

# Suntop Solar Farm

SSD 8696  
Response to Submissions

transport | community | mining | industrial | food & beverage | energy



**Prepared for:**

Suntop Solar Farm Pty Ltd

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**Date:**

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Rev00

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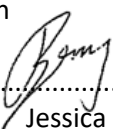
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# 1. Introduction

Suntop Solar Farm Pty Ltd (SSF) is owned by Photon Energy NV (Photon Energy), Canadian Solar Energy Holdings Singapore 4 Pte Ltd (Canadian Solar) and Polpo Investments Ltd (Polpo) (Referred to herein as SSF). SSF proposed to develop and operate a 170-megawatt (MW AC) (200 MW DC) solar photovoltaic (PV) facility including ancillary works and associated infrastructure at 909 Suntop Road, Wellington, NSW 2820 (“the Proposal”).

The facility would operate for a duration of approximately 30 years following which SSF would reassess the viability and either continue operations, upgrade the infrastructure or undertake decommissioning of the facility. Decommissioning would include removal of all ancillary works, associated infrastructure and remediation of land (as required) to enable continued agricultural use. However, the substation may remain following decommissioning of the solar farm to continue to service the region.

An Environmental Impact Statement (EIS) was prepared by pitt&sherry on behalf of SSF and submitted to the Department of Planning and Environment (DP&E) in May 2018. The EIS, including all the specialist reports were made available for download on the DP&E Major Projects Website during Public Exhibition from Wednesday 6<sup>th</sup> June to Friday 6<sup>th</sup> July 2018. During this period submissions were sought from members of the local community, government stakeholders and other interested parties.

The locality of the SSF is shown in Figure 1-1.

## 1.1 Purpose of this Submissions Report

As per the letter received from DP&E on 9 July 2018, DP&E requested that the proponent (SSF) prepare and submit a report detailing a response to the matters and recommendations raised in the submissions.

This submissions report has been prepared by pitt&sherry on behalf of SSF to meet the requirements of DP&E, and is structured as follows:

- **Section 1: *Introduction*.** Provides a summary of the key issues
- **Section 2: *Exhibition and Consultation*.** Provides detail of the consultation undertaken during the preparation of the EIS and public exhibition period
- **Section 3: *Actions since the exhibition period*.** Provides detail of the consultation and assessment undertaken subsequent to the closing of the public exhibition period, during the preparation of the submissions report
- **Section 4: *Submissions received and responses*.** Provides summaries of the submissions received by government agencies, interested parties and the community with associated responses and any changes to the proposal or revised mitigation measures.

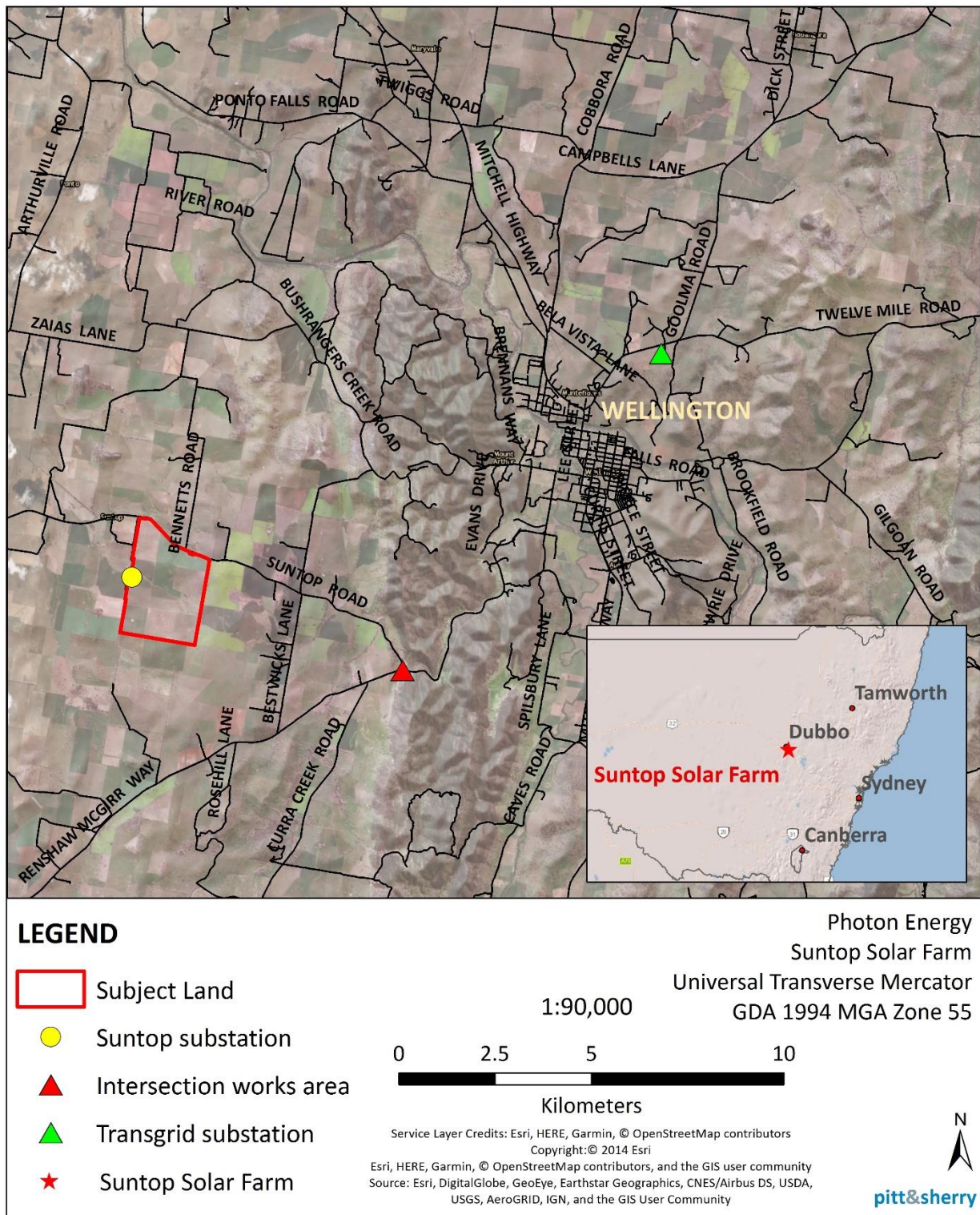


Figure 1-1 Locality map of the Proposal



## 1.2 Summary of Key Issues

A total of nine submissions were received from government stakeholders, organisations and the community identifying aspects including:

- Heritage
- Biodiversity
- Water Supply & Use
- Road Safety
- Bushfire
- Subdivision of Land
- Land use compatibility.

Each of the submissions has been responded to individually, covering each of the aspects, within Section 0. Further information has been provided and in some instances mitigation measures have been revised or new mitigation measures proposed to address the aspect raised in the submission.

## 1.3 Assessment and Determination Process

*The Environmental Planning and Assessment Act 1979* (EP&A Act) is the principal piece of legislation covering assessment and determination of development proposals in NSW. It aims to encourage the proper management, development and conservation of resources, environmental protection and ecologically sustainable development. The development assessment and approval system in NSW is set out in Parts 4 and 5 of the EP&A Act.

Under Schedule 1, Part 20 of the State Environmental Planning Policy (State and Regional Development) 2011 electricity generating works with a capital investment value of more than \$30million, or a capital investment of more than \$10million and located in an environmentally sensitive area of State significance, are deemed State Significant Developments (SSDs). The Proposed solar farm exceeds the \$30million capital investment value and is therefore declared SSD. Development consent for the Proposal is therefore being sought under Part 4 of the EP&A Act.

On 23 August 2017, SSF submitted a Preliminary Environmental Assessment (PEA) along with a request to the Secretary for the Secretary's Environmental Assessment Requirements (SEARs), as required by clause 3 of Schedule 2 of the EP&A Act Regulations 2000. The PEA provided information about the proposed development and preliminary assessment of the potential environmental impacts. In formulating the SEARs, requests were sent to relevant public authorities and agencies to inform the key issues raised in Section 4. of the EIS. The SEARs were issued to SSF on the 21 September 2017.

An Environmental Impact Statement (EIS) was prepared by pitt&sherry on behalf of SSF and submitted to the Department of Planning and Environment (DPE) in May 2018. The EIS was put on Public Exhibition from Friday 6<sup>th</sup> of June to Saturday 6<sup>th</sup> July 2018. Following the closing of the Exhibition period, DP&E issued a letter Request for Response to Submissions (RTS) to SSF in July 2018.

pitt&sherry have prepared a RTS report on behalf of SSF in response to DP&E request.

## 1.4 Project Benefits

The key benefit of the Proposal is the production of renewable electricity reducing our greenhouse gas emissions and reliance on fossil fuels. The production of renewable electricity will help contribute to NSW Governments' Renewable Energy Action Plan and other schemes and agreements made. On an annual basis, the Proposal will produce enough electricity to meet the needs of approximately 48,000 households.

Additionally, the proposal will reduce greenhouse gas emissions by over 357,000 tonnes of carbon dioxide (CO<sub>2</sub>) equivalent per annum (based on 0.948t/MWh from fossil fuels). This is roughly equivalent to removing approximately 125,000 cars from the road.

The Proposal would also provide the following national benefits:

- Develop the solar power industry and supply chain in Australia
- Develop Australian intellectual property and expertise in solar power
- Assist with Australia's commitments under national and international agreements
- Diversify sources of income for the agricultural sector, allowing financial resilience for farmers
- Provide energy security.

The proposal would also generate regional and local benefits including:

- Generating employment:
  - 250 construction jobs (at peak) as well as indirect supply chain jobs
  - Support up to ten operational jobs.
- Encouraging regional development:
  - Employee expenditure in the Wellington region (fuel supply, vehicle servicing, uniform suppliers, hotels/motels, B&B's, cafés, pubs, catering and cleaning companies)
  - Maximising the use of local contractors and equipment hire
  - Increasing local skills and trades through project experience.

## 2. Exhibition and Consultation

A Community and Stakeholder Engagement Plan (CSEP) was prepared in November 2017 in accordance with *The Community and Stakeholder Engagement Draft Environmental Assessment Guidance Series June 2017* (Draft Guidelines) prepared by DP&E. The CSEP documented the objectives of engagement, identification of relevant stakeholders, as well as the community and potential issues associated with the development. The CSEP also included an implementation plan which was updated as required through the duration of the community and stakeholder engagement. Table 6 from the CSEP, attached as Appendix L in the Suntop EIS, outlines the implementation plan, which was used as the guiding document throughout stakeholder engagement.

### 2.1 Consultation during EIS public exhibition

#### Community

In anticipation of the commencement of public exhibition period on Friday 6<sup>th</sup> of June correspondence (email) was sent (30<sup>th</sup> May 2018) to the 12 registered community members to advise them of the public exhibition period.

In addition to notifying the community, further one on one consultation was conducted with the following sensitive receiver:

- Receiver One (as identified in EIS): Multiple phone calls were conducted between receiver one and a Photon representative over the course of June 2018. Topics discussed followed on from concerns raised during EIS consultation, in particular:
  - Insurance in the case of a fire
  - Increase in salinity

- Visual mitigation
- Access to water on the proposed site property
- Traffic during construction.

Consultation has evolved into Photon engaging in continued discussions about potentially entering into an agreement regarding future use of Receiver One's property.

### **Aboriginal Heritage**

No further consultation was undertaken with Aboriginal stakeholders during the exhibition period. Further consultation was undertaken with the Office of Environment and Heritage as outlined in Section 4.

### **Agency Stakeholders**

#### Department of Planning & Environment (DP&E)

pitt&sherry on behalf of SSF continued ongoing consultation with DP&E, to supply information requested including contact details for identified sensitive receivers.

In accordance with DP&E requirements hard copies of the Suntop Solar EIS were posted to the following:

- One copy to DP&E
- Three copies to Dubbo Regional Council
- One copy to Nature Conservation Council.

#### Dubbo Regional Council

SSF continued to engage with Dubbo Regional Council following the submission of the EIS.

A meeting was held at Dubbo Regional Council headquarters on 05/06/2018. Attendees included the Mayor (Councillor Ben Shields), pitt&sherry, Photon Energy, Canadian Solar and Polpo.

Following this meeting, Mayor Shields, provided a letter of support for Suntop Solar Farm which is provided in Appendix A.

#### Roads and Maritime

pitt&sherry received email correspondence from Andrew McIntyre, Manager Land Use Assessment – Western Region of Roads and Maritime Service on 30<sup>th</sup> May 2018 in response to email correspondence sent by pitt&sherry on 8<sup>th</sup> May 2018 to provide an opportunity to provide comment on the draft concept plan.

A copy of this correspondence is provided in Appendix A. The feedback within this correspondence has been superseded by the formal submission made by Roads and Maritime during public exhibition. However, the general themes of this correspondence have also been addressed in Section 4 of this Submissions Report.

## **3. Actions since Exhibition Period**

SSF does not propose any changes to the layout or description of the Proposal to that outlined in Section 3 of the EIS.

Changes are proposed to the subdivision plan as outlined in Section 3.1.

Additional mitigation measures have been proposed to address submissions and are provided in Appendix B.

### 3.1 Revised Subdivision Plan

Changes are proposed to the subdivision as presented in Section 4.5.6 of the EIS.

A revised subdivision plan is presented in Appendix C which identifies an additional subdivision of 4800m<sup>2</sup> on part of Lot 3 DP506925 containing the TransGrid substation. The need for this additional subdivision is to provide a separate lot to be owned by TransGrid to contain the substation.

As such the following subdivision is proposed:

- Lot 1 – formerly a 4ha portion of Lot 3 DP 506925 comprising an access road and farm buildings
- Lot 2 – formerly a 4800m<sup>2</sup> portion of Lot 3 DP 506925 comprising agricultural paddock
- Lot 3 – the remaining 513ha of Lot 3 DP 506925 plus Lots 1 and 2 DP 506925, Lot 122 DP 753238 and Lot 90 DP 657805 including agricultural paddocks and a vacant residential building.



## 4. Submissions Received and Responses

A total of nine submissions were received from government stakeholders, organisations and the community, as described in Table 4-1. No objections to the Proposal were received.

Eight submissions were received from government stakeholders in the form of comments and have been addressed in Section 4.1. One submission was received from a member of the community in the form of comments and has been addressed in Section 4.2.

Stakeholder	Number of responses received
Government: <ul style="list-style-type: none"> <li>• Department of Industry: Land and Water</li> <li>• Department of Planning &amp; Environment: Resources &amp; Geoscience</li> <li>• Office of Environment &amp; Heritage</li> <li>• Office of Environment &amp; Heritage, Heritage Division</li> <li>• NSW Roads and Maritime Services</li> <li>• Fire and Rescue NSW</li> <li>• Dubbo Regional Council</li> <li>• NSW Rural Fire Service</li> </ul>	8
Community	1
<b>Total submissions received</b>	<b>9</b>

pitt&sherry have reviewed each submission to understand the key aspects and concerns.

### 4.1 Response to Government agency comments

Specific responses to government agency submissions is provided in Table 4-1 Summary of Responses to Government Agency Submissions

Table 4-1 Summary of Responses to Government Agency Submissions

Aspect	Detail of submission	SSF Response
Office of Environment and Heritage; Heritage Division		
Heritage	The Environmental Impact Statement (EIS) prepared by Pitt and Sherry, dated May 2018 has been reviewed. It identifies the heritage items located in the vicinity including those of local heritage significance listed under the Wellington Local Environmental Plan 2012. The EIS concludes that there will be no impacts upon views or construction related impacts to these heritage items and recommends Mitigation Measures including an Unexpected Finds Protocol which is supported.	As per mitigation measure H1 in Section 6.2 of the EIS, an Unexpected Finds Protocol which addresses unexpected non-indigenous heritage finds will be included in the Construction Environmental Management Plan to be completed by the construction contractor. SSF commits to complying with this mitigation measure.  <i>No further mitigation measures are proposed.</i>
Department of Planning & Environment: Resources & Geoscience		
Stakeholder consultation	Acknowledges the EIS has addressed all GSNSW requirements regarding the assessment of land use compatibility with operating mines, extractive industries (quarries), mineral, coal or petroleum resources and exploration activities. Mineral titles over the site have been identified and considered and consultation with the affected titleholder has been adequately undertaken and recorded in the EIS.	Noted.  <i>No further mitigation measures are proposed.</i>
Biodiversity Offsets	GSNSW note Suntop Solar Farm propose to acquit the liability of 47.758 credits by making a lump sum payment of equivalent value to the Biodiversity Conservation Trust Fund.	Noted.  <i>No further mitigation measures are proposed.</i>
Department of Industry Crown Lands and Water Division		
Water Supply and Use	Prior to Project Approval the water supply sources and security be confirmed and appropriate agreements obtained where required.  The security and relevant approval or agreement requirements of accessing the required volume has not been specified from any water source. The security of accessing water from the farm dams in the current dry conditions needs to be considered, in addition to the potential yield from the bore.	SSF are exploring alternative water supply sources and will confirm these including obtaining appropriate agreements and approvals prior to the commencement of construction. This includes consideration of water being transported to site from off-site sources.  Should the onsite bore be required for use during construction, SSF will obtain all approvals as required under the Water Management Act 2000.

Aspect	Detail of submission	SSF Response
	<p>Prior to Project Approval if the bore onsite (on LOT 3 DP 506925) is to be used, an assessment is required to assess the impact of extracting the proposed volume of water on existing users and the environment and consideration of the rules in the Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Source. The proponent will need to commit to acquiring the relevant water entitlement for the bore and link it to the site prior to its use.</p> <p>The bore is not currently authorised for use at the solar farm, and therefore the use of this bore will require further assessment.</p>	<p>SSF commits to a new mitigation measure (SW10) to source water for construction from off-site or obtain appropriate approvals for use of the on-site bore during construction.</p> <p>SSF will also formally register the onsite bore for stock and domestic use for the landholder.</p> <p>SSF commits to a new mitigation measure (SW11) to complete processes to formalise use of the onsite bore for stock and domestic use by the landholder.</p> <p><i>A new mitigation measure has been proposed.</i></p>
Dewatering	Excavations of trenches during the construction are estimated to be less than 1.2 m, while solar array posts are estimated to be less than 4 m deep. Intersection upgraded excavation depths have not been outlined, if dewatering is required, consultation with the NRAR is deemed necessary. Overall the proposal will not involve large excavations and impacts on groundwater will likely be minimal, with no predicted impacts on licensed water users.	<p>SSF commits to a new mitigation measure (SW6) that if dewatering is required that consultation with the NRAR will be undertaken.</p> <p><i>A new mitigation measure has been proposed.</i></p>
CEMP	Post Project Approval the proponent prepares a Construction Environmental Management Plan (CEMP) in consultation with DoI Water prior to commencement of activities	<p>SSF commits to a revised mitigation measure (G1) a project specific Construction Environmental Management Plan (CEMP) and all relevant sub plans will be prepared by the Contractor prior to commencing Stage 1 construction and in consultation with DoI Water.</p> <p><i>A mitigation measure has been revised.</i></p>
Drainage buffers	Post Project Approval impacts to ephemeral drainage lines are managed by adequate buffers, maintenance of vegetation cover and implementation of a Sediment and Erosion Control Plan (SECP). The SECP is to be prepared in accordance with the guidelines, <i>Managing Urban Stormwater: Soils and Construction: Volume 1 (Landcom)</i> criteria.	<p>As per mitigation measure S1, SSF commits to the preparation and implementation of a Soil and Water Management Plan (SWMP) as part of the CEMP, in accordance with <i>Managing Urban Stormwater: Soils and Construction: Volume 1 (Landcom, 2004)</i>. This will include a Sediment and Erosion Control Plan for the Site and intersection for implementation during construction.</p> <p><i>No further mitigation measures are proposed.</i></p>

Aspect	Detail of submission	SSF Response
Waterfront land	<p>Post Project Approval works within waterfront land are carried out in accordance with the <i>“Guidelines for Controlled Activities on Waterfront Land (NRAR 2018)”</i>.</p> <p>It appears works will be required across the second order watercourse for construction of the access road and the transmission line. The substation also appears to be within close proximity of this same watercourse. These works and use of buffers should be in accordance with the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018).</p>	<p>SSF commits to mitigation measure B10, any works surrounding the dam located on the western boundary of the site will include implementation of appropriate erosion and sediment controls to prevent silt build up in the dam.</p> <p>Further to the above, SSF commits to a new mitigation measure (SW7) that all works within waterfront land being carried out in accordance with the <i>“Guidelines for Controlled Activities on Waterfront Land (NRAR 2018)”</i>.</p> <p><i>A new mitigation measure has been proposed.</i></p>
Agricultural productivity	<p>Post Project Approval an assessment of the current agricultural productivity of the site is carried out e.g. crop yields and stocking rates over a minimum of the last 3 years.</p> <p>Gaining information on the current agricultural productivity of the site would provide a baseline data set to assist in providing agricultural indicators to guide the return of land back to agricultural production for decommissioning purposes.</p>	<p>A Draft Land Management Plan was prepared and included with the Suntop EIS as Appendix J.</p> <p>SSF commits to a revised mitigation measure (L6) that an OEMP will be prepared for the Proposal and will incorporate a land management plan which identifies the current agricultural productivity of the site.</p> <p><i>A mitigation measure has been revised.</i></p>
Pasture species	<p>Post Project Approval the pasture species for revegetation and production purposes be further assessed by local agronomic experts.</p>	<p>A Draft Land Management Plan was prepared and included with the Suntop EIS as Appendix J.</p> <p>SSF commits to a revised mitigation measure (L2) that if operations cease and the Site is to be decommissioned, a remediation plan will be compiled and implemented including identification of pasture species in consultation with local agronomic experts.</p> <p><i>A mitigation measure has been revised.</i></p>
Office of Environment and Heritage		
Biodiversity	<p>OEH accepts the use of the streamlined modules for this assessment and calculation of offset requirements.</p>	<p>Noted.</p> <p><i>No further mitigation measures have been proposed.</i></p>

Aspect	Detail of submission	SSF Response
Aboriginal Heritage	<p>The EIS has not presented or discussed the consultation process that occurred for the project with other Registered Aboriginal Parties (RAPs) as detailed in the “Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010). OEH has a list of approximately 20 RAPs that may hold cultural knowledge relevant to this development. Within this particular Aboriginal community, not all knowledge is held by the LALC members, and not all knowledge holders are associated with the LALC.</p> <p>OEH recommends that the proponent consult more extensively with the Aboriginal community to ensure adequate consultation has occurred and not just rely of the LALC as the only source of information. The proponent should adhere to the “Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010).</p>	<p>In accordance with the SEARs, an assessment of the likely Aboriginal heritage impacts of the development, including adequate consultation with the local Aboriginal community has been undertaken as outlined in Appendix E of the EIS.</p> <p>As outlined in Section 6.2 of the EIS, the Site was assessed as having low archaeological potential and no previously recorded sites were situated within or adjacent to the study area. An archaeological field survey was conducted by Kelleher Nightingale Consulting and the Wellington Local Aboriginal Land Council (WLALC) and identified three heritage sites within the study area. The sites are all outside the Proposal footprint and will not be impacted by the proposal. WLALC have stated their concurrence with the Proposal as long as the identified sites are protected and appropriate mitigation measures were outlined in Section 6. 2.1.4 of the EIS.</p> <p>Further consultation was undertaken with OEH on 6<sup>th</sup> July 2018 which concluded that the assessment and consultation undertaken by Kelleher Nightingale Consulting as presented in Appendix J of the EIS was in compliance with the SEARs issued by DPE and relevant OEH guidelines. OEH indicated no further requirements for assessment or consultation with regards to aboriginal heritage.</p> <p><i>No further mitigation measures have been proposed.</i></p>
NSW Roads and Maritime Services		
Road Safety	<p>Prior to the commencement of construction work, a Basic Right (BAR) turn treatment in accordance with Figure A28 Part 4 of Austroads Guide to Road Design, is to be provided in Renshaw McGirr Way at its intersection with Suntop Road. The intersection works are to be designed and constructed for a 100km/h speed environment and be able to accommodate the largest vehicle accessing the intersection.</p>	<p>As outlined in Section 3.3.1, the intersection of Suntop Road and Renshaw McGirr Way will be updated include a rural basic right turn treatment to widen the shoulder of Renshaw McGirr Way to allow vehicles to pass to the left of the turning vehicles to meet Austroads Guide to Road Design, Dubbo Regional Council Standards and a safe intersection stopping distance (SISD) for 100km/h speed zone.</p> <p>SSF commits to a new mitigation measure (T12) that prior to commencement of construction work a Basic Right (BAR) turn treatment in accordance with</p>



Aspect	Detail of submission	SSF Response
		<p>Figure A28 Part 4 of Austroads Guide to Road Design is to be provided in Renshaw McGirr Way at its intersection with Suntop Road. The intersection works are to be designed and constructed for a 100km/h speed environment and be able to accommodate the largest vehicle accessing the intersection.</p> <p><i>A new mitigation measure has been proposed.</i></p>
	<p>Prior to the commencement of construction work, a Basic Left (BAL) turn treatment as shown in Figure 8.2 Part 4A of the Austroads Guide to Road Design (copy enclosed) is to be provided at the intersection of Renshaw McGirr Way and Suntop Road. The BAL facility will also need to be sealed and built for a 100km/h environment.</p>	<p>In addition to the above SSF commits to a new mitigation measure (T14) that prior to the commencement of construction work a Basic Left (BAL) turn treatment in accordance with Figure 8.2 Part 4A of Austroads Guide to Road Design is to be provided at the intersection of Renshaw McGirr way and Suntop Road. The intersection works are to be designed and constructed for a 100km/h speed environment and be able to accommodate the largest vehicle accessing the intersection.</p> <p><i>A new mitigation measure has been proposed.</i></p>
	<p>Prior to the commencement of construction work, Size B Gateway 'Turning Traffic' signs (W5-25), with 250 metre distance plates, are to be provided adjacent to Renshaw McGirr Way, 250 metres either side of its intersection with Suntop Road. At the completion of construction, the signs are to be removed.</p>	<p>SSF commits to a revised mitigation measure (T7), that directional signage will be installed to direct construction traffic and warn other motorists of construction traffic. This will include Size B Gateway 'Turning Traffic' signs (W5-25), with 250m distance plates adjacent to Renshaw McGirr Way and 250m either side of its intersection with Suntop Road.</p> <p><i>A revised mitigation measure has been proposed.</i></p>
	<p>Prior to the commencement of construction work, the applicant is to prepare a Traffic Management Plan (TMP) in consultation with Dubbo Regional Council and Roads and Maritime Services. The TMP is to outline measures to manage traffic related issues associated with the delivery and construction of the solar plant and ancillary structures, any construction or excavated materials, machinery and personnel involved in the construction, operation and decommissioning processes. The plan is to detail the potential impacts associated with the development, the measures to be implemented and the procedures to monitor and</p>	<p>SSF commits to mitigation measure T2 of the Suntop EIS that a Traffic Management Plan shall be developed in accordance with Roads and Maritime Guidelines and the Australian Standard AS1742.3.</p> <p>SSF commits to revision of mitigation measure, T2, to include:</p> <ul style="list-style-type: none"> <li>• The origin, number, size, frequency, including peak and daily traffic volumes and destination of vehicles accessing/exiting the site</li> <li>• Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles</li> </ul>

Aspect	Detail of submission	SSF Response
	<p>ensure compliance. The plan is to address, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>• The origin, number, size, frequency, including peak and daily traffic volumes and destination of vehicles accessing/exiting the site</li> <li>• Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles</li> <li>• Existing background traffic, peak hour volumes and types and their interaction with projected development related traffic</li> <li>• Cumulative impacts of existing background traffic and traffic generated by the construction of the solar farm</li> <li>• The management and coordination of construction and staff vehicle movements to the site and measures to limit disruption to other motorists. Specifically, the TMP will detail how the projected</li> <li>• maximum of seventy (70) light vehicles accessing the site per day will be achieved and enforced</li> <li>• Shuttle bus collection and drop off locations and details of parking at these locations</li> <li>• Measures to be employed to ensure a high level of safety for all road users during the construction and operation phases of the development</li> <li>• Scheduling of haulage vehicle movements to minimise convoy length or platoons</li> <li>• Details of intersection improvement works in accordance with Austroads Guide to Road Design</li> </ul>	<ul style="list-style-type: none"> <li>• Existing background traffic, peak hour volumes and types and their interaction with projected development related traffic</li> <li>• Cumulative impacts of existing background traffic and traffic generated by the construction of the solar farm</li> <li>• The management and coordination of construction and staff vehicle movements to the site and measures to limit disruption to other motorists. Specifically, the TMP will detail how the projected maximum of seventy (70) light vehicles accessing the site per day will be achieved and enforced</li> <li>• Shuttle bus collection and drop off locations and details of parking at these locations</li> <li>• Measures to be employed to ensure a high level of safety for all road users during the construction and operation phases of the development</li> <li>• Scheduling of haulage vehicle movements to minimise convoy length or platoons</li> <li>• Details of intersection improvement works in accordance with Austroads Guide to Road Design</li> <li>• Local climate and environment conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the project (e.g. fog, wet weather and wildlife strikes).</li> </ul> <p><i>A revised mitigation measure has been proposed.</i></p>

Aspect	Detail of submission	SSF Response
	<ul style="list-style-type: none"> <li>Local climate and environment conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the project (e.g. fog, wet weather and wildlife strikes).</li> </ul> <p>RMS noted that the EIS lacks detail in relation to the traffic generated by the project and how traffic will be managed to provide a high level of safety for all road users during construction and operation of the solar farm. The EIS states a total of 250 staff will be employed at the site during peak construction, and, states staff will be encouraged to travel to and from the site by bus or carpooling. However, it is not specified how the projected 70 daily light vehicle movements will be achieved and enforced. Staff members that are based in surrounding locations such as Dubbo, Parkes and Orange will be required to travel long distances to work on a daily basis. Consideration of road safety hazards such as fatigue management, undulating topography and weather conditions such as fog have not been considered.</p>	
Fire & Rescue NSW		
Emergency Response Plan	A comprehensive Emergency Response Plan (ERP) is developed for the site.	<p>As per mitigation measure BF4 in Section 6.9 of the EIS, an Emergency Response Plan (ERP) will be developed in consultation with the NSW RFS District Fire Control Centre prior to construction. SSF commits to complying with this mitigation measure.</p> <p><i>No further mitigation measures are proposed.</i></p>
	The ERP specifically addresses foreseeable on-site and off-site fire events and other emergency incidents e.g. fires involving solar panel arrays, bushfires in the immediate vicinity or potential hazmat incidents	<p>SSF commits to the requirements of mitigation measure BF4 of the Suntop EIS. BF4 states that requirements of FMP to be developed will include:</p> <ul style="list-style-type: none"> <li>Foreseeable on-site and off-site fire events</li> <li>Clearly states work health safety risks and procedures to be followed by fire-fighters, including:</li> </ul>

Aspect	Detail of submission	SSF Response
		<ul style="list-style-type: none"> <li>– Personal protective clothing</li> <li>– Minimum level of respiratory protection (e.g. rubber fire fighter's boots and gloves, a self-contained breathing apparatus)</li> <li>– Minimum evacuation zone distances</li> <li>• A safe method of shutting down and isolating the PV system</li> <li>• Training for fighting fires within solar farms</li> <li>• Any other risk control measures required to be followed by fire-fighters</li> <li>• Evacuation triggers and protocols</li> <li>• Suppression response strategies and tactics, including aerial suppression options/management.</li> </ul> <p><i>No further mitigation measures are proposed.</i></p>
	<p>ERP details the appropriate risk control measures to safely mitigate potential risks to the health and safety of firefighters. Including level of personal protective clothing, minimum level of respiratory protection, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the photovoltaic system</p> <p>Other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site should also be included in the ERP.</p>	<p>SSF commits to the requirements of mitigation measure BF4 of the Suntop EIS. Mitigation measure BF4 outlines the requirement of the ERP to be developed during construction of the solar farm (see above).</p> <p>The potential hazards to fire fighters were also addressed in Section 6.9.2 of the Suntop EIS. The risks to fire-fighter safety associated with a fire burning the solar panels and associated equipment include:</p> <ul style="list-style-type: none"> <li>• Electrocution – solar panels would be energised under any natural or artificial light conditions</li> <li>• Conduction of electrical current through water is also a risk when operational personnel spray the high-powered engine hose at the inverter or the components of the solar PV system</li> <li>• Inhalation of potentially toxic fumes and smoke from any plastic</li> </ul>

Aspect	Detail of submission	SSF Response
		<ul style="list-style-type: none"> <li>components such as cables or other decomposed products of the panels,</li> <li>although the majority of the site, would be largely constructed of glass, silicon, steel and aluminium.</li> </ul> <p>Each inverter station will be fitted with an isolation switch allowing for the isolation and the turning off parts or all of the solar farm. This can be done remotely from SSF's or Photon's control centre. When the inverter station is turned off then the solar panels will be isolated and disconnected from the grid.</p> <p>This will mitigate risks to fire fighters by reducing their risk of electrocution.</p> <p><i>No further mitigation measures are proposed.</i></p>
	Two copies of the ERP be stored in a prominent 'Emergency Information Cabinet' located in a position directly adjacent to the sites main entry points.	<p>SSF commits to the requirements of mitigation measure BF5 of the Suntop EIS. BF5 states 'two copies of the ERP should be permanently stored in a prominent "Emergency Information Cabinet" to be located at the main entrance point to the solar farm, external to any security fence or locked gate, and a copy provided to local emergency responders.'</p> <p><i>No further mitigation measure proposed.</i></p>
Local emergency management committee	Once constructed and prior to operation, the operator of the facility contacts the relevant local emergency management committee (LEMC). LEMC is a committee established by Section 28 of the State Emergency and Rescue Management Act 1989.	<p>Section 3.5 of the Bushfire Impact Assessment (Appendix F of the EIS) states the following 'once constructed and prior to operation, contact should be made by the site operator with the Local Emergency Management Committee to establish emergency management procedures with relevant authorities for the safety hazards presented by the site. The operator of the solar farm should brief the local volunteer fire brigades and neighbouring farmers at appropriate intervals, for example, at annual pre-season fire meetings, on safety issues and procedures.'</p> <p>SSF commits to a new mitigation measure (BF14) that consultation with the Local Emergency Management Committee will take place prior to operation to establish emergency management procedures and revise the ERP if required.</p>



Aspect	Detail of submission	SSF Response
		<i>A new mitigation measure has been proposed.</i>
Dubbo Regional Council		
Project Description	EIS states the proposal has an estimated capacity of 170MW reduced from 260MW as stated in the PEA	<p>As outlined in Section 1.1 of the EIS, the proposal has an upper capacity of 170MW AC or 200MW DC.</p> <p>Following identification of environmental constraints on the site and application of buffers and mitigation measures to reduce environmental impact the capacity of the Proposal reduced accordingly.</p> <p><i>No further mitigation measures are proposed.</i></p>
	The PEA in section 2.4.1 makes reference to the solar farm's construction in "... 1ha stages – with up to 10 stages ...". The submitted EIS makes no reference to the construction of the development in 'stages'.	<p>SSF still intend to undertake construction of the Proposal in stages as referenced with the PEA. This is to manage the construction works on site, allowing areas to be completed efficiently and maintain environmental standards. Further detail regarding the construction methodology and staging would be presented in the Construction Environmental Management Plan prepared prior to construction.</p> <p><i>No further mitigation measures are proposed.</i></p>
	The EIS in Section 3.3.1 Key infrastructure components, refers to 'two maintenance storage containers'. No details have been provided regarding location, screening, footings, etc.	<p>As outlined in Section 3.3.1 of the EIS, the small area to be maintained for parking during operation and storage of maintenance equipment in two 40' shipping containers will be situated on the compound areas to be utilised during construction.</p> <p>Details associated with the construction and operation of this area including footings and proposed screening would be prepared during detailed design and prior to construction of the Proposal.</p> <p>SSF commits to a new mitigation measure (G6), to undertake consultation with Dubbo Regional Council regarding the detailed design of the operations compound for the Proposal.</p> <p><i>A new mitigation measure has been proposed.</i></p>

Aspect	Detail of submission	SSF Response
Waterways	<p>The PEA in section 2.2 identifies that development “... will avoid the existing surface water bodies on the site where possible including a buffer of 40m between infrastructure and any waterway.”</p> <p>No such statement has been provided in the submitted EIS, nor does it appear that the NSW Office of Water were contacted to provide any advice.</p>	<p>As outlined in Section 6.7.3 of the EIS, the major flowlines in the Site will be afforded protection by the implementation of a buffer.</p> <p>Figure 1.4 of the EIS identifies the proposed waterway buffers of 10-20m which are considered appropriate in consideration of the class and condition of waterways on the Site.</p> <p>Table 5-1 identifies consultation that was undertaken with Water NSW regarding existing bores on the Site and a submission has been received from Department of Industry – Land and Water and associated response outlined in this Report.</p> <p><i>No further mitigation measures have been proposed.</i></p>
Decommissioning	<p>The EIS in Section 3.3.4 Decommissioning, addresses the issue, but the issue remains as to how is this achieved, how is this enforced? Council may be unaware that a site is closing down and the site could be left in poor condition, especially for agricultural pursuits.</p>	<p>SSF commits to the mitigation measure L2, if operations cease and the Site is to be decommissioned, a remediation plan will be compiled and implemented.</p> <p><i>No further mitigation measures have been proposed.</i></p>
Planning Context	<p>Any State Significant Development proposal located within 200 km of the Siding Spring Observatory, must take into consideration the Dark Sky Planning Guideline when preparing its environmental impact statement.</p> <p>The Dark Sky Planning Guideline is briefly addressed in the EIS Table 4.1, but subclause 92(1)(d)(ii) of the Regulation has been left out of the Table.</p>	<p>Subclause 92(1)(d)(ii) of the EP&amp;A Regulation prescribes that (d) in the case of the following development, the Dark Sky Planning Guideline:</p> <ul style="list-style-type: none"> <li>(i) any development on land within the local government area of Coonamble, City of Dubbo, Gilgandra or Warrumbungle Shire,</li> <li>(ii) development of a class or description included in Schedule 4A to the Act, State significant development or designated development on land less than 200 kilometres from the Siding Spring Observatory</li> </ul> <p>As identified in Table 4-1 of the EIS consideration is given to:</p> <ul style="list-style-type: none"> <li>• The provision of development under the Dark Sky Planning Guideline. This Planning guideline was originally applied to the Dubbo Council LGA as it was within the prescribed distance from the Sidings Springs Observatory at Coonabarabran. Prior to the amalgamation of Wellington and Dubbo LGA’s, this guideline did not apply to areas within the Wellington LGA.</li> </ul>

Aspect	Detail of submission	SSF Response
		<p>Furthermore, as identified in Table 4-1 of the EIS, the development does not involve installation of lights that will be operational all night. Emergency lighting and sensor lights will be installed to assist with any emergencies. The type of light globe and their orientation will be in accordance with this guideline.</p> <p><i>No further mitigation measures have been proposed.</i></p>
	Assessment should consider the proposed development in terms of the Aims and Planning Principles outlined under State Environmental Planning Policy (Rural Lands) 2008.	<p>Consideration is given to the aims of State Environmental Planning Policy (Rural Lands) 2008 in Section 4.5.3 of the EIS.</p> <p>Further consideration of the planning principles of the SEPP (Rural Lands) is provided in Table 4-2.</p> <p><i>No further mitigation measures have been proposed.</i></p>
Road Safety	A s138 application shall be made to Dubbo Regional Council for the construction of any permanent or temporary new access along Suntop Road	<p>As identified in Section 4.3.4 and 4.6, consent under Section 138 of the Roads Act is required prior to disturbing or undertaking work, in or over a public road.</p> <p>SSF commits to a revised mitigation measure (T1), undertake consultation with the Road Authority on all proposed works and obtaining a Section 138 approval prior to the commencement of works.</p> <p><i>A mitigation measure has been revised.</i></p>
	Details of the permanent and temporary driveways shall be submitted to Council prior to any construction works, noting that the access driveways are to be designed and constructed of sufficient width at the roadway and the property boundary alignment such that a 'Semi-trailer' 19.0m in length (utilising the Austroads design templates, and a turning speed of 5-15 km/hr) is able to access the subject land in a forward motion from the through travel lane(s) of Suntop Road without the need to cross over onto the wrong side of the road at any time.	<p>SSF commits to a revised mitigation measure (T1), undertake consultation with the Road Authority on all proposed works and obtaining a Section 138 approval prior to the commencement of works.</p> <p><i>A mitigation measure has been revised.</i></p>

Aspect	Detail of submission	SSF Response
	Dilapidation Report on Suntop Road shall be submitted to Council prior to any construction works, and also another Dilapidation Report is required after completion of the construction works noting that any damage to Suntop Road, Renshaw McGirr Way and Showground Road will be required to be rectified at applicant's cost, as soon as possible.	SSF commits to a revised mitigation measure (T10), a dilapidation survey will be completed along Suntop Road, Renshaw McGirr Way and Showground Road prior to and after completion of the construction works.  <i>A mitigation measure has been revised.</i>
	A maintenance schedule shall be submitted to Council prior to any construction works for Suntop Road, Renshaw McGirr Way and Showground Road for the construction period to allow for increase wear along the edges of the sealed pavement due to the increased passage of heavy vehicles.	SSF commits to a new mitigation measure (T13), establishing a maintenance schedule with Dubbo Regional Council for Suntop Road, Renshaw McGirr Way and Showground Road for the duration of construction.  <i>A new mitigation measure has been proposed.</i>
Subdivision of Land	The proposed solar farm is to be located on Lot 2, not Lot 1 as referenced on page 49 of the EIS, so the slight error should be noted.	Noted. This is an error. The Solar Farm is to be located on Lot 2.  <i>No further mitigation measures have been proposed.</i>
	Figure 4-2 indicates the proposed Lot 1 (4 ha) which the current landowner is looking to retain. However, the configuration of this lot is irregular, having a 1.128 kilometre handle and the current landowner doesn't own the adjoining lot to the west (Lot 53 DP 753238 No.841 Suntop Road, Suntop). So the question arises as to what is being operated separately from the proposed solar farm. The proposed lot is below the minimum lot size (400 ha) and as such Council would object to the further fragmentation of rural land. It would appear that the current landowner and the applicant have not resolved the future of the subject site, well Lot 3 DP 506925 anyway. The matter needs to be resolved prior to determination of the application.	The reconfiguration of Lot 1 comprising an access road and farm buildings is to enable continued farming operations from other landholdings on Suntop Road being Lot 2 DP 983890 and Lot 93 DP753238. The proposed lot reconfiguration has been proposed to reduce the number of new lots associated with the development and ensure that the majority of the site is consolidated to prevent further fragmentation of agricultural land.  <i>No further mitigation measures are proposed.</i>
Developer Contributions	The former Wellington Council's Section 94A Developer Contribution Plan 2012, levies are payable at the rate of 1% of the proposed development cost. Given the proposal has a capital investment cost of \$262,000,000 the applicable levy would be \$2,620,000.00.	SSF will provide significant investment into the Wellington community and wider region. This will be in the form of employment / contracting opportunities during construction and operations, waste management, accommodation, transport and general living expenses. SSF will also undertake road upgrades including intersection improvements at Suntop Road and Renshaw McGirr Way. SSF will not be using Council facilities e.g. water and waste once the farm is

Aspect	Detail of submission	SSF Response
	<p>Council acknowledges that following the initial construction of the solar farm there will be negligible impact upon public amenities and services. However, maintains the view that the subject development will have an impact via the loss of viable RU1 Primary Production from the available Wellington land supply chain.</p> <p>Alternatively, the applicant may wish and it is Council's preferred option that a Planning Agreement (constituting a Community Benefit Fund) should be entered into and conditioned upon any Development Consent.</p>	<p>operational. As such the development, will not result in net increased impost on council services and infrastructure but rather provided localised improvements and broader economic benefit.</p> <p>The roads will be used as required however, it will only be for general use as is now the case. Given this, SSF is requesting that there are no contributions in the determination.</p> <p><i>No further mitigation measures are proposed.</i></p>
NSW Rural Fire Service		
Bushfire	<p>A Bush Fire Management Plan (BFMP) shall be prepared in consultation with the NSW RFS District Control Centre: 24hr emergency contact details, site infrastructure plan, site access and internal road plan; construction of APZ and their continued maintenance: location of hazards and additional matters as required by the District Office</p>	<p>The Bushfire Impact Assessment prepared by Eco Logical (Appendix F of the EIS) will provide the basis of the Fire Management Plan (FMP). SSF will complete a FMP as part of the Construction Environmental Management Plan (CEMP).</p> <p>SSF commits to a new mitigation measure (BF15) that prior to construction, a Fire Management Plan will be completed as part of the CEMP.</p> <p><i>A new mitigation measure has been proposed.</i></p>
	<p>The entire solar array footprint to be managed as an inner protection area as outlined in Section 4.1.3 and Appendix 5 of the 'Planning for Bush Fire Protection 2006'</p>	<p>SSF has agreed to manage the solar array footprint as an Asset Protection Zone. SSF will commit to maintaining the ground cover within the footprint through grazing, mowing and slashing as required, as part of the Land Management Plan.</p> <p>SSF commits to mitigation measure (BF12) that vegetation fuel levels internal to the APZ and throughout the solar farm will be maintained by grazing, slashing or mowing.</p> <p><i>No further mitigation measures are proposed.</i></p>



Aspect	Detail of submission	SSF Response
	<p>Provide a 10 metre defensible space that permits unobstructed vehicle access around the perimeter of the solar array development site</p>	<p>SSF commits to the requirements of mitigation measure BF6 that 'An APZ will be constructed around the solar farm with the following requirements:</p> <ul style="list-style-type: none"> <li>• The APZ will be 15 m wide around the entire perimeter of the solar farm footprint, and 20 m wide for areas abutting the remnant treed areas and landscaping areas</li> <li>• The external edge of the APZ setback at least 25 m from the external edge of PV panels or other components</li> <li>• The APZ must be either a mineral earth fire break (i.e. dirt or gravel) or a heavily grazed area</li> <li>• Trees and tall shrubs associated with the landscape plan should not be planted close to the APZ</li> <li>• APZ preferably located external to any security fence.</li> </ul> <p>The substation should have a 20m asset protection zone with no internal vegetation (gravel surface).'</p> <p>In accordance with the submission from NSW Rural Fire Service, this mitigation measure has been revised to include the following additional point:</p> <ul style="list-style-type: none"> <li>• A 10-metre defensible space that permits a 4 metre wide, unobstructed vehicle access will be provided around the perimeter of the solar array and associated infrastructure.</li> </ul> <p>Revised mitigation measures table is provided in Appendix B.</p> <p><i>A mitigation measure has been revised.</i></p>
	<p>A 20,000-litre water supply tank fitted located adjacent to the main internal road. The water supply shall have a hard stand surface within 4 metres of the supply.</p> <p>If the water supply is to be within a storage tank, the tank(s) shall be:</p>	<p>As per mitigation measure BF10 one water supply tank with a capacity of 50,000L will be located near the substation, out of the APZ.</p> <p>In accordance with the submission from NSW Rural Fire Service, this mitigation measure has been revised to include the following additional points:</p>

Aspect	Detail of submission	SSF Response
	<ul style="list-style-type: none"> <li>Constructed of non-combustible materials (i.e. steel or concrete)</li> <li>Fitted with a 65mm Storz fitting or similar</li> <li>All external fittings shall be made of metal.</li> </ul>	<ul style="list-style-type: none"> <li>Constructed of non-combustible materials (i.e. steel or concrete)</li> <li>Fitted with a 65mm Storz fitting or similar</li> <li>All external fittings shall be made of metal.</li> </ul> <p>Revised mitigation measures table is provided in Appendix B.</p> <p><i>A mitigation measure has been revised.</i></p>

**Table 4-2 Consideration of State Environmental Planning Policy (Rural Lands) 2008**

State Environmental Planning Policy (Rural Lands) 2008	SSF Response
7) Rural Planning Principles	
(a) the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas,	<p>The Proposal will provide socioeconomic benefits during the duration of operation, as well as agricultural land use opportunities (grazing) occurring throughout the Proposal life cycle and subsequent to decommissioning. This diversification of land use ensures sustainable economic activity in this rural area.</p> <p>The location and layout of the Proposal has considered the environmental constraints on the Site and wherever possible the design has been altered to remove or reduce environmental impact. Potential environmental and socio-economic impacts are addressed in Section 6 of the EIS.</p> <p>Furthermore, the area of disturbance will be minimal as no large areas of reshaping or excavation are proposed and piledriving will be used to install the pre-fabricated mounting structures. Once operational the Proposal will have limited environmental impacts.</p>
(b) recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State,	
(c) recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development,	
(d) in planning for rural lands, to balance the social, economic and environmental interests of the community,	
(e) the identification and protection of natural resources, having regard to maintaining biodiversity, the protection of native vegetation, the importance of water resources and avoiding constrained land,	

	<p>Construction and Operational Environmental Management Plans will be employed to ensure environmental management including mitigation measures outlined in the EIS are employed across the Site.</p> <p>The Proposal is fully reversible and would not result in any long term impacts to the inherent soil fertility, allowing existing farming activities to fully recommence following decommissioning.</p> <p>The compatibility of the proposed land use and adjoining activity (rural lands and agriculture) has been outlined in Section 6.6 of the EIS.</p>
(f) the provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities,	The proposal does not provide or remove opportunities for rural lifestyle, settlement or housing. The employment benefits provide social and economic welfare opportunities for the rural community.
(g) the consideration of impacts on services and infrastructure and appropriate location when providing for rural housing,	This planning principle is not relevant to the Proposal as it does not provide for rural housing.
(h) ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General.	No applicable local strategies are relevant to the Proposal.

## 4.2 Responses to community submissions

One submission was received from the community during the public exhibition period. A response to comments from this submission are provided in Table 4-3.

Table 4-3 Summary of responses to community submissions

Detail of Submission	SSF Response
<p>Increased risks and liability with fire</p> <ul style="list-style-type: none"> <li>Unavoidable risks with harvesting operations and unable to modify operations or implement mitigation measures</li> <li>Public liability insurance may not be available for our property for fire</li> <li>Proposed APZ and set back from solar panels is not adequate to mitigate the fire risks</li> <li>EIS dismisses any increased fire risk from the development and infrastructure limits access for firefighting equipment</li> </ul>	<p>As identified in Table 5-7 of the EIS, during one on one consultation with sensitive receiver's concerns were raised regarding insurance implications in case they start a fire due to normal agricultural operations.</p> <p>A Bushfire Assessment was completed as part of the EIS (Appendix F of the EIS) and included best practice industry mitigation measures adopted across large scale solar farms throughout Australia including a 15m APZ and additional set back between the boundary and the first solar panels.</p> <p><i>No further mitigation measures are proposed.</i></p>
<p>Reduced crop productivity</p> <ul style="list-style-type: none"> <li>Due to increased risks with fire crop operations will need to be modified or cease</li> <li>Aerial spraying would be impacted by the development impacting the profitability of the business and reduce property value</li> </ul>	<p>The compatibility of the proposed land use and adjoining activities is addressed in Section 6.6.2 of the EIS.</p> <p>The following aspects of the Proposal are considered compatible with agriculture and the rural environment:</p> <ul style="list-style-type: none"> <li>When groundcover is established under and around the solar panels the land can be used for sheep grazing as well as energy production</li> <li>The panels will provide shade, which will provide shade for animal comfort and wellbeing during warmer months</li> <li>Once operational the Proposal has limited environmental impacts and any environmental impacts are unlikely to migrate offsite and impact neighbouring land uses</li> <li>The land required for the Proposal will be wholly contained within the Subject Land and existing electricity easements</li> </ul>

	<ul style="list-style-type: none"> <li>• The proposal is not expected to impact or sterilise surrounding land from routine agricultural practices</li> <li>• The land can be rehabilitated to ensure no future land use conflicts. The Proposal will not impact future agricultural land uses on the proposal site or adjacent lands.</li> <li>• Diversification of land use providing sustainable income for the landowners.</li> <li>• The solar farm allows the land to rest and recover from intensive agricultural practices.</li> </ul> <p>The following aspects are considered incompatible with agriculture and the rural environment:</p> <ul style="list-style-type: none"> <li>• Introduces changes (new built environment elements) to the existing landscape character and scenic values</li> <li>• Risk of weed infestation.</li> </ul> <p>Those elements identified as incompatible have been addressed through the mitigation measures proposed in the EIS.</p> <p>A Bushfire Assessment was completed as part of the EIS (Appendix F of the EIS) and included best practice industry mitigation measures adopted across large scale solar farms throughout Australia including a 15m APZ and additional set back between the boundary and the first solar panels.</p> <p>Section 6.3.3 of the EIS details risks to aviation. As the infrastructure is relatively low to the ground with the tallest structure measuring approximately 22m the development would not pose a risk to aviation, in addition, the photovoltaic solar panels would appear dark grey from an aircraft, and would not constitute a glare or reflectivity hazard. SSF do not consider that the development impacts the ability to conduct aerial spraying on the adjacent land.</p> <p><i>No further mitigation measures have been proposed.</i></p>
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<p>Reduced access to water</p> <ul style="list-style-type: none"> <li>• Rely on access to water from an existing bore on the proposal Solar Farm site and easement arrangement with the current landowner</li> <li>• Access to water impacted by construction water usage and risk to damage to bore infrastructure</li> <li>• Reduced access to water poses a risk to our livestock operations and reduce our property value</li> <li>• Photon Energy have indicated that they will make all reasonable attempts to locate an alternate water source and in the interim, preserve the easement access.</li> </ul>	<p>As identified in Table 5-7 of the EIS, during one on one consultation with sensitive receiver's concerns were raised regarding access to the shared easement for water supply located on the proposed Site. SSF responded by offering to take reasonable measures to locate an adequate water supply on the residents' property, such that they did not have to rely on the existing bore.</p> <p>SSF formally commits to this offer through a new mitigation measure SW8, to take all reasonable measures to locate an adequate water supply on the adjacent 'Glenmore' property so they no longer have to rely on the existing bore.</p> <p><i>A new mitigation measure has been proposed.</i></p>
<p>Increased salinity impacts</p> <ul style="list-style-type: none"> <li>• Proposed position of sub-station is a known saline area</li> <li>• Disruption of the saline area is expected to lead to downstream impacts with higher saline water flows onto our property</li> <li>• Development would lead to loss of deep rooted pasture species and pastures will no longer be managed for maximum productivity</li> <li>• Grazing and pasture management impacted leading to increased salinity impacts which will in turn affect our property value and productivity.</li> </ul>	<p>The substation will be located on a concrete pad which will limit infiltration in this vicinity. This will not require any deep excavation and accordingly will not intercept or interfere with sub surface water movement.</p> <p>SSF commits to mitigation measure SW9, detailed design will include consideration of surface water flow paths to minimise any potential offsite impacts</p> <p>As identified in Section 6.8.2 of the EIS, several minor scalds have been identified by the landholder. In response to this a salinity specialist from the NSW Local Land Services at Wellington was consulted and indicated that the establishment of perennial pastures and the managed grazing of livestock would assist in lowering groundwater levels due to the uptake of infiltration water by grazed pasture plants. In addition, the infiltration rates during the operation of the SSF would also be lower than those that currently occur when the soil is exposed after cultivation. The substantial replanting of deep rooted trees and shrubs as part of the landscape plan will also assist with the uptake of soil water on Site, as will the selection of suitable pasture species.</p>

	<p>The Landscape Plan is presented in Appendix C of the EIS and includes details of the proposed location for landscaping. Management of the landscaping including watering will be addressed in the Operational Environmental Management Plan and Land Management Plan. A draft of the Land Management Plan was presented as Appendix J of the EIS.</p> <p>SSF commits to mitigation measure S9, design arrays to allow sufficient space between panels for essential maintenance activities and to facilitate maintenance of an effective ground cover beneath the panels to reduce erosion and help suppress weeds.</p> <p>SSF commits to mitigation measure S11, to implement a Land Management Plan that addresses the ongoing land management and maintenance activities including:</p> <ul style="list-style-type: none"> <li>• Ongoing agronomic management of the land including stock, water, vegetation and soils management</li> <li>• Measures required to maintain healthy soil and plant systems and maintain the agricultural capability of the land</li> <li>• Stock management programs and infrastructure (e.g. fencing, watering points)</li> <li>• Soil amelioration, pasture management and weed control</li> <li>• Monitoring programs for soil fertility and groundcover.</li> </ul> <p><i>No further mitigation measures have been proposed.</i></p>
<p>Increased weeds</p> <ul style="list-style-type: none"> <li>• Development will lead to increased weeds and risk of spread to our property</li> <li>• Impossible to implement effective management of weeds due to the inability to adequately manage grazing pressure</li> <li>• Herbicides likely to be required using products with long term persistent soil residual activity.</li> </ul>	<p>As identified in Section 6.1.3 of the EIS, during construction and operation there is a risk of introducing and/or spreading of weeds. However, implementation of the mitigation measures outlined in the EIS would reduce and manage this risk.</p> <p>SSF commits to mitigation measure B5, a Land Management Plan will be developed and incorporated into the CEMP and will include weed management.</p>

	<p>SSF commits to mitigation measure L4, all pesticides will be used in accordance with the Pesticides Act 1999, such that only registered pesticides are used based on label instructions that are designed to minimise impacts on surrounding land.</p> <p>SSF commits to mitigation measure S9, design arrays to allow sufficient space between panels for essential maintenance activities and to facilitate maintenance of an effective ground cover beneath the panels to reduce erosion and help suppress weeds.</p> <p><i>No further mitigation measures have been proposed.</i></p>
<p>Reduced land value</p> <ul style="list-style-type: none"> <li>Property value will be significantly reduced as a result of the combined effects of visual impacts, reduced productivity and reduced access to water.</li> <li>Visual impacts will occur with viewpoints from the residence and most areas on our property</li> <li>No acknowledgement of impact of development on the productivity, profitability and asset value of adjoining land</li> <li>EIS states only above ground infrastructure will be removed. With the below ground portion of footings for panels remaining it will not be possible to crop the site.</li> </ul>	<p>The visual impact from neighbouring private viewpoints on Suntop Road were assessed in the Visual Impact Assessment (Appendix C) and summarised in Section 6.3 of the EIS.</p> <p>It has been determined that implementation of mitigation measures outlined in Section 6.3.4 of the EIS, will reduce sensitive receivers visual impact levels to moderate or below (Table 6-7 in EIS). On this basis, it is not considered the solar farm will be visually obtrusive to the landscape or have an unreasonable impact on the visual amenity of nearby residents. The impacts of a solar farm on neighbouring property values has not been studied in-depth however there have been numerous studies on the impacts of wind generation on neighbouring property values in the United States (<i>Hoen et al., 2010; Hoen et al. 2015; Vyn and McCullough 2014</i>). These studies found the impact of wind energy generation on neighbouring property values to be negligible. As solar farms are perceived to have less visual impact than wind farms, the impacts to property values caused by solar farms are anticipated to be less than the impacts of wind farms.</p> <p>As outlined in Section 3.3.4 of the EIS, all infrastructure including footings, foundation posts and cabling would be removed following decommissioning excluding the substation, transmission line and access road.</p>

	<p>SSF commits to the mitigation measure L5, all the infrastructure will be removed upon decommissioning with the possible exception of the substation, transmission lines to the substation and access road to the substation.</p> <p><i>No further mitigation measures have been proposed.</i></p>
<p>EIS suggests development will improve soil health but construction and operation will lead to soil compaction with machinery, herbicide applications and no fertilisers will be applied to improve nutrient fertility</p>	<p>Construction will be for a limited time and the use of machinery during this period will be similar to the use of farming machinery during crop establishment and harvesting.</p> <p>Operation of the SSF will only see light vehicles accessing the site for scheduled maintenance and repairs as necessary.</p> <p>SSF commits to mitigation measure L4, all pesticides will be used in accordance with the Pesticides Act 1999, such that only registered pesticides are used based on label instructions that are designed to minimise impacts on surrounding land.</p> <p>SSF commits to a mitigation measure S11, implement a land management plan that addressed the ongoing land management and maintenance activities. This would address:</p> <ul style="list-style-type: none"> <li>• Ongoing agronomic management of the land including stock, water, vegetation and soils management</li> <li>• Measures required to maintain healthy soil and plant systems and maintain the agricultural capability of the land</li> <li>• Stock management programs and infrastructure (e.g. fencing, watering points)</li> <li>• Soil amelioration, pasture management and weed control</li> <li>• Monitoring programs for soil fertility and groundcover.</li> </ul> <p>A draft of the Land Management Plan was presented in Appendix J of the EIS.</p>

	<p>SSF commits to a revised mitigation measure G1, a project specific CEMP and all relevant sub-plans will be prepared by the Contractor prior to commencing Stage 1 construction and in consultation with DoI Water. The sub-plans will include:</p> <ul style="list-style-type: none"> <li>• Soil and Water Management Plan (SWMP) including erosion and sediment (ERSED) control <b>and soil compaction mitigation.</b></li> </ul> <p><i>A mitigation measure has been revised.</i></p>
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## 5. Conclusion

This submissions report has been prepared by pitt&sherry on behalf of SSF (the proponent) to meet the requirements of DP&E and Section 75H of the *Environmental Planning and Assessment Act 1979*.

As outlined within Section 3, an amendment to the Proposal as presented in the EIS is proposed associated with subdivision of the land. A revised subdivision plan is presented in Appendix C which identifies an additional subdivision of 4800m<sup>2</sup> on part of Lot 3 DP506925 containing the TransGrid substation (Section 3.1).

A total of eight submissions were received from government agency stakeholders and one submission from the community. No objections to the Proposal were received. The Proposal, as presented in the EIS, would provide local, regional and national benefits including:

- Develop the solar power industry and supply chain in Australia
- Develop Australian intellectual property and expertise in solar power
- Assist with Australia's commitments under national and international agreements
- Diversify sources of income for the agricultural sector, allowing financial resilience for farmers
- Provide energy security
- Local and regional economic benefits.

In consideration of the assessment presented in the EIS and this Response to Submissions (RTS) and the revised mitigation measures presented in Appendix B, SSF consider all the issues raised from submissions have been addressed and the project should proceed for approval by the Minister.

## Appendix A

### Additional Consultation Evidence

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BS:jo  
ED18/89677



**DUBBO REGIONAL  
COUNCIL**

5 July 2018

**OFFICE OF MAYOR  
CLR BEN SHIELDS**

To whom it may concern

Dubbo Regional Council provides its support for the development of three solar farms as proposed by Photon Energy/Canadian Solar for Suntop, Maryvale and Mumbil.

Construction of the solar farms will provide the opportunity for local construction industry employment and use of the local supplier businesses for construction materials and services.

The families of those employed on the solar farm will contribute to the development of society in the region through attending school, participation in sporting clubs, use of health and professional services and the purchase of other provisions which will support businesses in the region.

Dubbo Regional Council appreciates the investment in renewable energy, and as such, provides in-principle support for Photon Energy/Canadian Solar projects at Suntop, Maryvale and Mumbil.

I can be contacted on 0418 639 053 should you wish to discuss this further.

Yours faithfully

*Councilor Ben Shields*  
Mayor



**OFFICE OF THE MAYOR**

PO Box 81 Dubbo NSW 2830

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Civic Administration Building Church St Dubbo NSW 2830

**W** [dubbo.nsw.gov.au](http://dubbo.nsw.gov.au)

**evocities**  
REGIONAL CITY LIVING

## Genevieve Daneel

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**From:** MCINTYRE Andrew R <Andrew.MCINTYRE@rms.nsw.gov.au>  
**Sent:** Wednesday, 30 May 2018 9:42 AM  
**To:** Genevieve Daneel  
**Cc:** Development Western; Musarrat Khan; stephen.clayton@dubbo.nsw.gov.au  
**Subject:** RE: SSD 8696 - Suntop Solar Farm- Traffic Impact Assessment

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Genevieve

Thanks for your email and apologies for not including Jessica and James in this email as I seem to have lost their addresses in the registration of your email.

Conceptually, the BAR looks ok. My comments are as follows:

- You will still need to address in the traffic study how construction personnel commuting to and from the site each day will be managed. Particularly, how you will ensure personnel use buses/car pooling, thereby achieving the projected traffic volumes. Higher volumes than what is currently projected could result in a higher intersection treatment being required.
- Suntop Road will need to accommodate the two way passing of large vehicles, in particular, at its intersection with Renshaw McGirr Way. Swept paths need to be prepared and submitted to show turning heavy vehicles are able to pass in Suntop Road at the intersection.
- SISD needs to be provided in both directions.

Regards,

**Andrew McIntyre**  
Manager Land Use Assessment  
Western Region | Regional & Freight  
T 02 6861 1453 M 0417 431 982  
[www.rms.nsw.gov.au](http://www.rms.nsw.gov.au)  
*Every journey matters*

**Roads and Maritime Services**  
Level 1 51-55 Currajong Street Parkes NSW 2870

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**From:** MCINTYRE Andrew R  
**Sent:** Friday, 11 May 2018 5:18 PM  
**To:** Development Western  
**Subject:** FW: SSD 8696 - Suntop Solar Farm- Traffic Impact Assessment

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**From:** Genevieve Daneel [mailto:gdaneel@pittsh.com.au]  
**Sent:** Tuesday, 8 May 2018 2:46 PM  
**To:** musarrat.khan (musarrat.khan@dubbo.nsw.gov.au); MCINTYRE Andrew R  
**Cc:** Steve Clayton (Stephen.Clayton@dubbo.nsw.gov.au); Jessica Berry; James Garnier  
**Subject:** SSD 8696 - Suntop Solar Farm- Traffic Impact Assessment

Hi Andrew & Musarrat,

Please find the attached draft concept plan for proposed upgrade to Renshaw McGirr Way and Suntop Road addressing some of the comments made by Andrew on 28<sup>th</sup> April and following our consultation with Musarrat on 30<sup>th</sup> April.

Andrew - James Garnier, pitt&sherry's Senior Principal Engineer will be in touch this week to further discuss the plan.

Musarrat – FYI : Aboriginal and Ecological surveys are being undertaken at this location this week.

Kind regards,  
Geneveive

**Genevieve Daneel** BSc(Hons)

Environmental Consultant

**pitt&sherry**

M: 0438 693 279

E: [gdaneel@pittsh.com.au](mailto:gdaneel@pittsh.com.au) | W: [www.pittsh.com.au](http://www.pittsh.com.au)



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## Appendix B

### Revised Mitigation Measures

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#### Summary of General Management and Mitigation Measures for Construction and Decommissioning

Mitigation Measure Reference	Description
G1	<p>A project specific Construction Environmental Management Plan (CEMP) and all relevant sub-plans will be prepared by the Contractor prior to commencing Stage 1 construction <b>and in consultation with DoI Water</b>. The sub-plans will include:</p> <ul style="list-style-type: none"> <li>• Land Management Plan (LMP) including a weed management plan</li> <li>• Soil and Water Management Plan (SWMP) including erosion and sediment (ERSED) control <b>and soil compaction mitigation</b>.</li> <li>• Unexpected Finds protocol</li> <li>• Waste Management Plan (WMP)</li> <li>• Traffic Management Plan (TMP)</li> <li>• Emergency Contingency Plan.</li> </ul>
G2	<p>All employees, contractors and subcontractors are to receive a project induction. The environmental component may be covered in toolbox talks and should include:</p> <ul style="list-style-type: none"> <li>• Environmental mitigation measures</li> <li>• Vegetation clearing operations and controls to prevent unauthorised clearing</li> <li>• The Unexpected Finds Protocols (historic heritage, Aboriginal heritage and waste)</li> <li>• Aboriginal heritage (Types of aboriginal heritage objects, details of the NMH heritage object, legislative requirements and penalties associated with the harm or desecration of Aboriginal heritage objects)</li> <li>• Waste management strategies and mitigation measures.</li> </ul>
G3	Implement community consultation measures to inform the community of construction activity and potential impacts.
G4	A complaint handling procedure and register will be implemented to assist in recording and managing potential conflict with the local community during construction.
G5	<p>Mud and other debris shall be removed from the wheels and bodies of construction vehicles and equipment prior to leaving the project site and before entering the sealed public road network.</p> <p>Soil, earth, mud and other similar materials must be removed from the roadway preferably by dry methods (sweeping, shovelling).</p>

#### Summary of Management and Mitigation Measures for Construction and Decommissioning

Reference	Mitigation Measure
<b>Biodiversity</b>	
B1	A 10-m buffer shall be established between the perimeter of the remnant vegetation stands and the works footprint.
B2	Erect barriers to protect remnant perimeter trees, planting in Paddock 12 and Fuzzy Box clump in Paddock 1



Reference	Mitigation Measure
B3	The works (e.g. plant, material stockpiling) should not encroach into remnant vegetation and buffer areas.
B4	A clearing protocol will be developed to ensure any potential impacts to native fauna are minimised during vegetation removal, this will include supervised removal of trees with hollows by a trained wildlife carer.
B5	A Land Management Plan which will be developed ( <b>refer Appendix J</b> ) and will be incorporated into an overall construction environmental management plan (CEMP). This will include weed management, animal pest management and monitoring as well as an induction for all employees and contractors detailing the trees that are protected on Site.
B6	Trenches should be backfilled as soon as possible to minimise the chance of fauna becoming trapped. Any trench sections left open for greater than a day would be inspected daily, early in the morning and any trapped fauna removed. The use of ramps or ladders to facilitate trapped fauna escape is recommended.
B7	Speed limits should be set to 20km per hour on internal roads and tracks.
B8	A Vegetation Management Plan will be developed and incorporate tree protection measures to conserve the trees around the perimeter of the Site.
B9	Enhancement of buffer zones around the perimeter of the site to include additional planting of replacement trees for those lost due to the clearing of the paddocks
B10	Any works surrounding the dam located on the western boundary of the site will include implementation of appropriate erosion and sediment controls to prevent silt build up in the dam.
<b>Heritage</b>	
<i>Aboriginal Heritage</i>	
AB1	An Unexpected Finds Protocol which addresses unexpected aboriginal heritage finds will be included in the Construction Environmental Management Plan to be completed by the construction contractor.
AB2	The Unexpected Finds Protocol will form part of the site induction and must be viewed by all relevant employees and contractors before working on site.
AB3	Aboriginal archaeological sites, Suntop IF 1 and Suntop IF 2, (two isolated artefacts identified along a creek bank) and a Culturally significant tree (all outside the footprint), should be addressed in the CEMP to ensure protection.
AB4	If suspected Aboriginal objects, such as stone artefacts are identified during works, works must cease within 10m of the affected area and an archaeologist called in to assess the finds. If the finds are found to be Aboriginal objects, the OEH must be notified under section 89A of the NPW Act. Appropriate management or avoidance should be sought if Aboriginal objects are to be moved or harmed.
AB5	In the extremely unlikely event that human remains are found, works should immediately cease and the NSW Police are to be contacted. If the remains are suspected to be Aboriginal, the OEH may also be contacted at this time to assist in determining appropriate management.
<i>Heritage</i>	
H1	An Unexpected Finds Protocol which addresses unexpected non-indigenous heritage finds will be included in the Construction Environmental Management Plan to be completed by the construction contractor.
H2	The Unexpected Finds Protocol will form part of the site induction and must be viewed by all relevant employees and contractors before working on site.

Reference	Mitigation Measure
H3	If an item (or suspected item) of heritage is discovered during construction, all work in the area of the find will cease immediately and the Unexpected Finds Protocol implemented including notifying an officer from the Heritage branch of OEH immediately (in accordance with section 146 of the <i>Heritage Act 1977</i> ) and seeking advice for management of the object.
<b>Visual</b>	
V1	Minimise impact through use of siting and design features Group ancillary facility structures where possible to minimise sprawl <ul style="list-style-type: none"> <li>Stabilise new access roads formed within the Site required for operations, but do not seal with bitumen or other dark coating</li> </ul>
V2	Minimise and repair ground disturbance Minimise grading across the Site and undertake the minimum levelling necessary to install panel supports <ul style="list-style-type: none"> <li>Rehabilitate exposed ground surfaces as soon as possible</li> </ul>
V3	Implement Concept Landscape Plan, which includes visual screening. (refer <b>Appendix C</b> ).
V4	Minimise vegetation removal and retain existing trees and other native vegetation by including: <ul style="list-style-type: none"> <li>Temporary fencing around vegetation</li> <li>Demarcating area as a no-go zone.</li> </ul>
V5	Retain as much existing grass cover beneath solar panels as possible.
V6	Progressively stabilise disturbed area with pasture grasses.
<b>Noise</b>	
N1	Prepare a construction noise management protocol for site to manage noise emissions.
N2	Implement a formal complaint handling procedure to manage any potential concerns from the community. This will include: <ul style="list-style-type: none"> <li>Details of a readily accessible contact person.</li> <li>A well-documented process that includes an escalation procedure so that (if required) there is a path to follow should the complainant not be satisfied.</li> <li>Details regarding setting up a complaint register.</li> </ul> Each complaint would need to be investigated and appropriate noise amelioration measures put in place to mitigate future occurrences, where the noise in question is in excess of allowable limits
N3	Works are to be carried out during standard work hours (i.e., 7am to 6pm Monday to Friday; 8am to 1pm Saturdays). Any construction outside of these normal working hours would only be undertaken in the event of an emergency or with prior approval from relevant authorities. For non-emergency works outside standard hours, residents and other sensitive land use occupants should be informed of the works between 5 and 14 days before commencement.

Reference	Mitigation Measure
N4	Toolbox and induction of personnel prior to start of shift to discuss noise control measures that may be implemented to reduce noise emissions to the community, construction hours and nearest sensitive receivers.
N5	All plant should be shut down when not in use. Plant to be parked/started at farthest point from relevant assessment locations
N6	Avoid the operation of noisy equipment near noise sensitive areas and where possible, loading and unloading would be conducted away from sensitive areas.
N7	Noise levels will be considered when procuring equipment.
N8	All plant is to utilise a broadband reverse alarm in lieu of the traditional hi frequency type reverse alarm.
N9	Ongoing community consultation for residences within close proximity of the works. The information would include details of: <ul style="list-style-type: none"> <li>• The proposed works and when these will occur</li> <li>• The duration and nature of the works</li> <li>• Details of what to do should they have a noise complaint</li> <li>• Updates on the progress of works</li> </ul>
N10	Where possible use localised mobile screens or construction hoarding around plant to act as barriers between construction works and receivers, particularly where equipment is near the site boundary and/or a residential receiver including areas in constant or regular use (e.g. unloading and laydown areas)
N11	Limiting and scheduling the number of work areas along the northern boundary for piling, trenching and assembly activities to minimise noise levels at receptors along Suntop Road.
<b>Traffic, Transport and road Safety</b>	
T1	<b>Undertake consultation with the Road Authority on all proposed road works</b> , as stated above, and any ancillary road works and <b>obtaining a Section 138 approval</b> prior to the construction of the proposal.
T2	A Traffic Management Plan (TMP) for construction shall be developed in accordance with Roads and Maritime Guidelines and the Australian Standard AS1742.3. The plan would include: <ul style="list-style-type: none"> <li>• The designated routes of construction traffic to the site</li> <li>• A map of the primary access routes highlighting critical locations</li> <li>• Drivers Code of Conduct</li> <li>• Carpooling/shuttle bus arrangements to minimise vehicle numbers during construction</li> <li>• Scheduling of deliveries</li> <li>• Community consultation requirements</li> <li>• Any restrictions on traffic movements (such as residential areas, school pick-up and drop-off times)</li> <li>• Traffic controls (speed limits, signage, etc.)</li> <li>• A complaint handling procedure / register</li> <li>• An induction process for vehicle operators.</li> </ul>



Reference	Mitigation Measure
	<ul style="list-style-type: none"> <li>• The origin, number, size, frequency, including peak and daily traffic volumes and destination of vehicles accessing/exiting the site.</li> <li>• Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles.</li> <li>• Existing background traffic, peak hour volumes and types and their interaction with projected development related traffic.</li> <li>• Cumulative impacts of existing background traffic and traffic generated by the construction of the solar farm.</li> <li>• The management and coordination of construction and staff vehicle movements to the site and measures to limit disruption to other motorists. Specifically, the TMP will detail how the projected maximum of seventy (70) light vehicles accessing the site per day will be achieved and enforced.</li> <li>• Shuttle bus collection and drop off locations and details of parking at these locations.</li> <li>• Measures to be employed to ensure a high level of safety for all road users during the construction and operation phases of the development.</li> <li>• Scheduling of haulage vehicle movements to minimise convoy length or platoons.</li> <li>• Details of intersection improvement works in accordance with Austroads Guide to Road Design.</li> <li>• Local climate and environment conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the project (e.g. fog, wet weather and wildlife strikes).</li> </ul>
T3	All Proposal personnel will be provided training on the requirements of the TMP through site inductions, toolbox talks or specific training
T4	The heavy vehicle route will be included within the Driver's Code of Conduct and will form part of the project inception meeting for the project for all staff and drivers. This will include informing all drivers of school bus pick up, and drop off times along the route.
T5	Traffic control will be provided in accordance with the approved construction TMP to manage traffic movements (vehicular, cycle and pedestrian) during construction and maintain the flow of traffic within the site and on surrounding public roads
T6	Traffic management controls will be communicated to appropriate stakeholders which will include the local community in the site vicinity via a letter box drop
T7	Directional signage will be installed to direct construction traffic, and warn other motorists of construction traffic. <b>This will include Size B Gateway 'Turning Traffic' signs (W5-25), with 250m distance plates adjacent to Renshaw McGirr Way and 250m either side of its intersection with Suntop Road.</b> This signage is positioned in accordance with the approved Traffic Control Plans.
T8	<p>All employees, subcontractors and suppliers will comply with the speed limits within the worksite, which are as follows:</p> <ul style="list-style-type: none"> <li>• 40 km/h on formed roads</li> <li>• 20 km/h during foggy/dusty conditions with headlights on</li> <li>• 10 km/h when passing pedestrians.</li> </ul>

Reference	Mitigation Measure
T9	Develop a protocol which will be provided for undertaking dilapidation surveys and making any necessary repairs following construction. The dilapidation surveys will assess the existing condition of Suntop Road prior to construction and identify any damage once construction is complete. Should any damage be identified the road will be repaired in line with Council standards.
T10	A dilapidation survey will be completed along Suntop Road, <b>Renshaw McGirr Way and Showground Road</b> prior to and after <b>completion of the construction works</b> . A dilapidation survey protocol is provided in <b>Appendix H</b> .
T11	A Traffic management plan (TMP) for decommissioning will be developed as part of the decommissioning management plan. This will include a decommissioning haulage route. The indicative decommissioning route provided in this EIS will be reviewed prior to the start of decommissioning.
T12	Prior to commencement of construction work a Basic Right (BAR) turn treatment in accordance with Figure A28 Part 4 of Austroads Guide to Road Design is to be provided in Renshaw McGirr Way at its intersection with Suntop Road. The intersection works are to be designed and constructed for a 100km/h speed environment and be able to accommodate the largest vehicle accessing the intersection.
T13	Establish a maintenance schedule with Dubbo Regional Council for Suntop Road, Renshaw McGirr Way and Showground Road for the duration of construction.
T14	Prior to the commencement of construction work a Basic Left (BAL) turn treatment in accordance with Figure 8.2 Part 4A of Austroads Guide to Road Design is to be provided at the intersection of Renshaw McGirr way and Suntop Road. The intersection works are to be designed and constructed for a 100km/h speed environment and be able to accommodate the largest vehicle accessing the intersection
<b>Land Use</b>	
L1	Managed grazing will be used to maintain the height of ground cover during operation of the solar farm.
L2	If operations cease and the Site is to be decommissioned, a remediation plan will be compiled and implemented <b>including identification of pasture species in consultation with local agronomic experts</b> .
L3	Implement the Landscape Plan (refer <b>Appendix C</b> )
L4	All pesticides will be used in accordance with the <i>Pesticides Act 1999</i> , such that only registered pesticides are used based on label instructions that are designed to minimise impacts on surrounding land
L5	All the infrastructure will be removed upon decommissioning with the possible exception of the substation, transmission lines to the substation and access road to the substation.
<b>Surface Water, Hydrology and Groundwater</b>	
SW1	A Soil and Water Management Plan (SWMP) will be prepared and implemented by the Contractor as part of the CEMP, this will include use of onsite water for dust mitigation measures.
SW2	Minimise the footprint of disturbance at any one time by implementing progressive construction and remediation works.

Reference	Mitigation Measure
SW3	Design solar panel arrays to allow sufficient space between panels to establish and maintain ground cover beneath the panels and assist in reducing potential sediment impacts on water quality.
SW4	Ensure all refuelling activities are undertaken in a bunded area at least 40m from any waterways.
SW6	If dewatering required as part of the construction, consultation with the NRAR will be undertaken.
SW7	All works within waterfront land being carried out will be in accordance with the <i>'Guidelines for Controlled Activities on Waterfront Land (NRAR 2018).'</i>
SW8	Take all reasonable measures to locate an adequate water supply on the adjacent 'Glenmore' property so they no longer have to rely on the existing bore.
SW9	Detailed design will include consideration of surface water flow paths to minimise any potential offsite impacts.
SW10	Source water for construction from off-site or obtain appropriate approvals for use of the on-site bore during construction
SW11	Complete processes to formalise use of the onsite bore for stock and domestic use by the landholder
<b>Soils, Geology and Contamination</b>	
S1	A Soil and Water Management Plan (SWMP) will be prepared and implemented as part of the CEMP, in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004). This will include an erosion and sediment control plan for the Site and intersection for implementation during construction.
S2	Minimise the footprint of disturbance during construction and employ progressive rehabilitation strategies to reduce the erosion hazard.
S3	During trenching activities and backfilling, as far as practicable separate topsoil and subsoil and when backfilling return the soil layers in their original order where practicable to do so.
S4	Employ dust management measures on unsealed roads, stockpiles and other areas of loose or disturbed soil prone to dust generation. Controls may include covering of stockpiles, watering roads and synthetic soil stabilisers. Dust management techniques shall be outlined in the SWMP.
S5	Maintain erosion and sediment controls until construction works are complete.
S6	Install a stabilised site entrance that all construction vehicles will use to access the site. The stabilised entrance and traffic management protocols in the CEMP shall be designed to minimise tracking of sediment onto adjoining roads from departing vehicles.
S7	Undertake site inspections at least weekly and following significant rainfall events to observe the condition and operation of erosion and sediment controls and water management systems, and schedule any required maintenance.
S8	Undertake soil amelioration and vegetation improvement works in line with the requirements of a Land Management Plan. This should include undertaking required land or vegetation improvement works at an appropriate stage during solar farm development. For example, soil amelioration and fertilising might be most practically undertaken prior to solar panel installation. For similar reasons the desired pasture should be sown before solar panel installation.

Reference	Mitigation Measure
S9	Design arrays to allow sufficient space between panels for essential maintenance activities and to facilitate maintenance of an effective ground cover beneath the panels to reduce erosion and help suppress weeds.
S10	Develop and implement a protocol for management of an unexpected finds of soil contamination.
<b>Bushfire</b>	
BF1	All electrical components would be designed and managed to minimise potential for ignition
BF2	The design would consider that the access track must be trafficable by Category 1 fire appliances.
BF3	Maximise use of construction components using materials such as glass, silicon, steel and aluminium rather than plastic
BF4	<p>Develop an Emergency Response Plan (ERP) in consultation with the NSW RFS District Fire Control Centre prior to construction. The FMP should include:</p> <ul style="list-style-type: none"> <li>• Foreseeable on-site and off-site fire events</li> <li>• Clearly states work health safety risks and procedures to be followed by fire-fighters, including: <ul style="list-style-type: none"> <li>– Personal protective clothing</li> <li>– Minimum level of respiratory protection (e.g. rubber fire fighter's boots and gloves, a self-contained breathing apparatus)</li> <li>– Minimum evacuation zone distances</li> <li>– A safe method of shutting down and isolating the PV system</li> <li>– Any other risk control measures required to be followed by fire-fighters</li> <li>– Evacuation triggers and protocols</li> </ul> </li> </ul> <p>Suppression response strategies and tactics, including aerial suppression options/management.</p>
BF5	Two copies of the ERP should be permanently stored in a prominent 'Emergency Information Cabinet' to be located at the main entrance point to the solar farm, external to any security fence or locked gate, and a copy provided to local emergency responders.
BF6	<p>An Asset Protection Zone (APZ) will be constructed around the solar farm with the following requirements:</p> <ul style="list-style-type: none"> <li>• The APZ will be 15 m wide around the entire perimeter of the solar farm footprint, and 20 m wide for areas abutting the remnant treed areas and landscaping areas.</li> <li>• The external edge of the APZ setback at least 25 m from the external edge of PV panels or other components.</li> <li>• The APZ must be either a mineral earth fire break (i.e. dirt or gravel) or a heavily grazed area.</li> <li>• Trees and tall shrubs associated with the landscape plan should not be planted close to the APZ.</li> <li>• APZ preferably located external to any security fence.</li> </ul>

Reference	Mitigation Measure
	<ul style="list-style-type: none"> <li>The substation should have a 20m APZ with no internal vegetation (gravel surface).</li> <li><b>A 10 metre defensible space that permits a 4 metre wide, unobstructed vehicle access will be provided around the perimeter of the solar array and associated infrastructure.</b></li> </ul>
BF7	The APZ or a fire break is to be constructed as part of the first stage of the development.
BF8	<p>Construction between 1 December and 31 March would be undertaken in accordance with the following:</p> <ul style="list-style-type: none"> <li>All plant, vehicles and earth moving machinery will be cleaned of any accumulated flammable material (e.g. soil and vegetation)</li> <li>A suitable fire appliance (e.g. fire extinguisher) is present on site with at least two personnel trained in bushfire fighting</li> <li>On days when Very High fire danger or worse is forecast for Wellington, the “fires near me” app is to be checked hourly for the occurrence of any fires likely to threaten the site</li> </ul> <p>All operations involving machinery will cease while the GFDI is or forecast to be 35 or greater.</p>
BF9	Installation of electrical equipment such as, junction boxes, inverters, transformer and electrical cabling, is to be in accordance with AS 3000:2007 Electrical installations and undertaken by qualified professionals.
BF10	<p>Install a water supply tank with a capacity of 50,000L outside the APZ near the substation and:</p> <ul style="list-style-type: none"> <li><b>Constructed of non-combustible materials (i.e. steel or concrete)</b></li> <li><b>Fitted with a 65mm Storz fitting or similar</b></li> <li><b>All external fittings shall be made of metal</b></li> </ul>
BF14	Consultation with the Local Emergency Management Committee will take place prior to operation to establish emergency management procedures and revise the ERP if required.
BF15	Prior to construction, a Fire Management Plan will be completed as part of the CEMP.
<b>Hazardous Goods</b>	
Haz 1	Dangerous or hazardous materials would be transported, stored and handled in accordance with AS1940-2004: The storage and handling of flammable and combustible liquids and the ADG Code where relevant.
<b>Electromagnetic Interference</b>	
Haz 2	All electrical equipment would be designed in accordance with relevant codes and industry best practice standards in Australia.
Haz 3	The layout of the Proposal has been designed considering buffer distances between the solar farm and sensitive receivers, road users and the general public.
<b>Air Quality</b>	
A1	Activities shall be assessed during adverse weather conditions and modified as required to reduce dust generation (e.g. cease activity where reasonable levels of dust cannot be

Reference	Mitigation Measure
	maintained).
A2	Engines to be switched off when not in use for any prolonged period.
A3	Water suppression of dust on exposed areas, roads and stockpiles when required.
A4	Temporarily excavated soil and other materials that exhibit significant dust lift off would be wet down, stabilised or covered to manage dust.
A5	Development of a complaint procedure to promptly identify and respond to complaints.
A6	Vehicles and plant would be fitted with suitable pollution reduction devices wherever possible and maintained according to manufacturer's specifications.
<b>Socio-economic</b>	
Socio 1	<p>The Community Stakeholder Engagement Program (CSEP) will continue to be implemented, including:</p> <ul style="list-style-type: none"> <li>• Providing regular updates to the community</li> <li>• Inform relevant stakeholders of potential impacts (for example noise impacts)</li> <li>• Establishment of a complaints handling procedure and a response protocol</li> </ul> <p>Responding to any complaints received.</p>
Socio 2	Liaise with local industry representatives to maximise the use of local contractors, manufacturing facilities and materials. Create a resourcing plan to ensure jobs will be local.
Socio 3	Local accommodation options for staff will be maximised.
Socio 4	Continued engagement with Dubbo Regional Council to discuss community and business concerns.
<b>Waste</b>	
W1	<p>A WMP will be prepared and implemented as part of the CEMP to manage any construction waste. The WMP will include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Measures to avoid and minimise waste associated with the Proposal</li> <li>• The procedure for assessing, classifying and storing waste in accordance with the EPA's Waste Classification Guidelines (EPA, 2014) and management options</li> <li>• Procedures for storage, transport and disposal of waste</li> <li>• Procedures for notification to Wellington Waste Management Depot prior to any large disposals</li> <li>• Monitoring, record keeping and reporting, e.g. waste tracking data demonstrating the lawful disposal of contaminated products, waste or residues generated at the facility.</li> </ul>
W2	An Unexpected Finds (Waste) Protocol would be established and implemented in case potentially contaminated, hazardous or unsuitable material are encountered during the site works.
W3	Waste management strategies and mitigation measures will be communicated to all employees and contractors during site induction, prior to commencing works at the site.
W4	A schedule will be created with the temporary amenity hire contractor to remove sewage.
W5	The proposed facility will comply with the relevant Protection of Environment Operations Act waste-tracking requirements for any wastes assessed or classified as

Reference	Mitigation Measure
	hazardous waste, industrial waste or 'Group A' waste (such as solvents, paints or oils).
W6	Waste generated from the Proposal will be managed in accordance with the principles of the waste hierarchy. A decommissioning environmental management plan will be prepared for the proposed facility with a Waste Management Plan.
W7	Wellington Waste Management Depot given appropriate notification before any large quantities of waste are deposited at the Wellington Waste Management Depot. Consultation will be undertaken with Dubbo Regional Council to determine what these notification periods will be and what waste can be taken by the facility.
<b>Cumulative Impacts</b>	
CU1	The CEMP would be updated as required to incorporate potential cumulative impacts from surrounding development activities as they become known. This would include a process to review and update mitigation measures as new work begins or if complaints are received. Key areas within the CEMP include the Waste Management Plan and the Traffic Management Plan.

#### Summary of Management and Mitigation Measures for Operation

Reference	Mitigation Measure
<b>General</b>	
G6	Consult with Dubbo Regional Council regarding the detailed design of the operations compound for the Proposal prior to its construction .
<b>Biodiversity</b>	
B11	The OEMP will include: <ul style="list-style-type: none"> <li>• The land management plan – which will have a procedure or plan for monitoring vegetation cover and composition and allow for adaptive management</li> <li>• The weed management plan – which will include weed monitoring and control</li> <li>• Vehicle speed limits, to reduce risk of collision with fauna</li> <li>• Prohibition of domestic pets on site.</li> </ul>
<b>Visual</b>	
V7	Minimise impact through use of siting and design features. Signage required at the Site should be of sufficient size to be readable at driver height within short range (0-20m) and contain only information sufficient for basic facility and company identification, for safety, navigation, and delivery purposes. Large scale signage will not be installed.
V8	Avoid Night Sky Impacts. Permanent evening lighting will be limited to compulsory lighting required for the substation. Substation lighting will be turned on if an intrusion is detected or if staff are on site undertaking works outside of daylight hours. Amber colour lights will be used rather than bluish-white lighting.
V9	An OEMP will be prepared for the Proposal and will incorporate a complaints management process.

Reference	Mitigation Measure
V10	Monitor performance of screen planting areas six-monthly for first three years then annually. Replant as necessary if plants die, and supplement planting with alternative species if plants are not adapting to the Site.
<b>Noise</b>	
N12	Complete a one-off noise validation monitoring assessment to quantify emissions from site and to confirm emissions meet relevant criteria.
N13	Prepare an operational noise protocol that can be implemented to address any community concerns regarding noise emissions for future operations of the Proposal.
<b>Land Use</b>	
L6	<p>An OEMP will be prepared for the Proposal and will incorporate:</p> <ul style="list-style-type: none"> <li>• The land management plan including weed management and <b>fertiliser treatment</b>.</li> <li>• Ongoing landscaping commitments</li> <li>• <b>Identification of current agricultural productivity of the site</b></li> </ul>
<b>Surface water, Hydrology and Groundwater</b>	
SW5	Implement the Land Management Plan to ensure at least 80% groundcover is restored and maintained (Refer <b>Appendix J</b> )
<b>Soils, Geology and Contamination</b>	
S11	<p>Implement a Land Management Plan that addresses the ongoing land management and maintenance activities (Refer <b>Appendix J</b>). This would address:</p> <ul style="list-style-type: none"> <li>• Ongoing agronomic management of the land including stock, water, vegetation and soils management</li> <li>• Measures required to maintain healthy soil and plant systems and maintain the agricultural capability of the land</li> <li>• Stock management programs and infrastructure (e.g. fencing, watering points)</li> <li>• Soil amelioration, pasture management and weed control</li> <li>• Monitoring programs for soil fertility and groundcover.</li> </ul>
<b>Bushfire</b>	
BF11	Fit PV arrays with an earthing and lightning protection system connected to the main earth link.
BF12	Vegetation fuel levels internal to the APZ and throughout the solar farm will be maintained by grazing, slashing or mowing.
BF13	The solar farm will be monitored via off-site control centres to ensure systems are working correctly, investigate any alarms and monitor panel performance.
<b>Air Quality</b>	
A7	Establish and maintain ground cover in accordance with the Land Management Plan for the site.
<b>Waste</b>	
W8	A WMP will be prepared and implemented as part of the OEMP to manage any waste operational waste.



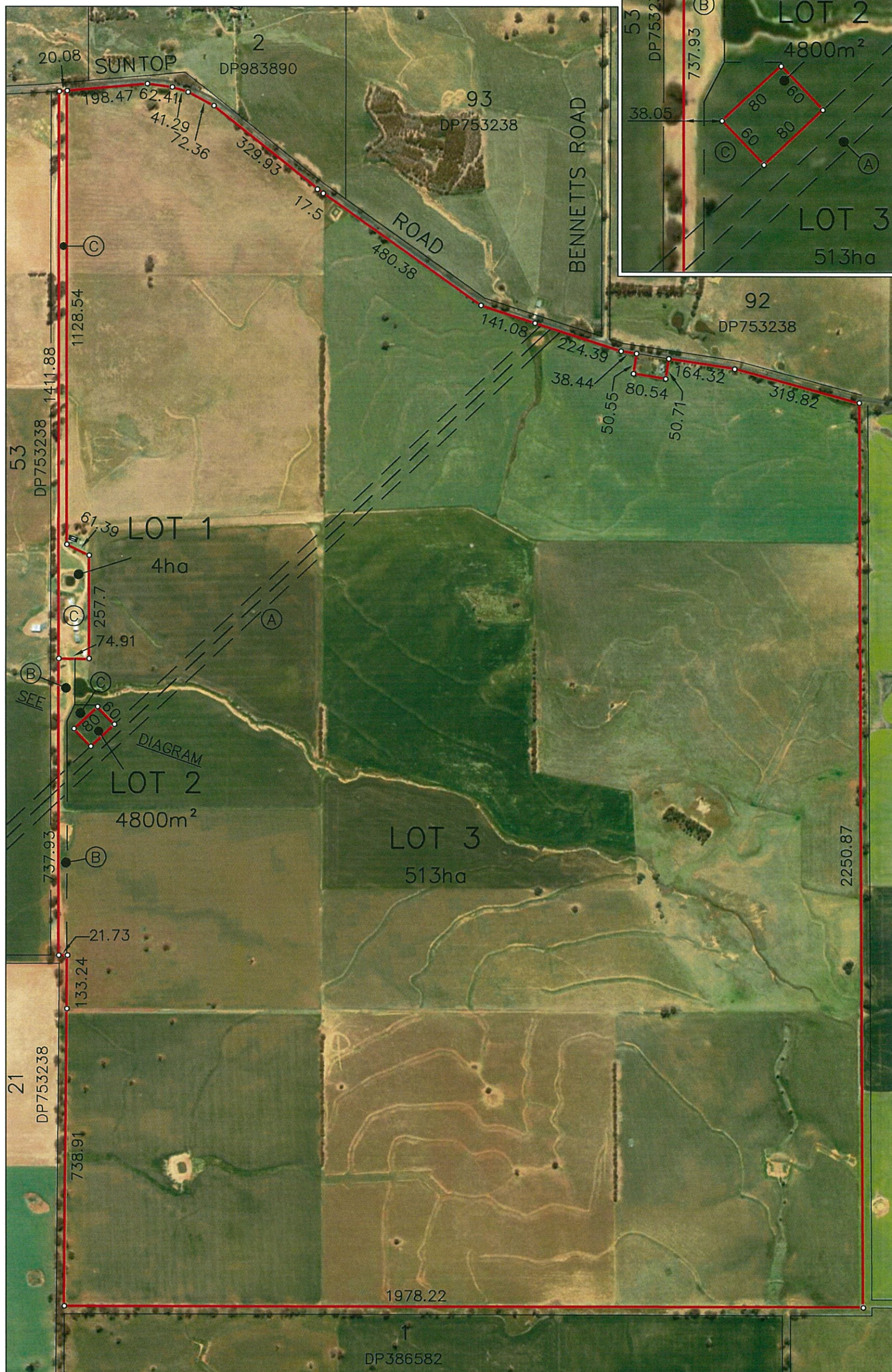
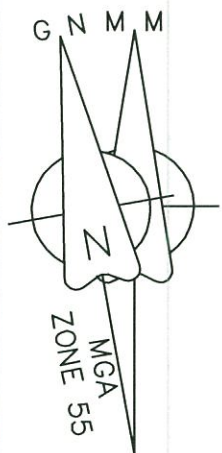
## Appendix C

### Revised Subdivision Plan

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1:10,000 0 100 200 300 400 500



- (A) EASEMENT FOR TRANSMISSION LINE 45 WIDE (DP6385987)
- (B) PROPOSED RIGHT OF CARRIAGEWAY 40 & 20 WIDE & VARIABLE WIDTH
- (C) PROPOSED EASEMENT FOR ACCESS VARIABLE WIDTH

**Notes:**  
This plan was prepared for Photon Energy as an existing site layout for overall planning purposes and should not be used for any other purpose. The dimensions, areas and total number of lots shown hereon are a combination of survey information and deed dimensions and are subject to field survey and also to the requirements of council and to any other authority which may have requirements under any relevant legislation. In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land. This note is an integral part of this plan.

A3

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Checked by  
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Approved

Job Number  
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Date  
11/05/2018

Scale  
1:10,000

**PROPOSED SITE PLAN**  
LOT 93 DP753238, LOT 3 DP506925  
& LOT 2 DP983890  
796 & 909 SUNTOP ROAD, SUNTOP

**PHOTON ENERGY**  
**GLENMORE PROPERTY, SUNTOP**

Drawing No.  
10065-DA02

Revision  
F

Sheet  
1 of 1



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## Suntop Solar Farm Submissions Report

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