

ADDENDUM TO STATEMENT OF ENVIRONMENTAL EFFECTS - GUNNEDAH 2A SOLAR FARM (DEVELOPMENT APPLICATION No. 2021/035)

Site description: Lot 48 DP 755474, 781 Wandobah Road, Gunnedah

This addendum is to the Statement of Environmental Effects for the Gunnedah 2A Solar Farm dated 8 April 2021. The addendum has been prepared in response to a request for additional information relating to the above development application from Gunnedah Shire Council dated 28 May 2021.

Specifically, this addendum addresses points 1 and 4 of the request for additional information which are addressed separately below.

1. Demonstrate how the development will meet:

- 1.1 Aims of Plan in accordance with Clause 1.2 of the Gunnedah Local Environmental Plan 2012
- 1.2 Each of the zone objectives of the RU1 Primary Production zone in accordance with Clause 2.3 of the Gunnedah Local Environmental Plan 2012

The aims of Gunnedah LEP 2012 as espoused in clause 1.2 are:

- to protect and promote the use and development of land for arts and cultural activity, including (aa) music and other performance arts,
- to conserve and enhance, for current and future generations, the ecological integrity, (a) environmental heritage and environmental significance of Gunnedah,
- to promote the economic well being of the community in a socially and environmentally (b) responsible way, focusing on new employment growth and a diversified economy,
- (c) to encourage the proper management of productive agricultural land and prevent the fragmentation of agricultural holdings,
- to provide opportunities for a range of new housing and housing choice, (d)
- to facilitate the provision and co-ordination of community services and facilities, (e)
- to seek the provision of adequate and appropriate infrastructure to meet the needs of future *(f)* development,
- to provide direction and guidance in the management of growth and development, (g)
- (h) to conserve the cultural and environmental heritage of Gunnedah,
- to allow development in a way that minimises risks due to environmental hazards. (i)

sustainable thinking

It is considered that the aims of the plan that of relevance to the proposed development are (a), (b), (c), (f), (h) and (i). A comment regarding the consistency of the proposed development with each of these aims is given below.

Response to (a): Upon decommissioning, the proposed development including all ancillary items can be removed and the land returned to its pre-development condition. The solar farm will require clearance of less than 1 hectare of native grasses. No native trees are to be removed. The biodiversity report prepared by Red-Gum Environmental Consulting concludes that the proposed development will not have a significant effect on any threatened species and ecological communities and/or their conservation. The solar farm would therefore not impact on ecological integrity, natural heritage or the environmental significance of Gunnedah.

Response to (b): The proposed development will generate community economic benefits through local employment opportunities during the planning and construction phases as well as limited maintenance and inspection jobs once operational. The development of a solar farm will assist to create a new market for local contractors and expand diversity of income for the land holder.

Response to (c): The land surrounding the solar array can continue to be used for farming purposes such as the cultivation of vegetables or flowers, or potentially livestock grazing during the operation of the solar farm. The array of panels can be removed once the facility is decommissioned and the land can be returned to agricultural use.

Response to (f): Electricity generated by the private infrastructure will be directed to the settlement of Gunnedah via existing electrical lines to contribute to the supply of electricity for use by households and businesses in the town centre. Any surplus electricity will be sent to the grid and any deficit will be drawn from the grid. As well as the potential to utilize local contractors to construct the facility, the township will benefit through the ability to provide clean energy that is generated adjacent the settlement which may be utilised as the town grows.

Response to (h): The development site is not listed as a heritage item in Schedule 5 Environmental heritage of *Gunnedah LEP 2012*. The closest listed item to the site is I024 Trelawny located at 1352 Wandobah Road, a distance of almost 6 kilometres to the south-west from the development area. This property is listed as being of local heritage significance. There is no visual or physical connection between the development site and the item and there would be nil impact on this property.

An on-line search was carried out of the *Aboriginal Heritage Information Management Service (AHIMS)* that is maintained by Heritage NSW and no Aboriginal sites or places are listed in or near the development site. Red Chief LALC will be engaged to carry out a site survey prior to commencement of any ground-breaking works.

Response to (i): The site is not mapped as a flood planning area or as bushfire prone land. However, precautions are to be taken to minimise risk in the event of a flood or bushfire including developing procedures to halt construction during heavy rainfall events, by providing defendable space around the array and preparing a fire emergency management plan.

The objectives of zone RU1 Primary Production are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To provide for a range of ecologically sustainable agricultural and rural land uses and development on broad acre rural lands.
- To protect significant agricultural resources (soil, water and vegetation) in recognition of their value to Gunnedah's longer term economic sustainability.
- To conserve and enhance the quality of valuable environmental assets, including waterways, riparian land, wetlands and other surface and groundwater resources, remnant native vegetation and fauna movement corridors as part of all new development and land use.

The proposed development is satisfactory to the objectives of zone RU1 in that renewable energy through the harnessing of sunlight is a form of primary industry, is a sustainable means to utilise a source of infinite energy that does not reduce the natural resource base and will not cause fragmentation or alienation of resource land as sheep grazing may continue beneath and around the solar array when the facility is constructed and operating.

The solar farm will diversify rural activities and provide an alternative means of income thereby supporting other on-farm activities. It will not lead to land use conflict with other rural activities as it is a benign development that will not produce noise, odour, dust or other emissions. Employment opportunities will be created for the local community both during construction and operation.

The solar farm would not adversely affect valuable environmental assets and would not have a significant impact on biodiversity or the ecological integrity of water resources, native vegetation or habitat linkages between patches of native vegetation.

It is considered that the proposed development is not inconsistent with the aims of *Gunnedah LEP 2012* or the objectives of zone RU1 Primary Production.

4. Visual impact assessment should consider any residential receiver located within a 2km radius of the development site and include any temporary screening measures proposed until vegetation reaches maturity. It is noted that an outdated areal image has been used for the purposes of identifying nearby receivers. Additional receivers are known to be located, but are not limited to, along Blackjack Forest Road and Saffron Close.

The receiver density is greater than the original assessment concluded and may result in additional cumulative impacts on the context and amenity of the area and may introduce an additional viewing corridor which requires assessment.

Accessing current aerial or satellite imagery that displays recent development and construction is problematic given availability and costs. Outside of metropolitan areas consultants generally rely on SIX Maps and Google Earth. NearMaps does not contain imagery of rural locations.

Having said that, new dwellings that have been developed north of the development site and within the 2 kilometre visual catchment radius as shown on Google Earth imagery dated 8 February 2021. These dwellings are not shown on SIX Maps imagery dated 28 July 2011. They include three dwellings on Blackjack Forest Road, five in Saffron Close and six along Booloocooroo Road. These dwellings are shown circled in yellow in Figure 1 below extracted from Google Earth.



Figure 1: Dwellings within the visual catchment on Blackjack Forest Road, Saffron Close and Booloocooroo Road. Source: Google Earth 8 February 2021

Vegetation lines Blackjack Forest Road can be seen in this aerial image and in the photograph below. This screen coupled with the relatively flat landscape and vegetation on intervening land between Blackjack Forest Road and the development site provides effective visual mitigation.

Clusters of rural lifestyle or large lot residential dwellings in the vicinity of Blackjack Forest Road and Booloocooroo Road are assessed as a single observation point. An assessment of impact at the closest point to the development site is included in the Landscape Character and Visual Impact Assessment to provide a worst-case scenario, noting that this is representative of other dwellings in the vicinity. Observation point R12 is representative of all dwellings in this area and is assessed to have an impact rating of moderate. The comment is made that there is no direct visual connection acknowledging that sensitivity is high in this area due to the potential for perceived land conflict between rural lifestyle inhabitants and rural uses. This perception is common at the interface of peri-urban and rural zones where occupants of residential dwellings do not appreciate that permissible land uses in the adjoining rural zone will be carried out. In any event, the proposed landscaping along the northern edge of the array will provide effective screening to dwellings in this direction.



Figure 2: Vegetation on the southern side of new dwellings on Blackjack Forest Road

It is considered that future development in this area and increasing densification will not create additional viewing corridors over the development site and will not alter the context and amenity of the area. This context has been taken into account in the visual impact assessment. Furthermore, the land to the south of Blackjack Forest Road and located between these dwellings and the development site is zoned rural (RU1 Primary Production) and not likely to be developed for housing in the foreseeable future.

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