

25 September 2017

SWT16/00150
SF2016/273275
MM

The Manager
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001
Attention: Anthony Ko

SEAR FOR SSD 8113 - PROPOSED SOLAR FARM, SIDONIA ROAD & MID WESTERN HIGHWAY, HAY.

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 Hay Sun Farm. From review of the information provided it is understood that the development proposal represents the establishment of a Solar Farm with an intended capacity of up to 110 Megawatts on the subject site. The subject site is located approximately 6 km north east of Hay and has frontage to the Mid Western Highway (HW6), which is a classified road, and to Sidonia Road, which is classed as a local road. The Mid Western Highway is an approved road train route.

The development will comprise of a series of photovoltaic panels (approximately 430,000) 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.

From the information provided 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 Mid Western Highway and Sidonia Road.

The proposed layout of the Solar Farm is separated into 2 parts with the southern part located on the northern side of the Mid Western Highway and the northern part located to the east of Sidonia Road. Access is proposed to the development site from both the Mid Western Highway and Sidonia Road. Sidonia road intersects with the Cobb Highway to the north of Hay within a 50 km/h speed zone. The access driveway to the Mid Western Highway is located, within a 110 km/h speed zone.

Roads and Maritime Services

The proposal includes the construction of a Basic Right Turn (BAR) and Basic Left Turn (BAL) treatment at the intersection of the proposed access driveway to the Mid Western Highway and to Sidonia Road. As part of the proposal it is appropriate to require the removal of all the existing access driveways to the Mid Western Highway with the exception of the driveway proposed to be retained for access to the development.

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 submitted reports identifies that a Construction Traffic Management Plan is to be developed with input from the relevant roads authorities for construction activity. Due to the proposed additional traffic through the intersection of Sidonia Road and the Cobb Highway and its current configuration this management plan shall also address mitigation measures for that intersections that intersection.

The supporting documentation considered the potential for glint and glare to cause distraction to motorist on the Mid Western Highway 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 the Mid Western Highway. Notwithstanding this the establishment of further vegetative screening particularly to the southern portion of the solar farm would minimise distraction of motorists on the Mid Western Highway.

As Sidonia Road is unsealed for part of the access route it may be appropriate to the require the preparation of a Road Dilapidation Report for this road during the construction (and decommissioning) activities, in consultation with the relevant road authority (Council). This report should address all road related infrastructure and be prepared prior to commencement of, and after completion of, construction (and decommissioning) with any damage resulting from the construction (or decommissioning) traffic to be repaired at the Proponent's cost.

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 Mid Western Highway 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. 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.
3. As a minimum the access driveway to the Mid Western Highway shall be constructed and maintained to the satisfaction of Roads and Maritime Services to provide the following:
- i) the required Sight Distances 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 driveway.
 - ii) Construction of a Basic Right Turn (BAR) and Basic Left Turn (BAL) intersection treatment 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 Mid Western Highway. 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 20 metres from its intersection with the Mid Western Highway. The intersection shall be designed and constructed so that vehicles turning between the Mid Western Highway and the access road are not required to cross to the opposing travel lane in order to perform a turn manoeuvre.
 - iv) No reduction in the capacity of the existing roadside drainage network and prevent water from proceeding onto, or ponding within, the carriageway of the Mid Western Highway. If a culvert is to be installed and is to be located within the required clear zone of the Mid Western Highway for the posted speed limit it is to be constructed with a traversable type headwall.
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. 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.
6. Glint and glare from the solar panels shall not cause a nuisance, distraction or hazard to the travelling public on the Mid Western Highway. In the event of glint or glare from the solar farm 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.
7. 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 Mid Western Highway to a standard to minimise distraction of the travelling public.
8. All existing access driveways to the development site from the Mid Western Highway shall be removed, with the exception of the proposed access driveway, and any damage or disturbance to the road reserve of Mid Western Highway shall be restored to match surrounding landform in accordance with Council requirements.
9. The Mid Western Highway 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 the carriageway. 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.
10. Any works within the road reserve of the Mid Western Highway 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.
11. 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 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