objectives of the zone are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To provide opportunities for intensive and extensive agriculture in appropriate locations consistent with the environmental capability of the land and access to irrigation water.
- To allow the development of processing, service and value-adding industries related to agriculture and primary industry production.
- To protect and enhance the water quality of receiving watercourses and groundwater systems so as to reduce land degradation.

While the proposal is not one relating to primary industry production, it will not result in the depletion of natural resources or resource base during its lifespan. Furthermore grazing is not excluded as the proposal includes the grazing of sheep to manage weeds.

Provided the impacts of the proposal can be appropriately mitigated the development would be consistent with the objective to minimise land use conflicts between the RU1 Primary Production zone and the adjoining zones.

Clause 6.1 - Earthworks

The objective of this clause is to ensure earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.

Earthworks are proposed as part of this development and involve basic land forming works to remove existing irrigation contour banks and dams to prepare the site for its use as a solar farm. These works could be considered commensurate with typical land forming activities within Leeton Shire.

Clause 6.2 - Flood planning

The objective of this clause is to minimise flood risk to life and property from land use. To allow development that is compatible with flood hazard and to avoid significant adverse effects on flood behaviour and the environment.

At the time the LEP was gazetted Council had no information about overland or localised flooding in the Shire, and the Flood Planning Map only identified land subject to mainstream flooding associated with the Murrumbidgee River.

Although part of the land is below the Flood Planning Level, the development is compatible with the identified flood hazard and is unlikely to adversely affect flood behaviour or cause adverse impacts to the environment or to other properties.

Clause 6.4 - Groundwater vulnerability

The objective of this clause is to protect vulnerable groundwater systems and to not adversely impact hydrological processes.

The north eastern part of the land has been mapped as a groundwater vulnerable area associated with shallow and deep groundwater resources of the Lower Murrumbidgee alluvium. These groundwater resources provide for beneficial and consumptive uses and are required to be protected from over extraction and degradation.

The development is unlikely to result in the depletion or degradation of groundwater resources or affect the environment through groundwater accessions, salinisation, nutrient loading or contamination.

If the development is approved a condition should be included to ensure the appropriate management and disposal of solid and liquid wastes from the development.

Clause 6.12 - Essential Services

The objective of this clause is to ensure that services essential for developments are adequately provided for;

Any approval for the development should require the applicant to provide a water supply suitable for the requirements of the development and land use.

Currently access is available from Grevillea Road and from Fivebough Road. The access from Fivebough Road is inappropriate for the development given its condition and limitations.

A 20m long access road is proposed to be made available from Fivebough Road and a condition should be required that the access be upgraded and constructed to Austroads standards for the safe ingress and egress of service vehicles utilising the site and to enable no overhanging of vehicles over the road reserve.

The development will generate its own electricity and the essential energy network will be required to be upgraded to allow connection into the grid. A condition should be for the development to provide electricity required by the development to the requirements of essential energy.

The proposal development does not require the access to any Murrumbidgee Irrigation assets.

The approval could include a condition that any crossing of an irrigation supply or drainage channel will require the prior approval of Murrumbidgee Irrigation.

Sewage Management is not required as no amenities will be permanently provided on site. Temporary facilities will be required to be made available during the construction period.

Stormwater is unlikely to be significantly impacted although flows will be required to be managed so that predevelopment flow rates are not exceeded.

(i) *Any proposed instrument that has been the subject of public consultation.*

There is no proposed instrument that has been the subject of public consultation that applies to this land.

(ii) *Any development control plan.*

There is no development control plan that applies to this land.

(iii) *Any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F.*

The developer and Council have held discussions on the creation of a Planning Agreement under section 93F for the payment of compulsory S94A fixed levy contributions.

This agreement will be subject to a condition of consent approval.

(iv) *The regulations (to the extent that they prescribe matters for the purposes of section 79C(1))*

There are not considered to be any applicable provisions of the regulation which apply to the development.

(v) *Any coastal zone management plan.*

There is no coastal zone management plan that applies to this land.

S79C(1)(b) Likely impacts of the Development

Environmental impacts on natural and built environments

The site consists of highly development agricultural land that was developed as under the original Yanco Irrigation scheme dating back to the 1930's. The site has been levelled and levy banks constructed to enable the land to be flood irrigated for the production of seasonal crops such as rice and the production of fodder for the stock grazing.

The impact of the development on the natural environment at a site specific level could therefore be limited, as the site has been highly modified and could not be considered as being in a natural state.

The impact of the development on the site in relation to fauna habitat would also be considered to be minimal as the site in its use as an agricultural holding would be subject to routine disturbance from ploughing, flooding, planting and harvesting activities.

As the development will not involve any disturbance of the land from an agricultural perspective, the site may be considered to improve habitat for fauna in that it will create a relatively protected area free from general farming disturbance.

Whilst the site is not listed as critical habitat it is located within 400 metres of a RAMSAR listed wetland which is recognised habitat of a number of migratory bird species and the Australasian Bittern, a threatened species. The site in its present status is not considered typical habitat for the Australasian Bittern.

The site being within 400 metres of a RAMSAR listed wetland is likely to be subject to birds flying over it. Whilst the potential for bird strike, where a bird believing the solar panel is water flies into the panel at a velocity that results in either injury or death to the bird, is present a 2010 NSW Planning draft Solar Energy discussion paper found that “potential glare associated with non-concentrating PV systems which do not involve mirrors or lenses is relatively limited”.

Social Impacts

The development is considered to have little or no social impact. The site is opposite a sewerage treatment works on the periphery of the township in a semi-rural area and will be screen by a vegetation plantation around its boundary.

Economic Impacts

The development will generate 25.77 MW of renewable electricity into the local grid and will provide renewable power for approximately 6,400 dwellings.

S79C(1)(c) The suitability of the site for the development

a) Will the development have an adverse effect on the landscape or scenic quality, views/vistas, access to sunlight in the locality or on adjacent properties?

The development is located in a rural area that is within 500m from existing residential development. The nature of the development involves a development footprint of 32.2ha and structures up to 3m in height.

The proposal thus may have the potential to impact on some of the scenic quality and existing views available within the locality.

b) Is the external appearance of the development appropriate having regard to character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of development in the locality?

The proposal involves a development footprint of 32.2ha with setbacks of 12m and 3m separation between groups of solar arrays. The nature of the development may result in some visual intrusion due to its character, location, scale, height and external appearance given the existing development and potential future development of the locality.

c) Is the size and shape of the land to which the Development Application relates suitable for the siting of any proposed building or works?

The size and shape of the land is suitable for the siting of the proposed development. Any structures located within the drainage easement on Lot 91 should not impede or obstruct the flow of drainage water through the development site.

d) Will the development proposal have an adverse impact on the existing or likely future amenity of the locality?

The development proposal may impact the future amenity of the area between the existing residential area and the westerly boundary. This area is zoned R2 Low Density

Residential and is available for future development for residential purposes in accordance with its zoning.

The applicant in their response to submissions included boundary landscaping to mitigate this risk.

Should the development be approved a condition would be required to ensure that landscape embellishment and screening is effectively established and maintained along the western and southern boundary to screen and enhance the development from the adjoining development.

e) Has adequate provision been made for the landscaping of the subject land?

A site plan has been provided by the applicant that provides for the landscaping of the western and southern boundaries of the development site to effectively screen and enhance the development.

Any approval of the development should require the imposition of a condition for the preparation and activation of a landscaping plan to enhance and screen the frontage and perimeter boundaries of the development.

f) Is the development likely to impact or harm the environment in terms of air quality, water resources and water cycle, acidity, salinity soils management or microclimatic conditions?

The development is unlikely to affect the environment in terms of air quality, water resources and water cycle, acidity, salinity soils management or microclimatic conditions.

g) Is the development likely to cause soil erosion?

Earthworks will be required to decommission existing dams, remove banks and implement stormwater controls. The SEE provides for a protocol of actions to be undertaken for the decommissioning of the dams. The earth works proposed to be undertaken are typical of agricultural earth works

A condition of any approval should be for the requirement to prepare and implement soil and water management plans to prevent site soil loss, prevent sedimentation and protect water quality of receiving waters.

h) Is the development likely to cause noise pollution?

Although there will be some noise during the construction phase of the Project associated with transport movements, site preparation and construction activities, the development is unlikely to result in noise pollution.

It is appropriate that a condition of approval include a requirement that construction activities be restricted within the hours of 7am to 6pm Monday to Friday and 8am to 1pm on Saturdays and that the development not exceed the background noise level by more than 5dB(A) when measured at any sensitive residential receptor.

i) Has the surrounding road system in the locality the capacity to accommodate the traffic generated by the proposed development?

The SEE originally identified access to the property via an unsealed driveway off Fivebough road with a 20m internal access road. The plans have since been amended and provide for two property accesses and a 10m access road. The SEE states that during construction phase the peak daily traffic is likely to be 30 light commercial vehicles and 10 heavy vehicles, mostly comprising semi-trailers

The access and the internal access tracks will be required to allow vehicles to safely access, manoeuvre around and exit the site.

It is considered that the surrounding road system is capable of accommodating the traffic generated by the proposed development once operational.

j) Are there any other requirements which should be considered in determining the Application?

The development is proposed within a rural area and close to an existing and future residential zone. While the development is suitable within a rural context the location of the development close to a future residential area and on the route of a Ramsar destination site, means that the development should be appropriately landscaped or screened to protect the existing and future amenity of the area. On this basis the impact to nearby residential views would be considered reasonable.

S79C(1)(d) any submissions made in accordance with this Act or the regulations

Council advertised and notified the proposal to neighbours (Refer to Notification Plan – **Attachment 3**) and relevant government agencies. The notification period was 21 March 2017 to 17 April 2017. A public meeting on the proposal was also convened by Photon on 6 April 2017 during the notification/exhibition period. The minutes of this meeting are included in **Attachment 4**.

During the exhibition period, seven (7) written submissions were received, that raised twelve (12) separate matters. Copies of the submissions are included in **Attachment 5** of this report. The applicant provided a response to submissions (RTS) which is included in **Attachment 6**.

Key matters raised in the submissions are discussed below:

- 1) The location of the development close to a residential area is not ideal and will impact on land values and future development opportunities on Quodling and Grevillea road.*

Comment:

The location of the development close to a residential area is permissible provided the impacts on residential amenity are able to be appropriately mitigated through screening, setback and design. Land values are subject to market forces which are difficult to measure and predict. Provided a development is appropriately designed to be compatible within its setting and context, the impacts should not be significant and it would be difficult to substantiate adverse economic impact on land values.

Any approval for the development would require the imposition of a condition for the effective screening of the development.

- 2) Structures close to a residential area require screening with bushes and trees.*

Comment:

The impact of the development on existing and future residential amenity is an issue which is required to be addressed by the proposal.

The applicant has responded to this issue through submission of a site plan providing for a 3m wide landscaped buffer on the southern and western boundaries consisting of a minimum of two rows of trees and shrubs, appropriately spaced to allow growth but with foliage to effectively screen and enhance the development.

To prevent the loss of views from the adjoining resident areas, consideration must also be given in the proposed landscaping plan for the use of suitable landscaping plants that are not deciduous, have a maximum height of 3 metres, are quick growing and when mature have dense foliage.

Any approval for the development would require the submission of a landscape plan, prior to the issue of any Construction Certificate, prepared by a qualified landscape architect demonstrating that the buffer width and species selected are appropriate for the area, have adequate spacing, form and growth habit to effectively screen the development.

Landscaping would be required to be established prior to the issue of the Occupation Certificate and maintained for the life of the project.

3) Restriction of views.

Comment:

The submitter is an adjoining landholder to the south of the subject land (referred to as RV7- Figure 5-1 p12 Visual Impact Assessment). The Visual Impact Assessment identifies this site as well as two other sites as being moderately impacted by the proposal.

The applicant has since modified the proposal as a result of the concerns raised to provide for a 3m landscape buffer.

The views from the two story house is already affected by existing vegetation on that property however views may still be impacted to some extent by the proposal, due to the proximity and height of the residence. The addition of screening landscaping as previously discussed to the development on the southern and western boundaries will help to reduce the extent of impact.

4) Impact of Noise.

Comment:

Noise associated with the development is likely to occur during the construction phase of the project estimated at 22-30 weeks duration.

A quantitative noise assessment was carried out in accordance with the Interim Construction Noise Guidelines and relevant Australian Standards (AS 1055.1-1997 and AS 2436-2010).

This report indicated that the combined noise level (assuming all equipment was operating simultaneously) was estimated at 90 dB(A) at 10m during construction and that nearby residences on Grevillia Road, Hill View Place and Guild Place would experience the greatest potential impact during the construction phase of the project and noise levels are predicted to exceed the management levels (55 dB(A)) for part of the construction period.

Because the predicted noise was based on a worst case scenario with all equipment working simultaneously and because works will proceed from south to north with each solar array grouping expected to take 2-3 weeks to complete, the temporary duration and likely extent of noise is considered to be reasonable.

5) *Lack of buffering and separation distance to adjoining development.*

Comment:

After considering this issue, the original site plan was amended to provide for a 6m wide internal perimeter access track around the development site as well as a 3m landscaped buffer on the southern and western boundary. The amendments achieve a minimum of 12m separation of the solar panels from the eastern and western boundaries and 13.7m on the southern boundary which is considered reasonable.

6) *Impact from aerial spraying to solar panels.*

Comment:

Landholders have an obligation to prevent spray drift impacting other lands. The location of the development and the obligation of farmers to manage the impact of pesticides from aerial spraying means that this is unlikely to be an issue.

7) *Inadequate threatened species assessment.*

Comment:

A number of issues have been raised by several submitters including government agencies in relation to the adequacy of the threatened species assessment. Issues of concern include:

- inadequate risk assessment of the risk of bird strike on solar panels,
- inappropriate mitigation measures to reduce the risk of bird collision,
- no consideration of local bird and migratory bird flight paths,
- inadequate monitoring to mitigate against potential impacts,
- inappropriate reactionary mitigation measures after development is operational,
- no consideration of the breeding season of the Australasian Bittern,
- lack of scientific certainty about the effectiveness of the separation between groups of arrays to break up the 'lake' effect.
- insufficient assessment of the potential impact to bird species using the land for forage,
- Seven species identified as unlikely to occur that have been recorded close to the development site.

While some concerns have been raised about the Threatened Species Assessment, NSW Office of Environment and Heritage are generally satisfied with the level of assessment and conclusion that there is a low risk to threatened species presented by the proposal. OEH support the spatial separation of solar array groups using access tracks to diminish the 'lake affect' so that birds will be most likely to utilise the nearby Fivebough wetland as opposed to the development site where solar panels might be perceived as water.

Minimal research is available about the risk of solar farms to wetland threatened species. However some research suggests that by separating groups of arrays there is a reduction of the total 'lake affect'. The theory is that groups of small separated water bodies are less likely to be attractive to birds than what might be perceived as a larger lake.

The development design proposes 30 spatially separated groups of solar arrays. Each grouping is separated by either 3m or 6m wide access maintenance corridors.

Cumberland Ecology have indicated that the solar panels have a reflectivity that is lower than that of water and the risk of a bird strike with the panels is low. NSW OEH recommends that the applicant be asked to provide evidence of the adequacy of access track widths to achieve a satisfactory separation distance to break up the lake effect.

They have also recommend that an environmental management plan be prepared for the development prior to the development commencing, which includes, amongst other things, an appropriate monitoring program during the life of the development to record any matter such as bird strike and to include reporting, remediation measures.

This evidence as well as the preparation of an environmental management plan which includes an appropriate monitoring program should be prepared.

The proponent originally proposed a monitoring program of every three weeks in association with routine inspections. OEH provides that a more frequent monitoring program including dead bird protocol and reporting regime is required with protocols in place prior to construction.

As recommended by OEH a condition could be imposed requiring the applicant prior to the issue of any Construction to prepare a Management Plan for protected species which would also include an ecological protocol and a monitoring program to be implemented to mitigate the risk on protected and threatened species. The justification for not referring the proposal to the commonwealth is documented in a submission from Cumberland Ecology dated 12 May 2017 can be found in **Attachment 2**.

8) No consideration of the breeding season of Australasian Bittern.

Comment:

Cumberland Ecology has identified that there is the potential for disturbance to the Australasian Bittern from noise and vibration during construction of the development. They have indicated that the impacts can be managed by regulatory standards as well as avoidance or minimisation of construction during breeding season. The breeding season of the Australasian Bittern is from November to the end of February.

Any approval for the development would require the imposition of a condition for a Construction environmental management plan, prior to the issue of a Construction Certificate, which should provide for minimal construction activities during the breeding season of the Australasian Bittern.

9) Erosion and weed impacts.

Comment:

Earthworks are necessary to decommission existing dams and redundant internal channels, sustainably manage sedimentation and runoff and protect receiving waters. As a pest plant mitigation measure, sheep grazing is proposed or alternatively the utilisation of independent weed control contractors.

Any approval for the development would require the imposition of a condition for the preparation of a soil and water management plan and a vegetation management plan prior to the issue of a construction certificate.

10) Decommissioning Plan and Closure Management Plan required prior to Commencement.

Comment:

The SEE discusses the need for a decommissioning plan to ensure that at the end of its life, the development site is appropriately rehabilitated to enable future sustainable land use. Further, the SEE proposes that this decommissioning plan be prepared after the establishment and operational phase of the solar farm is commenced.

To promote certainty that the measures proposed are adequate, sustainable and appropriately funded, any approval of the development would require the imposition of a condition for the decommission plan to be prepared prior to the issue of a Construction Certificate along with satisfactory arrangements being made for the enforceable guarantee of the costs associated with the decommissioning plan.

11) Crossing of channels and location of fencing to satisfy MI.

Comment:

A condition of approval will be for the approval of Murrumbidgee Irrigation for crossing of any irrigation and drainage channels and fencing to be located so as to enable the maintenance of channels.

12) No assessment of change to volume of runoff from the land and susceptibility of Fivebough wetland to changes in inundation.

Comment:

The development is not expected to significantly alter the volume or rate of runoff that occurs currently. Irrespective a condition will be imposed on any approval regulating no substantial change to pre-development flows.

S79C(1)(e) – Public Interest

The public interest is an overarching requirement, which includes the consideration of the matters discussed in this report. The proposed development is considered to generally meet the provisions of relevant environmental planning instruments, subsequently, as these instruments have been created having regard to the objects of the Act and following community consultation they are considered to express planning controls that seek to protect the public interest. Accordingly, it is considered that the proposal is not prejudicial to the public interest.

3.2.2 Riverina Murray Regional Plan 2036 - Implementation Plan 2017-2019

The proposal is consistent with Direction 11.1: Promote the diversification of energy supplies through renewable energy generation by encouraging renewable energy projects.

4 CONCLUSION & RECOMMENDATION

The proposed development been assessed in accordance with the requirements of the *Environmental Planning and Assessment Act 1979*. The assessment demonstrates that the proposal is considered to be satisfactory in terms of the applicable matters for consideration identified within relevant legislation. A total of seven (7) submissions were received in relation to the proposal, the matters raised in these submissions have been considered and addressed within this report.

Approval of the application is recommended.

APPENDIX 1

ASSESSMENT REPORT ATTACHMENTS

APPENDIX 2

DRAFT CONDITIONS OF CONSENT DA 20/2017

General

1. The design, construction, layout and management of the proposed development is to comply with the following documents;
 - i) Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017, Ref 2016.276 prepared by KMH Environmental.
 - ii) Plan dated 12/4/2017 Ref PEA-15-116-320, Project: Leeton PV Plant, Part: System Layout, Drawing Title: PV Array Layout.
2. All building works shall be carried out in accordance with the Building Code of Australia.
3. Temporary use structures shall be placed on-site in accordance with the requirements of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, Division 3, Subdivision 3.
4. Clearing of land, excavation, and/or earthworks, building works, and the delivery of building materials shall be carried out between the following hours:

Mondays to Fridays - 7:00am to 6:00pm
Saturdays - 7:00am to 4:00pm except as noted in Clause 'b'

 - a) No work is permitted on Sundays and Public Holidays
 - b) No work is permitted on Saturdays when a public holiday is adjacent to that weekend, construction industry awarded rostered days off or on Construction industry shutdown long weekends.
5. All shipping containers installed on-site and used as permanent means of storage shall comply with the following:
 - i) Containers must not be located over water, wastewater or stormwater mains or dedicated drainage easements.
 - ii) Containers must not be located over gas lines or underground power lines.
 - iii) Setbacks to overhead power lines must comply with the requirements of the relevant electricity authority.
 - iv) Containers must be screened from the streetscape by suitable vegetation or other appropriate screening.
 - v) Containers must be painted a neutral colour to blend with the surrounding natural environment and built structures.
 - vi) Containers must be placed on flat, solid ground. Any associated earthworks (cut & fill) must be in accordance with Subdivision 15 – 'Earthworks and retaining walls' of Division 1 of the Codes SEPP.
 - vii) Containers must not be stacked.
 - viii) Containers must not contain sanitary facilities.

- ix) Containers must not be used to store contaminated or hazardous materials.
6. The development is to be managed to ensure that post development drainage flow rates must not exceed pre-development flow rates.
- All surface drainage water is to be managed via existing drainage points into Murrumbidgee Irrigation Ltd drainage assets. Murrumbidgee Irrigation Ltd have advised that all allotments created from Farm 2157 have one common drainage point of no more than 225mm for all blocks.
7. A Decommissioning Plan is to be submitted to Council within eighteen (18) months from the issue of the Occupational Certificate and is to include the matters listed under B6 of Section 5.2.3 Mitigation Measures – Construction and Decommissioning on page 36 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.
8. The development is to be provided with a water supply appropriate to the operation of the development and use of the site.
9. The development is to be provided with electricity supply appropriate to the operation of the development and use of the site.
10. The existing trees located along the southern boundary with Grevillia Road are to remain and be incorporated into the vegetation screening area.
11. The development is to comply with any requirements NSW Planning for Bush Fire Guidelines (NSW Rural Fire Service 2006) and be implemented in accordance with Section 5.11.3 Mitigation Measures – Bushfire on page 56 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.

Pre-construction/Prior to the Issue of a Construction Certificate

12. No activity is to be carried out on site until the Construction Certificate has been issued, other than:
- a) Site investigation for the preparation of the construction, and/or
 - b) Implementation of environmental protection measures, such as erosion control etc that are required by this consent.
13. All Construction Certificates for building/development works are to be issued by a Principal Certifying Authority appointed by the proponent prior to the commencement of any building works.
- The Principal Certifying Authority (if not the Council) is to notify Council of their appointment and notify the person having the benefit of the development consent of any critical stage inspections and other inspections that are to be carried out in respect of the building work no later than 2 days before the building work commences.
14. Prior to the issue of any Construction Certificate a practicing structural engineers design and certification of the solar panel steel framework shall be submitted to the Certifying Authority.
15. A copy of the stamped approved plans shall be kept on site for the duration of site works and be made available upon request to either the Principal Certifying Authority or an officer of the Council.

16. Site security and public access is to comply with the NSW WorkCover publication titled, 'Site Security and Public Access onto Housing Construction Sites' and all site security and public access measures are to be installed prior to the commencement of any demolition, excavation or building works and be maintained throughout construction.

The use of barbed wire and/or electric fencing is not to form part of the protective fencing to construction sites.

17. A sign is required to be erected in a prominent position on the work site on which building work is being carried out. The sign shall indicate:

- a) The name, address and telephone number of the Principal Certifying Authority for the work;
- b) The name of the Principal Contractor and a telephone number at which that person may be contacted outside of working hours; and
- c) That unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work is being carried out, but shall be removed when the work has been completed.

18. Temporary closet accommodation are to be provided throughout the course of building operations by means of a chemical closet complying with the requirements of the Department of Environment and Climate Change or a temporary connection, by a licensed plumber and drainer, to Council's sewer where available.

19. The following Critical Stage Inspections are required to be carried out by the Principal Certifying Authority to enable the issue of an Occupation Certificate:

- a) After each building/development work has been completed and prior to any occupation certificate being issued in relation to the building work.

48 hours prior notice for all of the above inspections (where applicable) shall be given.

20. A Construction Environmental Management Plan is to be submitted to Council prior to the issue of any Construction Certificate and is to include the matters listed in Section 5 the document known as Leeton Solar Farm Statement of Environmental Effects, Photon Energy, dated February 2017 prepared by KMH Environmental and is to include the following plans;

- i) A Ecological Works Method Statement to include the matters listed under B4 of Section 5.2.3 Mitigation Measures – Construction and Decommissioning on page 36 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.
- ii) An Operational Environmental Management Plan to include the matters listed under B1, B2, B3 and B4, of Section 5.2.3 Mitigation Measures – Construction and Decommissioning on page 36 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.
- iii) The Operational Management Plan is also to provide protocols to lessen the potential to cause disturbance threatened birds within the Fivebough Wetlands though the creation of any vibration, noise or lighting.
- iv) A Noise Management Plan to include the matters listed under N1, N2 and N3 of Section 5.3.4 Mitigation Measures – Construction and Decommissioning on page

44 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.

- v) An Erosion and Sediment Control Plan to include the matters listed under S1, S3, S4, S5, S6 and S7 of Section 5.4.3 Mitigation Measures – Construction and Decommissioning on page 46 and matters listed under SWW2, SGW3, SGW4 and SGW5 of Section 5.9.3 on page 52 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.

The Plan is also to address the remediation through establishment of suitable vegetation of any bare ground resulting from land forming or construction activities.

No soil materials from the site are permitted to be tracked onto Fivebough Road by vehicles leaving the site. Should this occur measures are to be implemented to remove any dust/mud from Fivebough Road deposited by vehicles leaving the site.

- vi) A Construction Traffic Management Plan to include the matters listed under T1, T2 and T3 of Section 5.5.3 Mitigation Measures – Construction and Decommissioning on page 47 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.

The Construction Traffic Management Plan is to also include the following matters;

- a) Accesses shall be located and maintained so as to comply with the required Safe Intersection Sight Distance (SISD) in either direction or in accordance with the Austroads Publications as amended by the RTA supplements for the prevailing speed limit. The intended method of compliance with this requirement shall be submitted to Council for approval prior to issue of any Construction Certificate.
- b) A 'Rural' type vehicular access is to be provided for the development off Fivebough Rd. This will require construction of a new access for the allotment or the widening and upgrading of the existing access to the allotment in accordance with Council's Specification for 'Construction of Rural Type Access'.
- c) Any access gate and associated fencing shall be located at least the length of the design vehicle plus four (4) metres from the edge of the carriageway or at the property boundary, whichever is the greater. Details are required prior to the issue of any Construction Certificate
- d) Prior to any Construction Certificate being issued details of off street car parking associated with the construction/decommission phase of the development is to be provided.
 - a) A minimum of Twenty (20) spaces for Staff Parking and a minimum of Two (2) for Visting Parking are to be provide.: Two (2) spaces minimum.

Any parking required in excess of this are to be catered for on site.

- e) The developer is to provide sufficient area on site for loading and unloading of vehicles which will also allow for turning paths of servicing vehicles.
- f) The proposed development shall provide and maintain sufficient area on site to allow for the storage of all vehicles intending to access the site. At no time

shall vehicles be required to queue on Fivebough Road. Details are required prior to the issue of any Construction Certificate.

- g) The developer is to provide a manoeuvring area of adequate size for the design vehicle so that ingress to the site and egress from the site is in a forward direction. Details are required prior to the issue of any Construction Certificate.
 - h) An approval from Council pursuant to Section 138 of the Roads Act 1993 to carry out work, construct/alter vehicle crossovers and the installation of kerb and gutter and concrete footpath or any other structures within the road reserve for this development is required prior to issue of any Construction Certificate. This application must be accompanied by engineering design plans, reports, calculations and any other relevant documents.
 - i) All development works undertaken on public land or assets must be done so by suitably experienced contractors acceptable to Council. They must maintain public liability insurance cover to the minimum value of \$20 million. The policy shall indemnify Council from all claims arising from the execution of the works. Documentary evidence of the currency of the policy shall be provided to Council prior to the commencement of work and upon request, during the progress of the work.
 - j) Any damage to Council infrastructure in, on or under the road reserve as a result of works undertaken for the development site shall be rectified by the Developer to the satisfaction of the Council so as to ensure the integrity of public infrastructure. Any damage to Council's infrastructure which is obvious before construction is to be immediately notified to Council to avoid later conflict.
 - k) All works undertaken in carrying out the development shall comply with Work Health and Safety Act 2011 and Regulations and Safe Work NSW Guidelines codes of practice as well as Safe Work Australia. Traffic Control Plans (TCP) are to be prepared by a person with the applicable certification from Roads and Maritime Services (RMS) in accordance with AS1742.3 and the RMS current version of the Traffic Control at Worksites manual. All TCP are to be implemented prior to the commencement of any works undertaken within the road reserve.
- vii) A Waste Management Plan to include the measures listed under Section 5.10.3 Mitigation Measures – Construction and Decommissioning on page 54 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.
21. The management of any Aboriginal object identified on the site whilst undertaking the Construction or Decommissioning stage to comply with the protocols listed under Section 5.7.3 Mitigation Measures – Construction and Decommissioning on page 49 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.
22. The management of any non Aboriginal object identified on the site whilst undertaking the Construction or Decommissioning stage to comply with the protocols listed under Section 5.8.3 Mitigation Measures – Construction and Decommissioning on page 50 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental.
23. During construction air quality is to be maintained and monitored in accordance with the protocols specified under Section 5.12.3 Mitigation Measures – Construction and Decommissioning on page 57 of the document known as Leeton Solar Farm Statement

Prior to Issue of Occupation Certificate

24. An Operational Environmental Management Plan is to be submitted to Council prior to the issue of an Occupation Certificate and is to include the matters listed under B7 and B8 of Section 6.3 Summary of Mitigation Measures on page 62 of the document known as Leeton Solar Farm Statement of Environmental Effects Photon Energy, dated February 2017 prepared by KMH Environmental and is to also include the following Plans;

- i) A Fauna Monitoring Plan that establishes strategies for the monitoring, management and mitigation of potential impact of the development on fauna. The Plan is to record the monitoring of any fauna strike events resulting in the injury or death of any fauna, any increase in numbers of fauna frequenting the site, any event on the site that has the potential to impact fauna and a record of any action employed on the site to deter or protect fauna.

A copy of these records is to be lodged annually to LSC for the life of the development.

The Fauna Plan is to establish protocols that are to be implemented should an event occur that involves injury or death to any threatened or endangered fauna species. The protocols are to establish the requirement for the immediate reporting of such an event to LSC and the NSW Office of Environment and Heritage, a report detailing any possible mitigating factors (changes in climate, environment or operation) and the range of mitigation measures proposed to be taken to deter future events involving any threatened or endangered fauna species.

- ii) A Waste Management Plan for the management of all solid and liquid wastes generated by the development during its operational stage.
- iii) A Noxious Weeds Management Plan for the management of noxious weeds on the site of the proposed development.

25. Photon Energy, or the owner of the development at the time, to undertake all necessary mitigation measures, such as a minimum 1.8 metre high colourbond fence consistent with typical fencing in a residential development, should these works be necessary to maintain a suitable visual aspect from the following existing allotments in the event that these allotments are subject to future residential development;

Lot 638	DP 704408
Lot 1	DP 858247
Lot 2	DP 858247
Lot 2	DP 832791

26. In accordance with Leeton Shire Council Section 94A Fixed Levy Plan a development contribution of \$240,000 applies to this development.

Payment of this development contribution is to be paid to Council either;

In full prior to the issue of the Occupation Certificate, or
In accordance with a signed Voluntary Planning Agreement, prepared by Photon Energy, that is submitted and agreed to by both LSC and Photon Energy before the Occupation Certificate is issued, under which Photon Energy is required to pay an minimum annual monetary contribution for a maximum period of time so that at the cessation of the agreement a minimum amount of \$240,000 has been paid to LSC.

Any Voluntary Planning Agreement is to be prepared in accordance with the requirements of Part 4 Division 6, Subdivision 2 of the Environmental Planning and Assessment Act 1979 and Clause 2.13 of the Leeton Shire Council Section 94A Fixed Levy Plan.

27. A Landscape Management Plan is required to be submitted for the establishment of a vegetation screening border to be established immediately adjacent to the full length of the western and southern boundaries. The vegetation screening border is to be a minimum of 3m, consisting of dense at a suitable density to effectively screen the development from the west and southern aspects. The selected plantings are to include suitable quick growing, non deciduous plants that have maximum mature height of 3-4m. The plan is to include details on any proposed watering systems, maintenance, replacement of dead trees etc. The developer will be required to establish the vegetation screening plantings along the full length of the western and southern boundaries prior to the issue of an Occupation Certificate and will be required to maintain the vegetation screen for the life of the development.

Should the site also be used for the grazing of sheep for the control of weeds and long grass, the vegetation screening border is to be protected from gazing by the sheep to prevent the vegetation border from being reduced.

The Landscape Management Plan is to also incorporate measures to further address any visual impacts from the development once established to the following properties and areas that may be required in addition to the above landscaping requirements, should the visual impacts of the development warrant future visual mitigation works;

145 Fivebough Road Leeton.
95 Grevillia Street Leeton.
124 Grevillia Street Leeton.
To vehicle traffic along Fivebough Road.

28. Prior to any Occupation Certificate being issued the gated access to Grevillia St shall be fenced across so that it prohibits vehicular access from this location. This access is not to be used during construction activities.

APPENDIX 3 PLANS AND DOCUMENTATION

APPENDIX 4 NOTIFICATION & ADVERTISING INFORMATION