Longreach Solar Farm

Biodiversity Report

Report prepared for

Canadian Solar

by

DC Solutions Ltd

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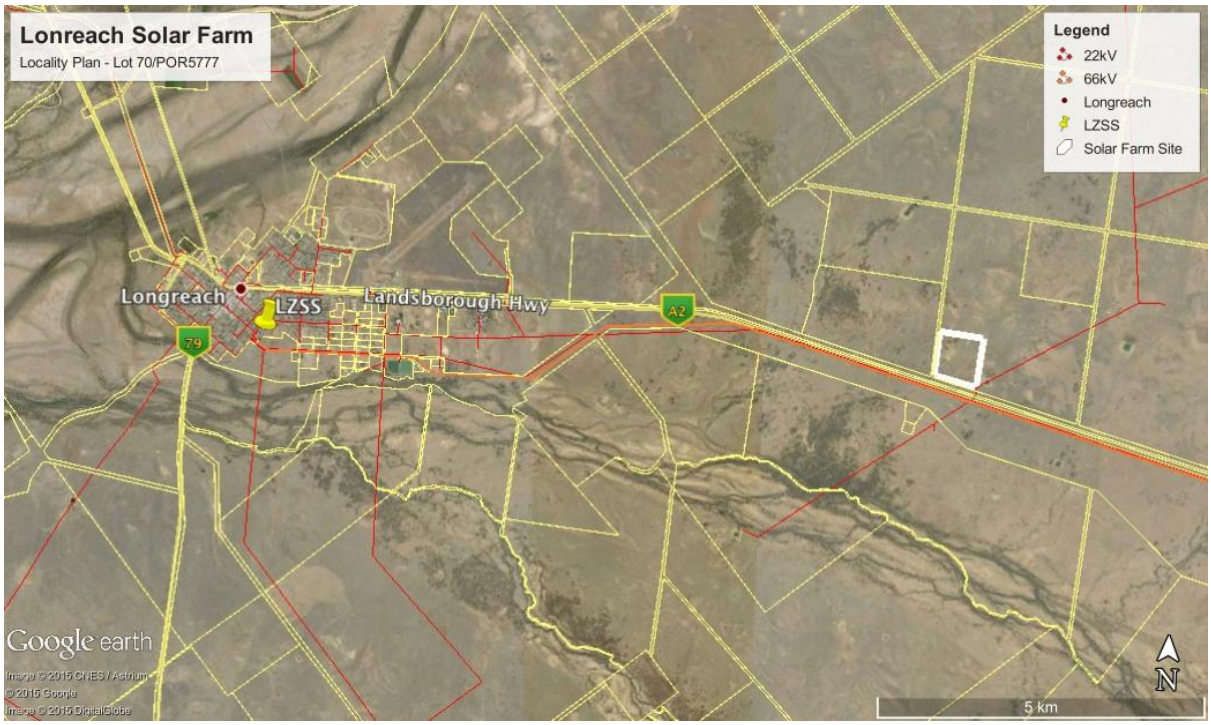


Locality of proposed Longreach Solar Farm

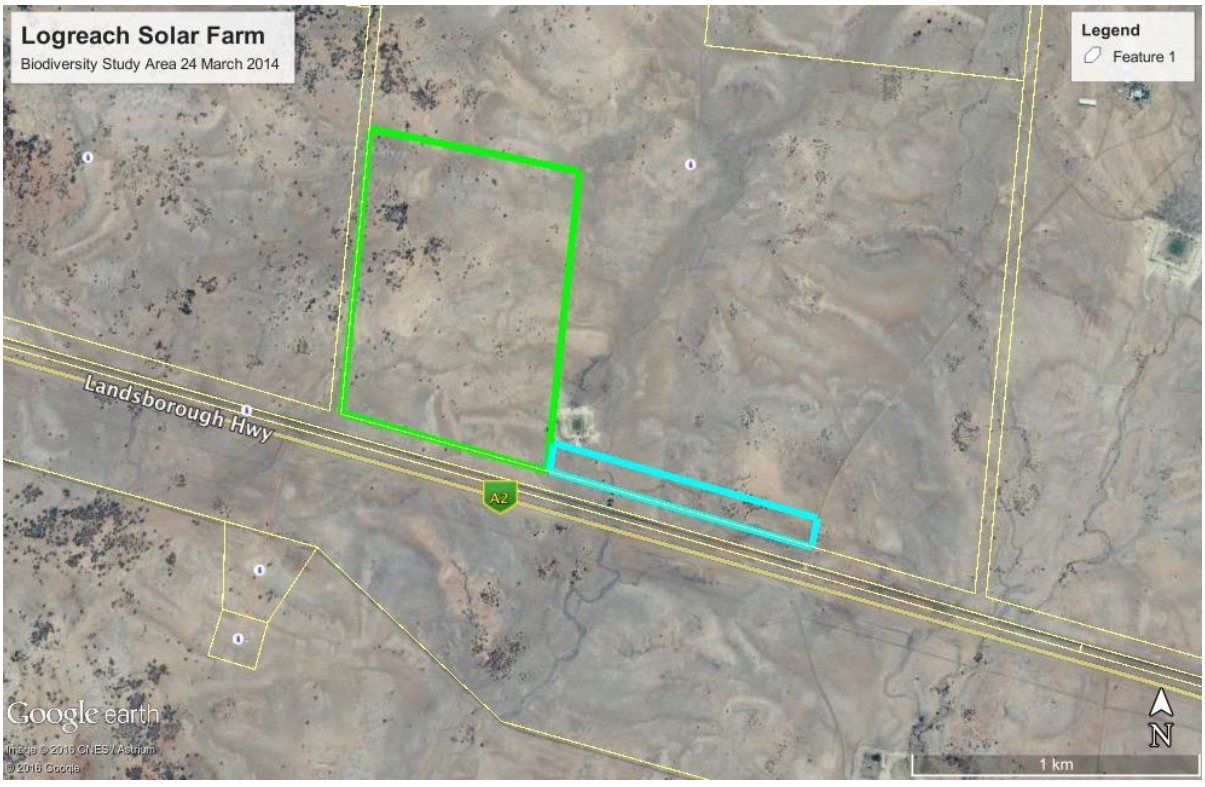
Qualifications

Graeme Armstrong has a PhD from Charles Darwin University, specialising in botany, and has over 10 years experience as an environmental consultant where his clients have included State agencies. In association with the Queensland Herbarium, he developed vegetation assessment protocols for Queensland.

Background

DC Solutions was engaged by Canadian Solar (Australia) Pty Ltd to undertake a detailed assessment of the environmental values (flora/fauna and land condition) of the site of the proposed Longreach Solar PV Project.

The site is located approximately 12 kilometres east of Longreach, on the northern side of the Landsborough Highway. The site is approximately 78 hectares with a further 8 hectares (approximately) in the access road. While the solar farm area will be a maximum of 30 hectares, a larger area was included in this investigation to allow micro-siting flexibility, pending the outcome of other investigations.



Layout of proposed Longreach Solar Farm (green) and access track (blue)

Scope

The assessment considered matters relevant to State and Federal legislation relating to environmental approvals. This analysis was limited to the following statutes:

State Legislation...

- *Nature Conservation Act 1992* (NCA)
- *Vegetation Management Act 1999* (VMA)
- *Environmental Offsets Act 2014* (EOA)

Commonwealth Legislation...

- *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC)

The assessment also considered matters identified in the following documents:

- Vegetation Management Report provided by Operations Support (Vegetation Management) or State Land Assets Management, Department of Natural Resources and Mines.
- Dept. of Infrastructure Local Government and Planning Pre-lodgement advice.

This assessment is based on the assumption that all vegetation within the site will be removed up to the required 30 hectare area.

Site photo 1

Methods

The site was inspected and flora and fauna surveys undertaken on 29th and 30th March 2016.

An assessment of the accuracy and comparative proportions of the regional ecosystem mapping was conducted and the extent of wooded areas mapped. The surveys were undertaken to determine if any threatened species identified by the state Wildnet and federal species databases were present at the site.

Surveys entailed two belt transects approximately 600 metres long and 2 metres wide (Appendix 1), two 30 minute bird surveys and one spotlighting session for 30 minutes searching for nocturnal mammals.

Advice was sought from the Department of Natural Resources and Mines (Vegetation Management) – Central Region as to whether a clearing permit was required based on the survey results. The resulting report provided by the Department is attached as Appendix 2.

Site photo 2

Results

1. The site comprises 90% Regional ecosystem 9.4.1; *Astrebla lappacea* ± *Aristida latifolia* ± *Panicum decompositum* grassland on Cretaceous sediments (Least Concern) and 10% RE 4.9.7 *Astrebla spp.* grassland wooded with *Acacia tephrina* ± *A. cambagei* and *Atalaya hemiglauca* on Cretaceous sediments (Least Concern).

2. The wooded area in RE 4.9.7 is regrowth associated with the runoff from a small dam, determined through aerial photographs provided by the Department of Natural Resources and Mines (DNRM) and included as Appendix 3.

3. None of the threatened flora or fauna species identified from state and federal databases were observed in any of the surveys completed on the site.

4. There are no wetlands, watercourses or essential habitat[1] on the property.

5. The property is not listed as containing any protected plants.

6. The property is not listed as high value under the Land Suitability Map.

Site photo 3

[1] 'Essential habitat' is a State Government classification of sites and locations considered to contain important habitat for flora and fauna species of conservation significance.

Conclusions

1. There is no requirement to refer the project under the EPBC Act because no listed species have been observed at the site.

2. If the approximately 2 hectares of regrowth on the site needs to be removed for development, then, DNRM advises a clearing permit is required.

3. Also based on advice from DNRM, if the project is deemed to be a significant community project under Division 2 (10) of the Vegetation Management Act 1999 by the Chief Executive of DNRM, this project would be exempt under Schedule 24, Part 2, (2) (j) (i); however, the applicant would need to pursue this avenue with local government.

4. The access road will be an upgrade of an existing track and will not require the clearing of any vegetation – grass is not considered vegetation under the Vegetation Management Act.

Preparation and lodgement of clearing permit applications is through the Department of Infrastructure, Local Government and Planning with information provided on the process in the following pages:

https://www.qld.gov.au/environment/land/vegetation/applying/

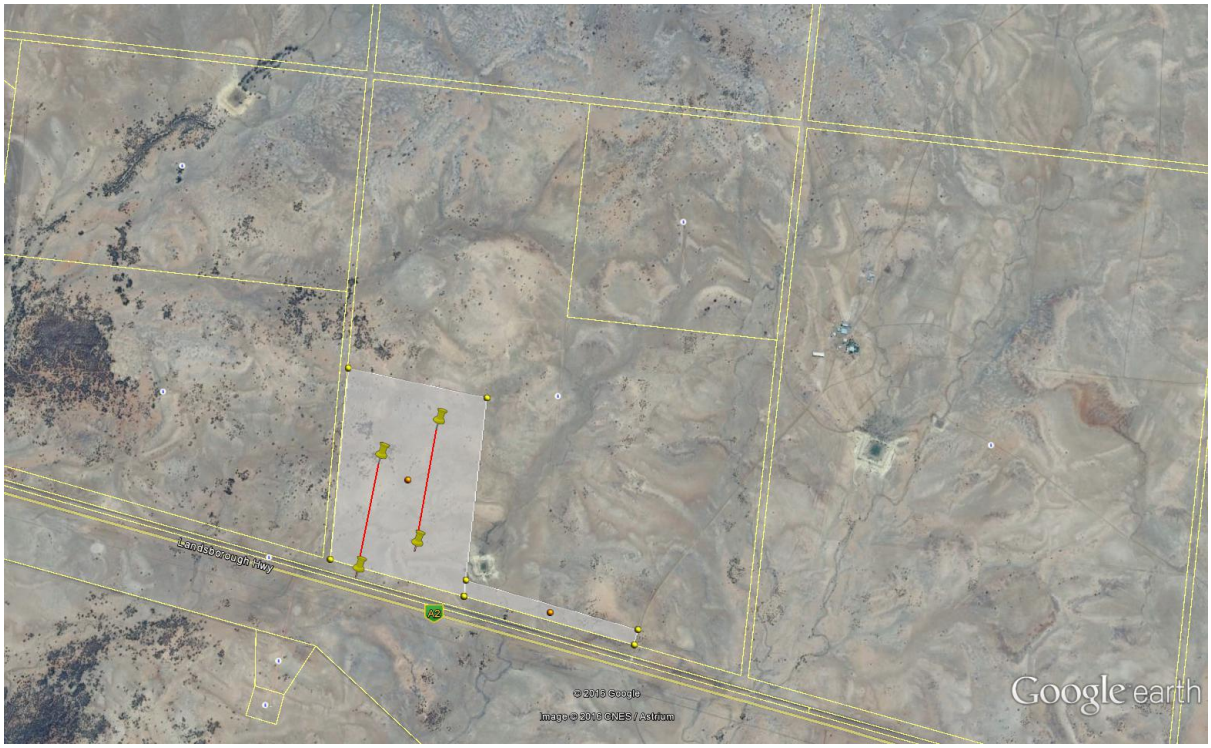
http://www.dilgp.qld.gov.au/planning/development-assessment/state-assessment-and-referral-agency.html

http://www.dilgp.qld.gov.au/planning/development-assessment/electronic-lodgement.html

Appendices

Appendix 1

Survey belt transects, also attached electronically.

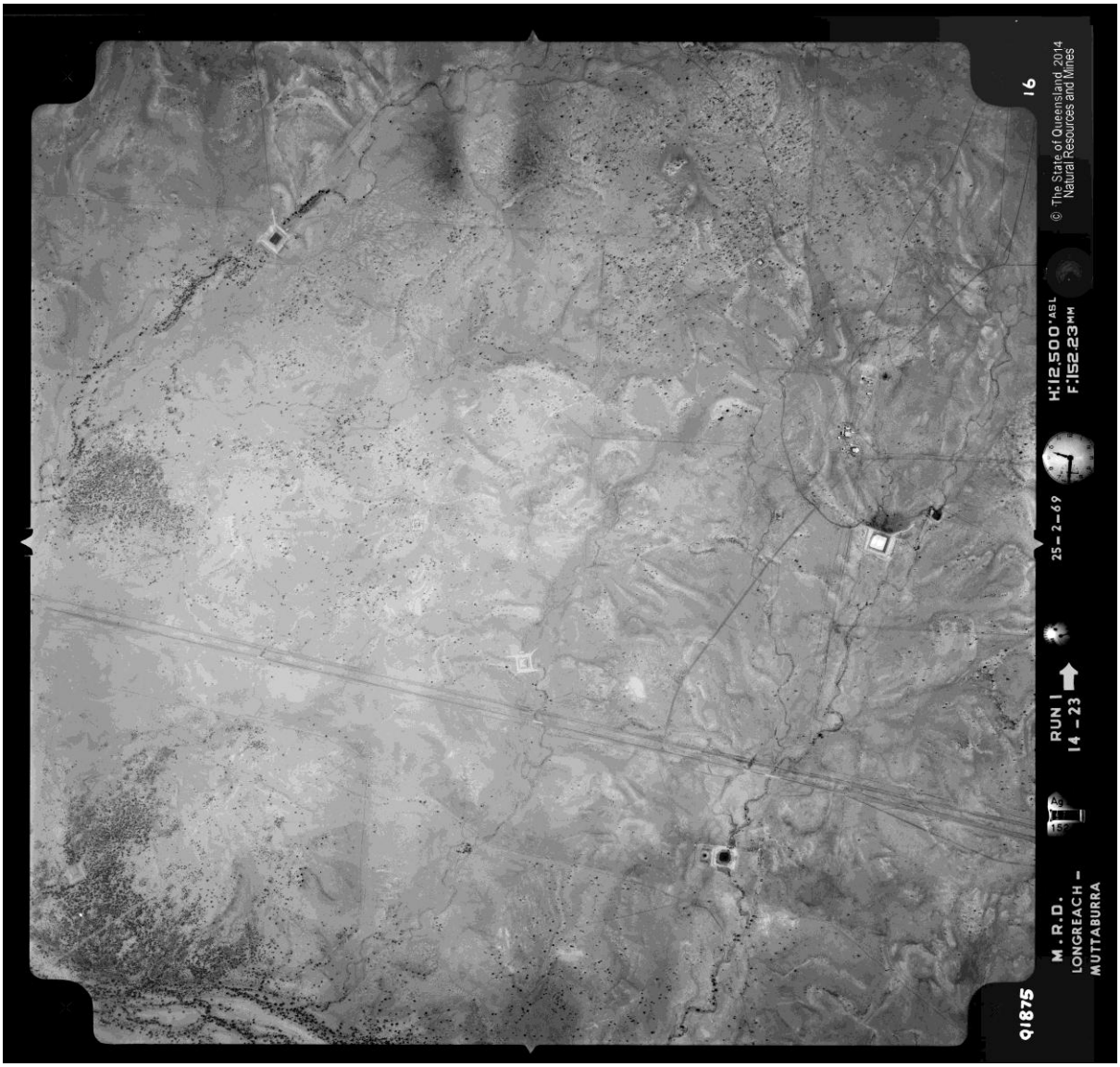


Appendix 2

Department of Natural Resources and Mines' Vegetation Management Report, attached electronically.

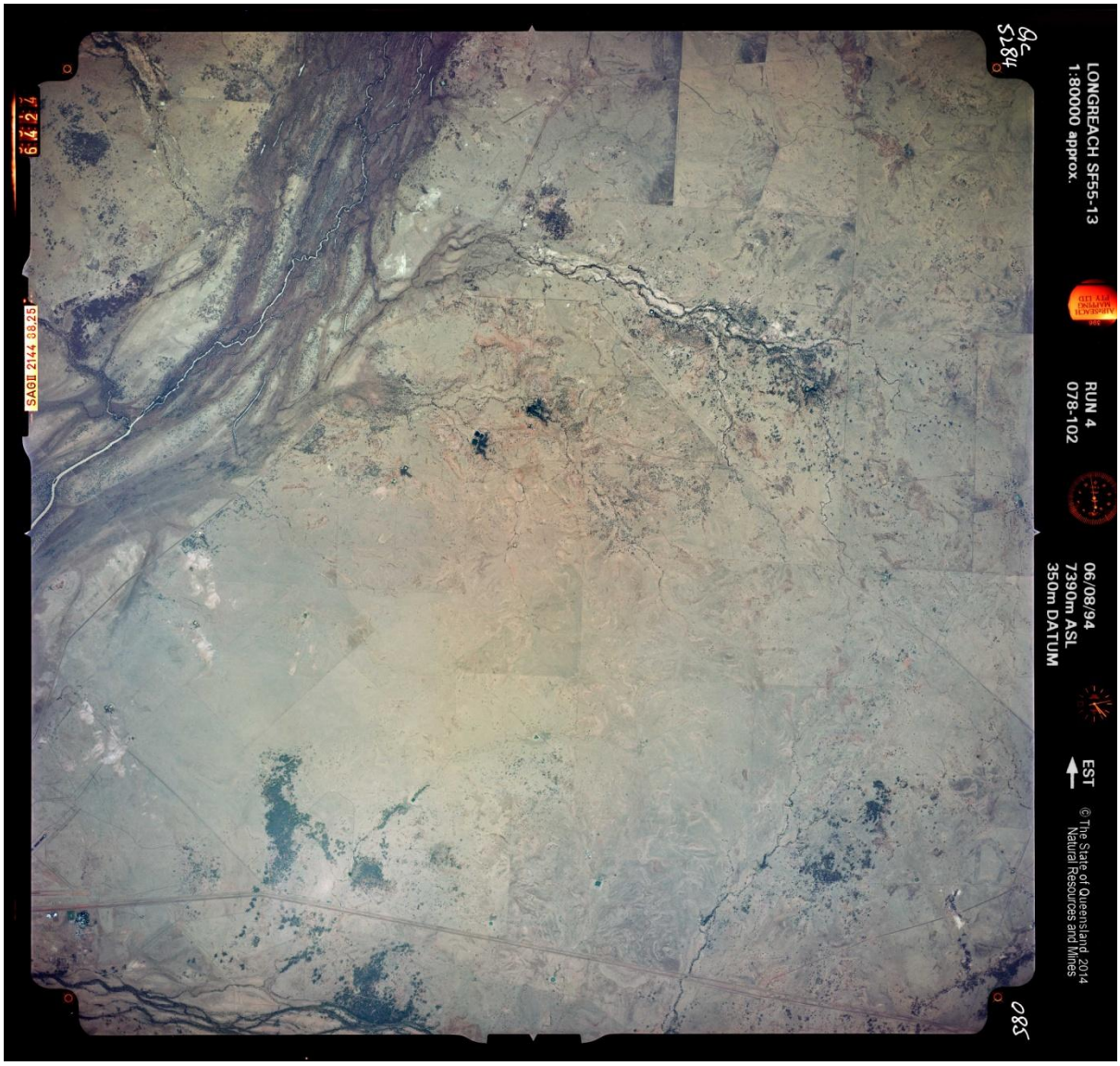
Appendix 3

Time-series aerial photographs, also attached electronically.



Aerial image of site area taken 25-02-1969 showing scattered vegetation

Aerial image of site area taken 11-05-1971 showing some vegetation thickening



Aerial image of site area taken 06-08-1994 showing continuing vegetation thickening