

Appendix 2 Griffith Overview and Environmental Constraints Map

The proposal site is located approximately 7 kilometres (km) south east of Griffith, within the Griffith Local Government Area and Murrumbidgee Irrigation Area. The site is accessed via Irrigation Way, Hamilton Road and Poletta Road. The proposal would connect to the existing Griffith/Yoogali Transgrid substation, located on Hamilton Road to the west of the site.

The proposal site comprises approximately 125 hectares of freehold land which is very flat, completely cleared of trees and is currently used for irrigated cropping. The site has been previously laser levelled for irrigation purposes and includes three irrigation channels. The areas immediately adjacent to the proposal site are dominated by broad scale irrigated agriculture, as well as road, rail and canal infrastructure. Six residences are located in close proximity to the site, the nearest being approximately 150 m from the site boundary.

The proposal comprises the construction, operation and eventual decommissioning of a 53 MVA or 60 MW solar farm. Key infrastructure components would include:

- Solar arrays: approximately 200,000 solar panels supported by approximately 25,000 piles, driven or screwed into the ground in order to support the solar array's mounting system.

The panels to be installed would be either:

- single-axis tracking panels (which would have approximately 2,650 tracker units)
 - north-oriented fixed-tilt panels
 - east-west facing fixed-tilt panels
 - or a combination of these alternatives.
- Approximately 26 PV boxes or PV skids (either containerised or installed on a 'skid' platform) each of them containing an inverter and a 33kV transformer.
 - Onsite cabling and electrical connections between solar arrays and panel inverters.
 - One delivery station in a container or on a 'skid' platform (no further voltage step-up being required, the delivery station will not contain any transformer).
 - Cables and trenches.
 - Internal access tracks to allow for site maintenance vehicles, and gravel access road and parking for staff and visitors.
 - Staff amenities and offices.
 - Perimeter security fencing, approximately 2.3m high.
 - Vegetation buffer.
 - A 33kV underground or overhead power line to connect into the existing Griffith/Yoogali Transgrid substation, approximately 300 metres west of the site, on Hamilton Road.

The construction and commissioning phase of the proposal would take approximately nine months. Approximately 35 employees would be required during the first month of construction, rising to approximately 90 employees during the peak construction period. During construction, approximately 0.5 full time equivalent staff would be required on site.

At the end of its operational life, the proposal site would be either reconditioned or decommissioned. Decommissioning would remove all above ground infrastructure, rehabilitating the site to allow for a return to agricultural or other land use for the majority of the site

ASPECTS

- Heritage artefacts
- EEC and habitat vegetation

- Environmental and noxious weeds
- Soil and Water Management

***Refer to Sub-Plans for specific environmental site management**



- An existing overhead line will need to be taken into account for the design of the plant and its yield assessment.
 - The green line in the map below is a 21m high Transgrid overhead line (code: 99K - concrete poles);
- An existing underground fibre optic will need to be taken into account for the design of the plant.
 - The orange line in the map represents the fibre optic along Poletta Road. It shouldn't impact the first stage presented in this document as this stage would likely be built on the south-western part of the land.
- The Murrumbidgee canal borders the PV Plant land along Poletta road and Ross road, as shown in dark blue.
 - The underground connection line between the PV Plant and the Transgrid substation will need to go through Ross road, and as a result of the Murrumbidgee canal, would likely require an underbore.
 - Two (2) secondary canals go through the PV Plant area as shown in light blue below. These canals will not impact the design as they will be backfilled by the landowner before construction.
- A flood zone has been identified on the north-eastern area of the site, as shown in blue in the map. As a result, the south-western part of the site will be the preferred location for the PV Plant.
- Sufficient space for at least two (2) rows of vegetation screening should be allowed outside the fences. The final design of this vegetation buffer will be agreed with neighbours at the end of the project construction, and coordinated by the EPC.

Griffith – Development Consent (App. SSD 6604): General Layout of Design

