

7.0 Recommendations

7.1 Impact Mitigation Strategies

7.1.1 OVERVIEW OF IMPACT MITIGATION

A range of methods for mitigating the visual impact of the proposed development have been identified and are outlined in this section of the VIA. The recommendations seek to achieve a better visual integration of the proposed Manildra Solar Farm and the retention of existing landscape character at both local, and regional scales. The mitigation measures attempt to lessen the visual impact of the proposed development whilst enhancing the visual character of the surrounding environment. They are made notwithstanding issues raised by other consultants (eg. engineering, ecology, geology etc).

When site planning the Solar Farm the design should consider some or all of the following mitigation strategies to lessen the visual impact of the proposal. This is by no means an exhaustive list, however the adoption of these recommendations will assist considerably in ensuring the proposal contributes positively to the visual quality and character of the area.

In addition to the impact mitigation strategies outlined in the following sections, a visual impact mitigation plan has been prepared and is included as figure 14 on the following page of this report.

7.1.2 CONSTRUCTION MITIGATION

It is likely the greatest visual impact will occur through the construction stage. Though the construction phase would be temporary practical methods should be employed to reduce the impact of this stage. These include but are not limited to the following:

- Dust reduction throughout the construction process
- Restoration of any earthworks required for the construction
- Clearing of existing vegetation is to be kept to a minimum

7.1.3 SOLAR PANELS & ASSOCIATED INFRASTRUCTURE

Once construction has been completed, the solar farm will be a relatively low lying development, with panels having a vertical height of approximately 2-3m above ground level. Due to the low height, visibility of the solar panels can be potentially be significantly reduced through a variety of mitigation methods.

Although the PV Solar Panels are the most visible feature of the landscape, a considerable amount of associated infrastructure is to be included in the proposal. This infrastructure associated with the solar panels is outlines in the project proposal section of this report. Methods of mitigation which will be incorporated into the project include:

- Colour of above ground infrastructure to be sympathetic to the landscape character
- Underground cabling to be utilised where possible
- The design and location of ancillary works are to incorporate measures which will reduce the visual impact

7.1.4 LANDSCAPING & VISUAL SCREENING

Visual screen planting is a beneficial mitigation method used to assist in the reduction of the Solar Farm's visual impact. Visual screen planting can be undertaken in the form of boundary planting around the solar farm, foreground planting at affected viewpoints and residential tree planting.

The existing remnant woodland vegetation contributes significantly character of the area. The selection of endemic species for use as screen planting would enhance the existing landscape character, and be seen as a continuation of the existing vegetation. This planting would be best implemented in areas where natural vegetation has been removed for access roads and agricultural activity.

To assist in concealing the Study Site from areas with a visual impact, screen planting is proposed along the boundary edges of the proposed development. Boundary planting is proposed to be undertaken along the northern, western and southern perimeters of the proposed solar farm. Screen planting along these boundaries will ensure visibility is restricted from roads and nearby homesteads.

Roadside planting along the eastern edge of Molong Manildra Road is an additional mitigation method proposed to ensure views from the road are fragmented. Planting along the roadside would be seen as a continuation of the existing roadside vegetation and would reinforce the existing landscape character.

In areas where additional screen planting is required, the proposed solar farm can be screened through the implementation of foreground planting around areas affected. Amelioration of the visual impact from homesteads within close proximity to the proposed development should be undertaken in consultation with the relevant land owners.

Proposed visual impact mitigation in the form of visual screen planting has been suggested in figure 14.

7.1.5 VISUAL OPPORTUNITIES

The proposed Manildra Solar Farm is a flagship development for renewable energy which, due to the relatively large scale and new technology, is bound to be of interest to viewers. There are opportunities for the provision of educational viewing areas at various locations around the site. The integration of a viewing area where visitors would be able to safely view the solar farm and surrounding landscape would be a positive attribute to the development. Combined with interpretive signage these viewing areas would provide insight into the function, output and benefits of large scale solar farms.

An area on the northern edge of the Site has been identified as a potential location for a public viewpoint due to the expansive views over the proposed solar farm site. The public viewing area is identified in Figure 14 on the following page.

7.0 Recommendations (contd.)

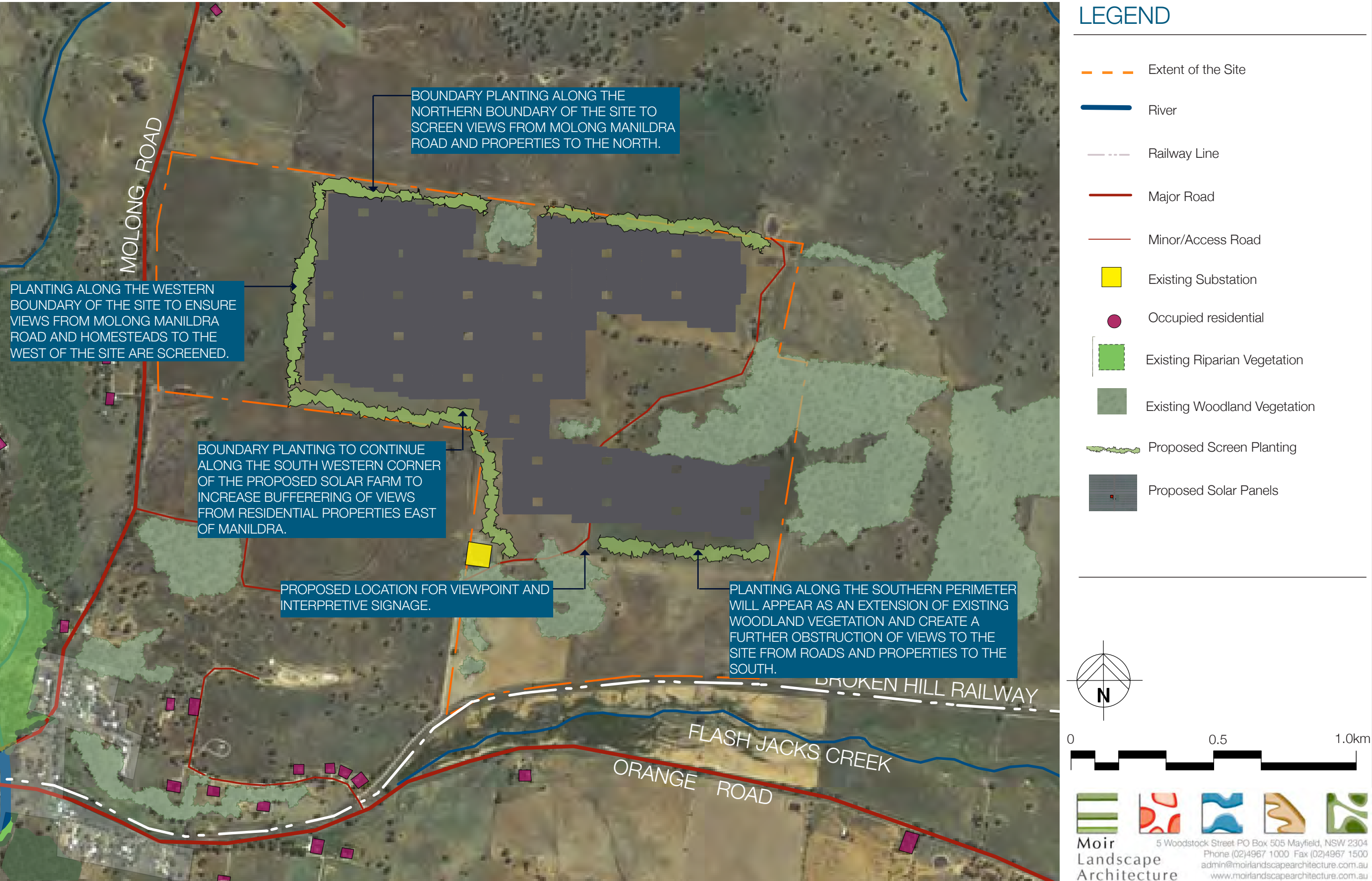


Figure 14: Visual Impact Mitigation Principles

7.0 Recommendations

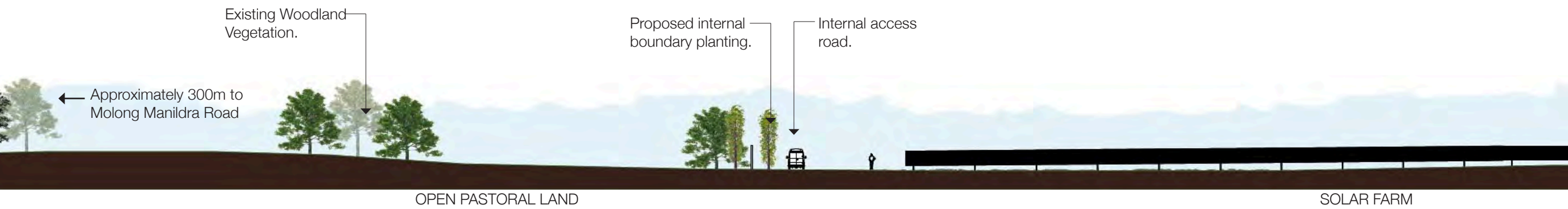


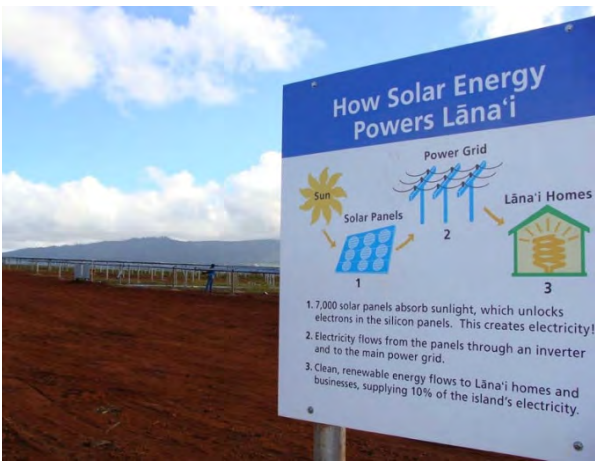
Figure 15: Section through solar farm from Molong Manildra Road



1. Existing roadside planting along Molong Manildra Road.



2. Mandagery Creek Riparian Vegetation.



3. Educational signage.



4. Public viewing area.

8.0 References

Publications

Colleran, JR. & Gearing D., (1980) A Visual Assessment Method for Botany Bay, Landscape Australia, 3 August,

DOP (1988) Rural Land Evaluation, Government Printer, Department of Planning.

EDAW (Australia) Pty Ltd., (2000) 'Section 12- Visual Assessment', The Mount Arthur North Coal Project: Environmental Impact Statement, URS Australia Pty Ltd, Prepared for Voal Operations Limited.

State Pollution Control Commission, (1981) Guidelines for Visual Assessment and Management of Coastal Landscapes.

Wright G., (1973)Landscape Quality: A Method of Appraisal, Royal Australian Planning Institute Journal, October

Maps

<http://map.google.com.au>
2010 Google- Map Data Sciences Pty Ltd, PSMA

Websites

The Orange Town and Around Website, Manildra NSW Australia (2010)
<http://www.orange-nsw.com/Manildra.html>

Wikipedia, Manildra, NSW (2009)
http://en.wikipedia.org/wiki/Manildra,_New_South_Wales