

Mumbil *Solar Farm*

Addendum Scoping Report | July 2019

Document Information	Details
Title	Mumbil Solar Farm Addendum Scoping Report
Purpose	Scoping Report to accompany Application and Request for SEARs

Revision	Date	Prepared by	Reviewed by	Approved by
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2	23 July 2019	Virgil Robinson Andrew Wilson	Jessica Andrews	Andrew Wilson

1 Executive Summary

Epuron is proposing to develop a 140 MW solar farm near Mumbil (the Proposal). The Proposal is located in New South Wales, about 20 kilometres south of Wellington. The site is proposed on privately owned land, currently used for grazing sheep.

Photon Energy Pty Ltd started development of the project and was issued Secretary's Environmental Assessment Requirements (SEARs) for the Proposal in October 2017. Epuron is now the proponent for the Proposal.

There are no significant changes to the proposed solar farm since the SEARs were issued. There are minor changes to the land involved with the proposal with the removal of one lot and a minor increase in potential development area on three lots - please refer to Section 2 of this report for further details. Epuron is also planning to include a battery energy storage system as part of the solar farm.

Epuron has performed early stakeholder consultation and has carried out a preliminary biodiversity site assessment. Matters of concern were identified via stakeholder consultation which are discussed in this report. The preliminary biodiversity work shows the site to be of predominantly of low ecological value.

This addendum scoping report has been prepared to support an application to the Secretary of Department of Planning and the Environment (DPE) for updated Secretary's Environmental Assessment Requirements (SEARs) to guide the preparation of the Environmental Impact Statement (EIS) for the Proposal.

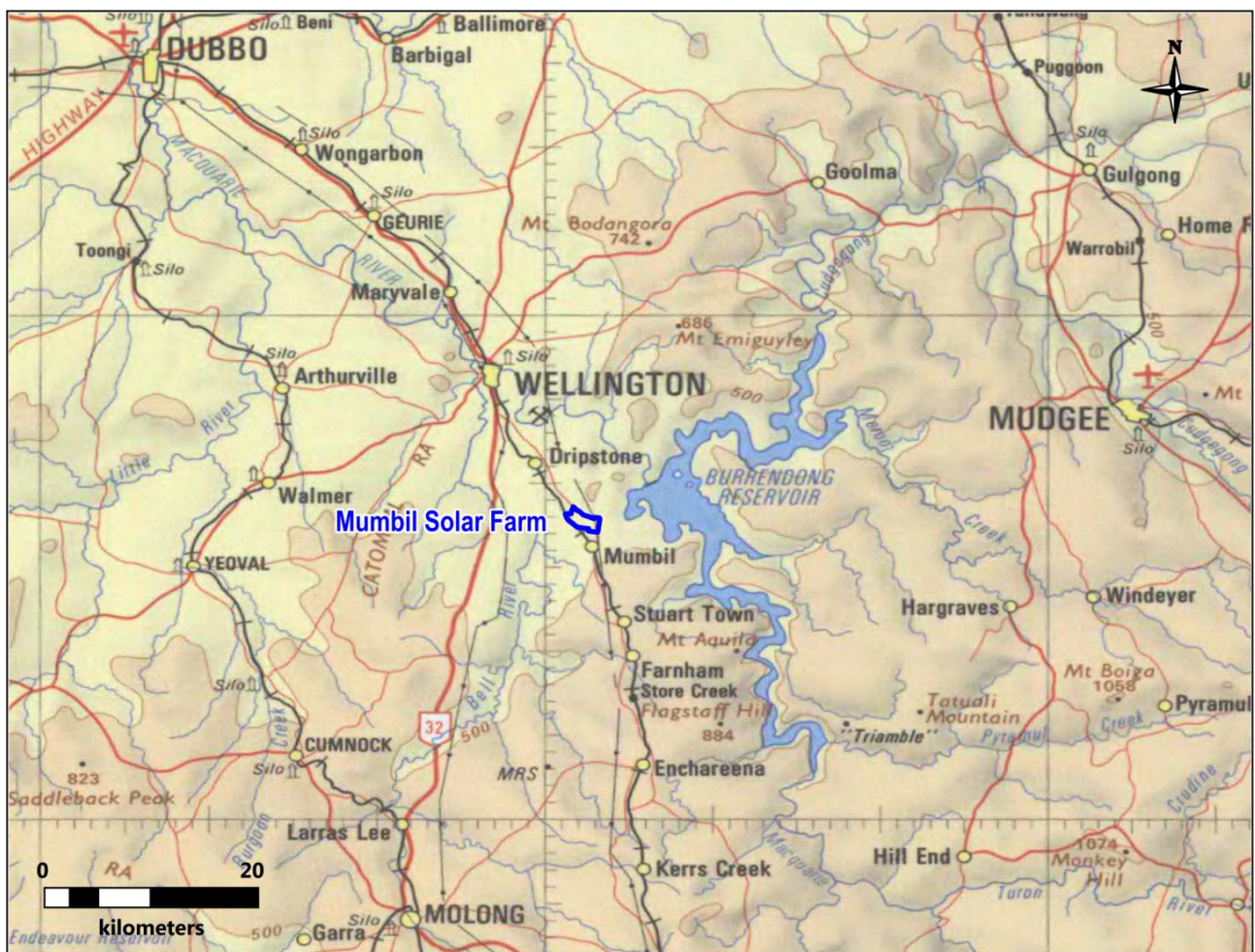


Figure 1 - Regional context of the site

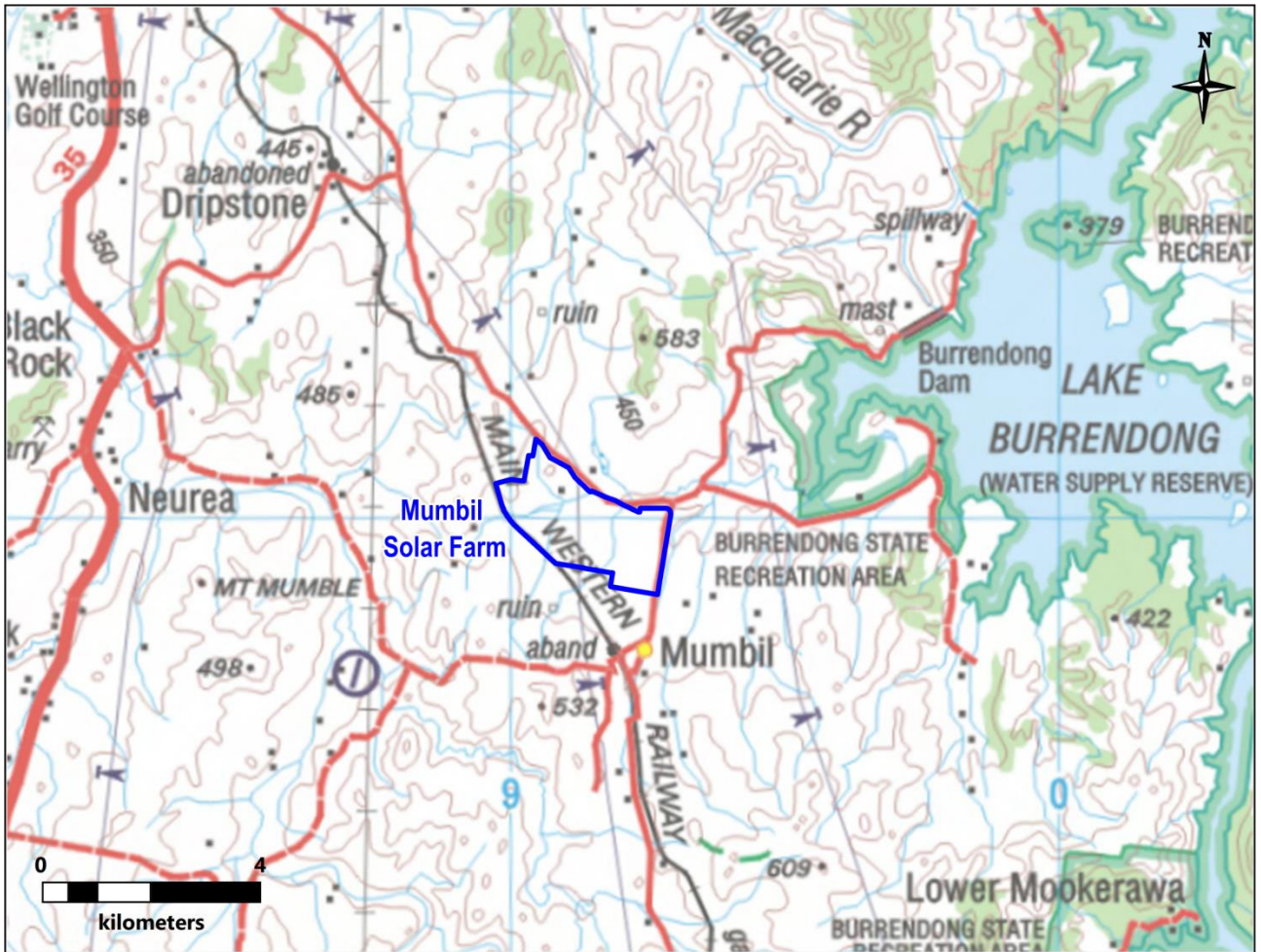


Figure 2 - Site Locality



Figure 3 - Mumbil Solar Farm site

2 Proposed Changes to the Proposal

There are minor changes to the potential development area and the land that the solar farm may be located on as outlined in Table 1 and Figure 2 below.

Table 1 – Minor changes in potential development area

Original Development Area		Revised Development Area		Change in Area
Land Lot/DP	Area	Land Lot/DP	Area	Increase
44/756896 (part)	15.5 ha	44/756896 (whole)	16 ha	0.5 ha
12/756896 (part)	12 ha	12/756896 (whole)	16 ha	4 ha
19/756896 (part)	13 ha	19/756896 (whole)	15 ha	2 ha
2/621653 (part)	26 ha	2/621653 (whole)	49 ha	24 ha
2/134277	14 ha	Land parcel not required	0 ha	-14 ha
Total increase in potential development area:				15.5 ha
Original development area 418 ha		Revised development area 433.5 ha		3.7%

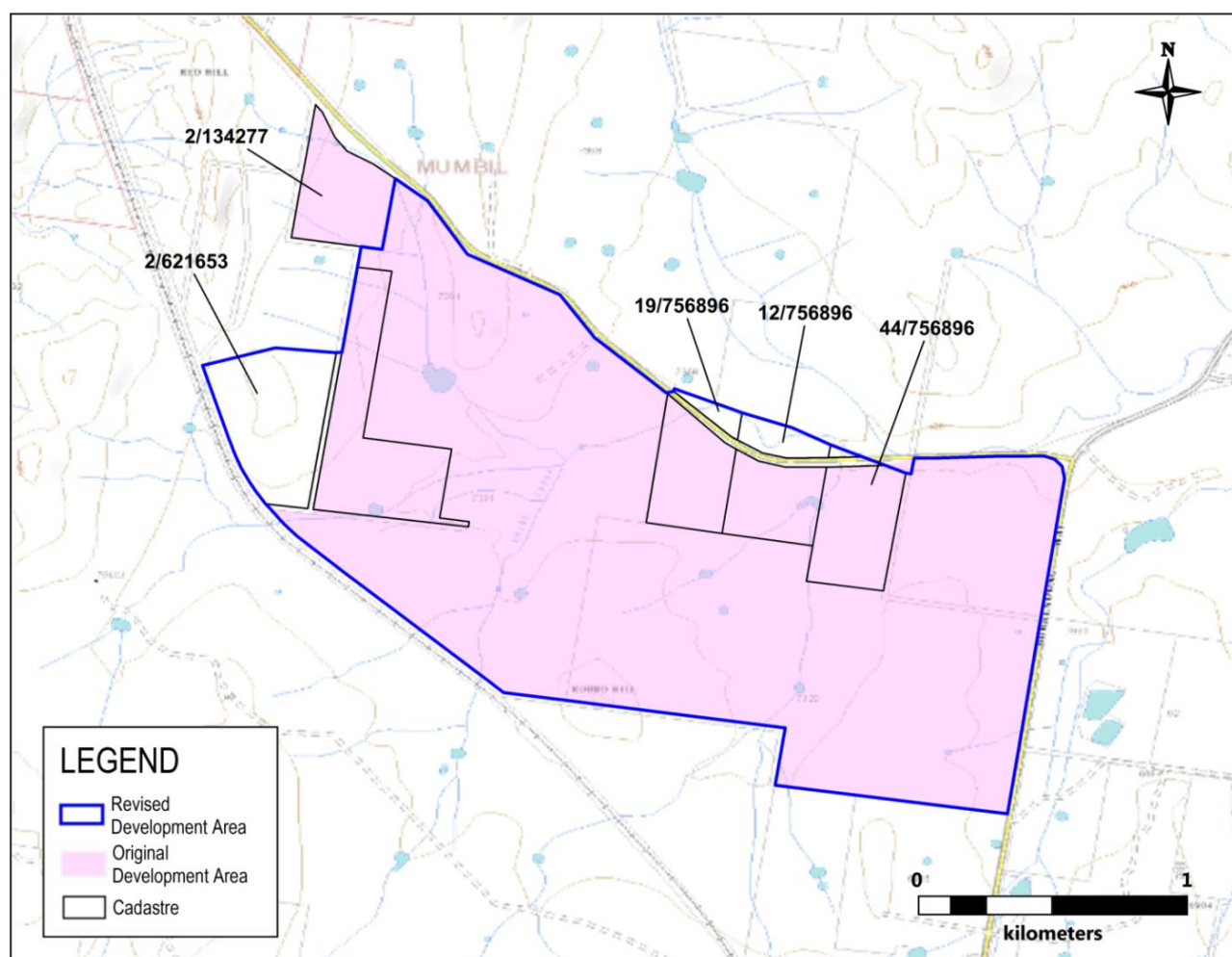


Figure 4 - Comparison of original and revised development areas

Epuron is also planning to include a battery energy storage system as part of the solar farm (Figure 5). The energy storage system would form part of the solar farm substation and connection to the existing 132 kV transmission line on the site. The estimate area occupied by the system would be approximately 40 m by 40 m.



Figure 5 – Typical battery energy storage system

Consideration of additional impacts

1. Minor change in potential development area – no change in potential impacts and no additional consideration or assessment required.
2. Battery energy storage system – no significant additional impacts. A hazard and safety impact assessment will be carried out to assess the potential impact and hazards associated with battery energy storage systems.

3 Proposal Scope

Proponent	The Proponent for the Proposal is Epuron Projects Pty Ltd (Epuron), an Australian renewable energy company established in North Sydney in 2003. Epuron is one of the most experienced wind and solar energy development companies in Australia.
Proposal Land	The proposal land is as follows 8/756896, 77/1084243, 60/756896, 2/621653, 46/756896, part 104/756896, 58/756986, 45/756896, 38/756896, part 57/1084242, 19/756896, 12/756986, 17/756896, 44/756896, 32/756896, 85/756896, 73/756896, 2/1060966. The total area of Proposal land is 440 hectares.
Proposal Background	<p>The proposed Mumbil Solar Farm (Proposal) was initiated by Photon Energy Pty Ltd, who submitted a scoping report to Department of Planning and the Environment (DPE) in September 2017 and was issued Secretary's Environmental Assessment Requirements (SEARs) for the Proposal in October 2017. A comparison of the Photon and Epuron development areas is shown in Figure 4, demonstrating it is substantially the same proposal.</p> <p>Epuron is now the proponent for the Proposal, having entered into exclusive land agreements with the site landowners in May 2019. Epuron is developing the site using the principles outlined in the NSW Government's Large-Scale Solar Energy Guideline for State Significant Development dated December 2018.</p>
Locality	The Proposal is located in New South Wales, about 20 kilometres south east of Wellington (Figure 1). The site is proposed on privately owned land, currently used for grazing sheep. Part of the Proposal site is the subject of a historical dryland salinity rehabilitation project. Mumbil village is located immediately south of the site, with a population of approximately 420 people. The village of Dripstone, with a population approximately 70 people, is located 4km to the west. Access to the site is via Burrendong Way, off the Mitchell Highway south of Wellington, NSW. Lake Burrendong is a recreational area located approximately 10km north east of the site. Other solar and wind farms are proposed in the region and while not all are expected to go ahead, concurrent construction of the Proposal and other projects is possible.
Proposal Description	<p>The Proposal consists of:</p> <ul style="list-style-type: none"> - Solar farm capacity up to 140 MW; - A Battery Energy System of up to 70 MW/420 MWh hours in size; - PV modules mounted on a fixed or tracking mounting frames; - Site amenities including a site office and maintenance building; - An access track off Burrendong Way and internal access tracks; - Underground electrical conduits and cabling; - Perimeter security fencing; - Onsite substation including ancillary grid connection equipment and infrastructure; - Subdivision of substation land; - A telecommunications tower up to 100 m in height; - Construction period of approximately 12 months with peak staff of approximately 100; <p>The Proposal estimated capital value is \$210 million.</p>
Justification and	The Proposal meets Australia's need for new electricity generation. This is an immediate need with regards to lowering electricity prices and a long term need with regards to system security given the retirement plans for the larger part of Australia's existing generation fleet.

Alternatives Considered	<p>Alternative generation technologies were considered and solar photovoltaics was chosen as it is currently the cheapest available form of new electricity generation in the Australian market. Alternative sites were considered and the Proposal site was selected as preferred due to good solar resource, proximity to appropriate existing electrical infrastructure, electrical network efficiency, access, low ecological value of the land, low agricultural value of the land (the solar farm is not located on Biophysical Strategic Agricultural Land).¹</p>
Planning Framework	<p>Environmental Planning and Assessment Act 1979 (NSW): The Proposal would be assessed under Part 4 of the EP&A Act.</p> <p>State Environmental Planning Policy (State and Regional Development) 2011 (NSW): The Proposal would have a capital investment cost estimated of more than \$30 million, therefore the proposal is classified as “State Significant Development”.</p> <p>State Environmental Planning Policy (Infrastructure) 2007 (NSW): (ISEPP) allows the development for the purpose of a solar energy system on any land with consent (except land in a prescribed residential zone).</p> <p>State Environmental Planning Policy (SEPP) 44 – Koala Habitat Protection, SEPP 55 – Remediation of Land; and SEPP 33 – Hazardous and Offensive Development: These will be considered in the preparation of the EIS.</p> <p>Wellington Local Environment Plan 2012 (Wellington LEP) (NSW): The site is zoned primary Production (RU1); electricity generation, while prohibited under some Wellington LEP zones, is not prohibited under the RU1 zone. Solar energy development is permissible on any land under the ISEPP.</p> <p>Heritage Act 1977 (NSW), National Parks and Wildlife Act 1974 (NSW), Threatened Species Conservation Act 1995 (NSW), Native Vegetation Act 2003 (NSW), Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth): Further assessment is required under the EIS for the Proposal under these Acts. Epuron’s consultants, NGH Environmental performed a preliminary biodiversity site visit in June 2019. The resulting constraints map is shown in Figure 7.</p> <p><u>High Constraint (Red)</u></p> <p>These include areas of:</p> <ul style="list-style-type: none"> • Threatened Ecological Communities (TEC) with an intact overstorey and/or native dominated understorey (White Box Grassy Woodland and Yellow Box Grassy Woodland) • Non-TEC Plant Community Types (PCTs) in good condition (good ecosystem credit species habitat) • Potential candidate species credits habitat <p><u>Moderate Constraint (Orange)</u></p> <p>These include areas of:</p> <ul style="list-style-type: none"> • Degraded TEC (Areas dominated by White Cypress Pine) • TEC associated Derived Native Grasslands • Non-TEC PCTs in moderate condition <p><u>Low Constraint (Green)</u></p> <p>These include areas of:</p> <ul style="list-style-type: none"> • Degraded TEC derived grasslands (that do not meet the criteria for TEC determination)

¹ NSW Planning and Infrastructure, State Environmental planning Policy 2007, Biophysical Strategic Agricultural Land, SEPP_MPEI_STA_022_320_20131213

	<ul style="list-style-type: none"> • Non-TEC PCTs in low or poor condition • Non-native vegetation (Exotic vegetation) <p>Given that impacts are expected to be avoidable via project design, an EPBC referral on the basis of potential to significantly impact specific Commonwealth listed Threatened Ecological Communities is considered unlikely.</p> <p>Crown Lands Act 1989: The Proposal does not include any Crown Land.</p> <p>Native Title Act 1993: Native title is not expected to exist on the Proposal land.</p> <p>Section 4.42 of the EP&A Act: The Proposal will comply with any requirements for approvals for work in or over a public road approval under the Roads Act 1993, Bushfire Management Plan under Rural Fires Act 1997, Water Access licence(s) under the Water Management Act 2000, Construction Certificates and Building Certificates under the EP&A Act, Management plans and other conditions of development consent.</p>
Stakeholder Consultation	<p>Epuron developed a Stakeholder Consultation Plan in consultation with PlanCom, with the immediate aim to identify matters of concern to stakeholders, including nearby residents and business owners. Epuron is investigating an early stage wind energy development in the area and therefore the consultation to date discussed the wind farm and solar farm with stakeholders.</p> <p>In Q2 2019 Epuron commenced following early stakeholder engagement:</p> <ul style="list-style-type: none"> - Introductory meetings: DP&E, Dubbo Regional Council/ Mayor, NSW DPI Wellington; - Introductory letters: local aboriginal land council, state local and federal members, neighbours within 1km of the Proposal, local media, local businesses and local community groups; - Face to face meetings with those parties that requested meeting within 1km of the Proposal. <p>Stakeholders expressed the following:</p> <ul style="list-style-type: none"> - Multiple stakeholders expressed broad support of the Proposal including interest in job opportunities; - Multiple stakeholders wanted to know more about community benefits and some had specific suggestions; - Multiple stakeholders wanted to know more about construction access and road use; - Two stakeholders expressed concern regarding regional perception of solar farms with regards to fear of change and/or compatibility with agriculture; - One stakeholder expressed concern regarding loss of agricultural land and expressed a preference for the wind farm development to proceed; - One stakeholder expressed interest in the potential for the site to support multiple land uses e.g. solar and agriculture; - One stakeholder had specific solar project design recommendations regarding the saline land at site and had recommendations regarding the rehabilitation of dry saline land; - One stakeholder expressed that they value of ecology and was interested to know more about the design of the solar farm and any ecological impacts. <p>Epuron will continue to consult with the local community and other stakeholders through a variety of means throughout the project phases from continuation of the early engagement through to the development, construction, operation and decommissioning phases.</p>

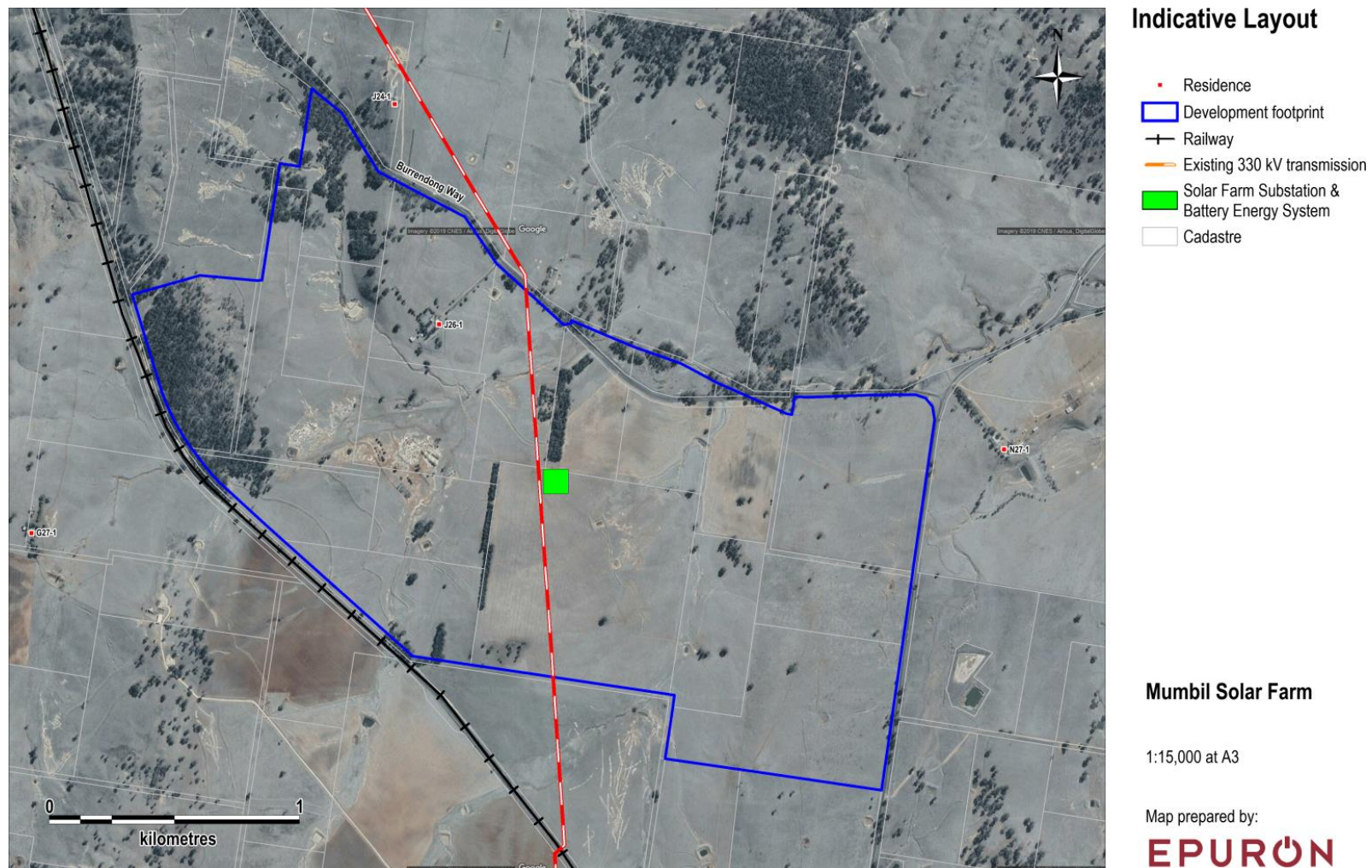


Figure 6 - Mumbil Solar Farm indicative layout

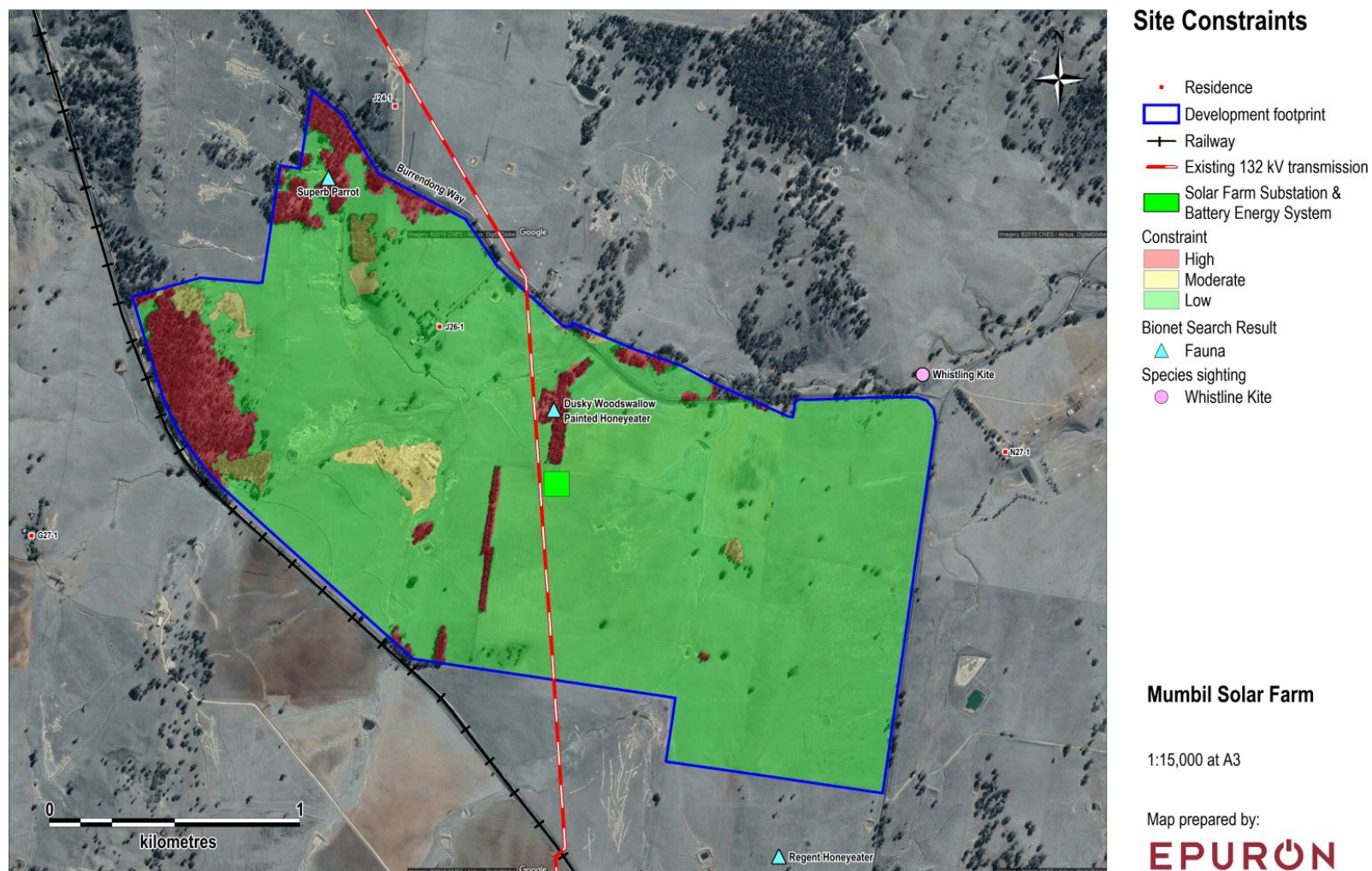


Figure 7 - Preliminary constraints map



Figure 8 – Existing 132 kV powerline and potential substation location



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