

19 September 2018

SWT18/00052 SF2018/130114 MM

The Manager
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Mandana Mazaheri

## SSD-9237 - PROPOSED SOLAR FARM - YARRABEE SOLAR PARK, BACK MORUNDAH ROAD, MORUNDAH.

I refer to your correspondence regarding the subject Application which was referred to the Roads and Maritime Services for assessment and comment.

Roads and Maritime Services has reviewed the Environmental Impact Statement (EIS) and Traffic Impact Assessment (TIA) dated August 2018 prepared by SLR Consulting Australia for the Yarrabee Solar project. From the information provided it is understood that the proposal is for the establishment and operation of a 900 MW solar photovoltaic (PV) plant and associated infrastructure on the subject site. The subject site has frontage and access to Back Morundah Road, which is classed as a local road, within a 100 km/h speed zone.

The subject site is located southwest of Narrandera to the south of the Sturt Highway and west of the Newell Highway. The site does not have frontage to the Sturt or Newell Highways but will rely on access via these roads for workers and delivery of components. As access into the development site is proposed from the local road network any access driveway should be consistent with the requirements of Council. Approximately 3 million panels are to be delivered to the site. The EIS and TIA refer to the use of B-Double heavy vehicles.

The EIS refers to an intended site access protocol to split light and heavy vehicles. The EIS indicates that the access plan is for heavy vehicles to enter and exit the site via the Western Access Route (via Main Canal Road) and for light vehicles and buses to access the site via the Eastern Access Route (via Back Morundah Road). Notwithstanding this EIS also refers to access for heavy vehicles via the intersection of the Sturt Highway with Back Morundah Road. Depending on the access route adopted the intersection of Main Canal Road or Back Morundah Road are proposed to be upgraded to provide an Auxiliary Left Turn-Short (AUL)(s) intersection treatment for left turn from the Sturt Highway in addition to the existing intersection treatment. The development is to be required to define the adopted access routes for light and heavy vehicles prior to the commencement of construction.

The TIA has been prepared on an assumption that the proposed development is to be constructed in 3 stages with each stage taking approximately 18 months, resulting in a construction period of 4.5 years. The

TIA anticipates that an average of 56 vehicle movements (28 in and 28 out) will be generated by the development with a peak traffic generation of up to 145 vehicles per day. Each construction phase will have a peak work force of up to 450 workers on site. Work force numbers will be phased over the 12 month construction period, representing an average over the construction period of between 150 and 200 workers. The traffic figures above include a 20 seater coaster at 14 movements per day for the transportation of part of the workforce however the submitted documentation fails to provide details for this service such as pick up and drop off points etc. This will need to be addressed ion the TMP\*.

The submitted documentation does not finalise the preferred route for the delivery of components to the development site or the source of other products, such as the aggregate, water and sand. The submitted reports acknowledge that this development will require the preparation of an appropriate Traffic Management Plans. As the proposal relies on access via the classified and local road network this plan should be finalised in consultation with the relevant road authorities, in this case being both the Roads and Maritime Services and Council.

The documentation does not finalise the preferred route for the delivery of components to the development site or the source of other products, such as the aggregate, water and sand, however it is noted that items such as solar panels and racking systems will be transported from either Sydney or Melbourne via the Newell and Sturt Highways. The submitted reports acknowledge that this development will require the preparation of appropriate Traffic Management Plans. As the proposal relies on access via the classified and local road network this plan should be finalised in consultation with the relevant road authorities, in this case being both the Roads and Maritime Services and Council.

Given the type and scale of the proposed development and its proximity to a public road it is considered appropriate that issues relating to potential for distraction of, and for glare impacts on, passing motorist be addressed. Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road, the proponent shall implement mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.

Roads and Maritime is mainly concerned with the impact of the development on the safety and efficiency of the road network. Roads and Maritime emphasises the need, particularly during the construction phase of this development, to minimise the impacts on the existing road network. As the subject site is to be accessed via intersections with the classified road network within a high speed zone the following conditions are proposed for road safety reasons.

Roads and Maritime Services has assessed the Development Application based on the documentation provided and would raise no objection to the development proposal subject to the Consent Authority ensuring that the development is undertaken in accordance with the information submitted as amended by the inclusion of the following as conditions of consent (if approved):-

- 1. Prior to the commencement of construction activities on the development site a Traffic Management Plan shall be prepared in consultation with the relevant road authorities (Council and Roads and Maritime Services) to outline measures to manage traffic related issues associated with the development, particularly during the construction and decommission processes. The appointed transport contractor shall be involved in the preparation of this plan. The plan shall address all light and heavy traffic generation to the development site and detail the potential impacts associated with the development, the mitigation measures to be implemented, and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to the following;
  - i) Finalise details of haulage, including transport routes, volumes, vehicle type and length, timing, and frequency,
  - ii) Finalise details of any required road-specific mitigation measures.
  - iii) Require that all vehicular access to the site be via the approved access route.

rms.nsw.gov.au 2

- iv) Details of measures to be employed to ensure safety of road users and minimise potential conflict with project generated traffic,
- v) Proposed hours for construction activities, as night time construction presents additional traffic related issues to be considered.
- vi) The management and coordination of the movement of vehicles for construction and worker related access to the site and to limit disruption to other motorists, emergency vehicles, school bus timetables and school zone operating times.
- vii) The management of construction staff access to the works site is to include strategies and measures employed to manage the risks of driver fatigue and driver behaviour.
- viii) Measures to address adverse climatic conditions that may affect road safety for vehicles used during construction, operation and decommissioning of the facility (e.g. fog, dust, wet weather).
- ix) procedures for informing the public where any road access will be restricted as a result of the project,
- x) any proposed precautionary measures such as signage to warn road users such as motorists about the construction activities for the project,
- xi) a Driver Code of Conduct to address such items as; appropriate driver behaviour including adherence to all traffic regulations and speed limits, safe overtaking and maintaining appropriate distances between vehicles, etc and appropriate penalties for infringements of the Code,
- xii) details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site.
- 2. Prior to the commencement of construction on-site, the Proponent must undertake all works to upgrade any road, its associated road reserve and any public infrastructure in that road reserve, to a standard suitable for use by heavy vehicles to meet any reasonable requirements that may be specified by the relevant roads authority. The design and specifications, and construction, of these works must be completed and certified by an appropriately qualified person to be to a standard to accommodate the traffic generating requirements of the project. On Classified Roads the geometric road design and pavement design must be to the satisfaction of the Roads and Maritime Services.
- 3. Subject to the adoption of the preferred route for access for heavy vehicles to the development site as a minimum the intersections of Main Canal Road or Reas Lane with the Sturt Highway shall be constructed and the roadside maintained to provide the following:
  - a) Be constructed and the roadside maintained so as to provide the Sight distance requirements for a reaction time of 2.5 seconds in either direction along the Sturt Highway in accordance with the Austroads Publications as amended by the supplements adopted by Roads and Maritime Services for the posted speed limit. Compliance with this requirement is to be certified by an appropriately qualified person prior to construction of the vehicular access.
  - b) Be constructed to provide an Auxiliary Left Turn Short (AUL)(s) intersection treatment on the Sturt Highway in accordance with the Austroads Guide to Road Design as amended by the supplements adopted by Roads and Maritime Services for the posted speed limit. The intersection is to be constructed to the standards required for an approved road train route. Details certifying the construction of the intersection to the required standard shall be provided to Roads and Maritime Services.
  - c) The construction of the local road intersection with the Sturt Highway to provide for 2 travel lanes and be sealed for at least 50 metres from its intersection with the Highway. The intersection shall be designed and constructed so that vehicles turning between the Sturt Highway and local road are not required to cross to the opposing travel lane in order to perform a turn manoeuvre. The intersection shall be line marked in accordance with Australian standards.
  - d) Be designed and constructed so as not to interfere with the capacity of the current roadside drainage network and to prevent water from proceeding onto, or ponding on, the carriageway of the Sturt Highway.
  - e) Provide a new polymer modified asphalt heavy duty pavement wearing surface across the intersection to accommodate the heavy vehicle turn paths to and from the Sturt Highway.

rms.nsw.gov.au 3

- 4. A management plan to provide measures to suppress dust generation from the development site and the transportation route shall be prepared and implemented to the satisfaction of Council and Roads and Maritime Services.
- 5. Any damage or disturbance to the road reserve of the Sturt Highway is to be restored to match surrounding landform in accordance with Council requirements.
- 6. As the Sturt Highway is part of the State Road network works on the carriageway of the highway will require the developer to enter into a Works Authorisation Deed (WAD) with Roads and Maritime Services before finalising the design or undertaking any construction work within or connecting to the road reserve. The Works Authorisation Deed documentation is to be submitted for each specific change to the state road network for assessment and approval by Roads and Maritime Services prior to commencement of any works within the road reserve. The applicant is to contact the Land Use Manager for the South West Region on Ph. 02 69236611 for further detail.
- 7. Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road, the proponent shall immediately implement glare mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.
- 8. Any works within the road reserve of a classified road requires approval under Section 138 of the Roads Act, 1993 from the road authority (Council) and concurrence from Roads and Maritime Services prior to commencement of any such works. The developer is responsible for all public utility adjustment/relocation works, necessitated by the development and as required by the various public utility authorities and/or their agents.
- 9. Works associated with the development shall be at no cost to Roads and Maritime Services.

Please be advised that under the provisions of the Environmental Planning & Assessment Act it is the responsibility of the Consent Authority to assess the environmental implications, and notify potentially affected persons, of any development including conditions.

Any enquiries regarding this correspondence may be referred to the Manager, Land Use for Roads and Maritime Services (South West Region), Maurice Morgan, phone (02) 6923 6611.

<u>Please forward a copy of the Notice of Determination for this Development Application to the Roads</u> and Maritime Services at the same time as advising the applicant.

Yours faithfully

Per: 
Jonathan Tasker
Acting Director
South West NSW

rms.nsw.gov.au 4