

7 August 2017

SWT16/00131
SF2016/217988
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The Manager
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Anthony Ko

SEAR SSD 7955 - PROPOSED HILLSTON SUN FARM, LOT 63 DP664722, LOTS 1, 2, & 3 DP 1126458, LOTS 22, 43, 61, 76, 77,85, 100 DP 755189, KIDMAN WAY, HILLSTON.

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) prepared by EMM Consulting for the Hillston Sun Farm project. From the information provided it is understood that the proposal is for the establishment and operation of an 85 MW solar photovoltaic (PV) plant and associated infrastructure on the subject site. The subject site has frontage to the Kidman Way, which is a classified road within a 100 km/h speed zone. The Kidman Way is an approved road train route.

The development site is located on the western side of the Kidman Way to the south of Hillston. The development will comprise of a series of photovoltaic panels (approximately 300,000) arranged in a series of rows positioned to maximise the use of the solar resource available at the site. The panels will be constructed in a single axis tracking configuration, which will allow the panels to rotate from east to west during the day tracking the sun's movement. The panels will be fixed to and supported by ground-mounted framing with the maximum height of the PV solar panel rows being approximately 2 metres.

It is understood that the anticipated construction period will be approximately 12 months from the commencement of site establishment works. Due to the characteristics of such a development the significant proportion of traffic generation (both light and heavy vehicles) occurs during the construction and decommissioning stages with the operational phase of the development will generate limited traffic. The EIS outlines transport issues and details Management and mitigation measures for traffic generation including works to proposed driveways to the Kidman Way.

Due to the location of a large vegetated area through the middle of the subject site and other site constraints the development proposes the construction of 2 access driveways to the Kidman Way for the establishment and operation of the solar farm. The submitted reports propose the construction of a Basic Right Turn (BAR) and Basic Left Turn (BAL) treatment at the intersection of the proposed access driveways with the Kidman Way. The subject site currently has several access points to the Kidman Way. As part of the proposal it is appropriate to require the removal of

all the existing access driveway with the exception of the 2 proposed to be retained as part of the development application.

The submitted documentation considers the heavy and light vehicle traffic generation for construction of the facility. Based on the information provided a number of unanswered variables exist, such as timing of construction, transportation routes, source of and transportation of materials such as sand and gravel, etc. that require clarification. It is considered appropriate that the assessment of the application condition the need for discussions with the relevant road authorities (in the case Roads and Maritime Services and Council) to formulate appropriate traffic management processes prior to the commencement of construction activity on the development site. The TIA identifies that a Construction Traffic Management Plan is to be developed with input from the relevant roads authorities for construction activity.

It is proposed that approximately 100 FTEs would be required on site during the peak construction period. The workforce is to be source from both the local and wider region. Given the potential distances to be travelled and the construction workforce numbers it would be appropriate to consider options to address driver fatigue for the construction period of the development.

The supporting documentation considered the potential for glint and glare to cause distraction to motorist on Kidman way and concluded that due to the anti reflective properties of the PV solar panels, they are not expected to cause a distraction to motorists on Kidman Way. Notwithstanding this the establishment of further vegetative screening particularly to the southern portion of the solar farm would minimise distraction of motorists on the Kidman Way.

Roads and Maritime is mainly concerned with the provision of safe access between the subject site and the public road network and 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 the intersection with the Kidman Way which is located within a 100 km/h 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. 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) Require that all vehicular access to the site be via the approved access route.
 - ii) Details of traffic routes to be used by heavy and light vehicles, and any associated impacts and any road-specific mitigation measures.
 - iii) Details of measures to be employed to ensure safety of road users and minimise potential conflict with project generated traffic,
 - iv) Proposed hours for construction activities, as night time construction presents additional traffic related issues to be considered.
 - v) 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,
 - vi) loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles,
 - vii) procedures for informing the public where any road access will be restricted or impaired as a result of the project,

- viii) any proposed precautionary measures such as signage to warn road users such as motorists about the construction activities for the project,
 - ix) 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,
 - x) details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site,
2. The Proponent must engage an appropriately qualified person to prepare a Road Dilapidation Report for all road routes to be used during the construction (and decommissioning) activities, in consultation with the relevant road authority (Roads and Maritime Services and Council). This report is to address all road related infrastructure. Reports must be prepared prior commencement of, and after completion of, construction (and decommissioning). Any damage resulting from the construction (or decommissioning) traffic, except that resulting from normal wear and tear, must be repaired at the Proponent's cost. The applicant is accountable for this process, rather than the proposed haulage contractor. Such work shall be undertaken at a time as agreed upon between the Proponent and relevant road authorities.
 3. 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 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 a standard to accommodate the traffic generated by the project. On Classified Roads the geometric road design and pavement design must be to the satisfaction of the Roads and Maritime Services.
 4. As a minimum each of the access driveways to the Kidman Way shall be constructed and maintained to the satisfaction of Roads and Maritime Services to provide the following:
 - i) the required Safe Intersection Sight Distance (SISD) with a reaction time of 2.5 seconds in either direction 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.
 - ii) a Basic Right Turn (BAR) and Basic Left Turn (BAL) treatment at its intersection with the Kidman Way 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 on the Kidman Way. The intersection is to be constructed to the standards required for an approved road train route.
 - iii) 2 way movement and be sealed for at least 50 metres from its intersection with the Kidman Way. The intersection shall be designed and constructed so that vehicles turning between the Kidman Way and the access road are not required to cross to the opposing travel lane in order to perform a turn manoeuvre.
 - iv) Not reduce the capacity of the existing roadside drainage network and to prevent water from proceeding onto, or ponding within, the carriageway of the Kidman Way. If a culvert is be installed and is to be located within the required clear zone of the Kidman Way for the posted speed limit it is to be constructed with a traversable type headwall.
 5. 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.
 6. No external lighting of any infrastructure associated with the project is permitted at night that may cause distraction to road users other than low intensity security lighting.

7. Glint and glare from the solar panels shall not cause a nuisance, distraction or hazard to the travelling public on the Kidman Way. In the event of glint or glare from the solar plant being evident, 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. A landscaped buffer (at least 5 metres in width planted with a variety of species endemic to the area and growing to a mature height ranging from 2 metres to at least 5 metres) shall be established and maintained within the subject property along the frontages of the site to the Kidman Way to a standard to minimise distraction of the travelling public.
8. The intersection of the access roadway and Kidman Way is to 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 within, the carriageway of Kidman Way. If a culvert is to be installed and is to be located within the required clear zone of Kidman Way for the posted speed zone it is to be constructed with a traversable type headwall.
9. Once the 2 access roadways are constructed all existing accesses to the development site from the Kidman Way shall be removed and any damage or disturbance to the road reserve of Kidman Way shall be restored to match surrounding landform in accordance with Council requirements.
10. The Kidman Way is part of the State Road network. For works on the State Road network the developer is required 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 can contact the Land Use Manager, South West Region on Ph. 02 6923 6611 for further detail.
11. Any works within the road reserve of the Kidman Way 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.
12. All works associated with the project shall be at no cost to the Roads and Maritime Services.

Under the provisions of the Environmental Planning & Assessment Act the Consent Authority is responsible to consider any likely impacts on the natural or built environment. Depending on the level of environmental assessment undertaken to date and nature of the works it may be necessary for the developer to undertake further environmental assessment for any ancillary road works required as a condition on the development.

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.

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

Yours faithfully



Per:
Jonathan Tasker
Acting Director
South West NSW