

Energy Assessments  
Department of Planning & Environment  
Locked Bag 5022  
PARRAMATTA NSW 2124

Attention: Nestor Tsambos

**SSD-23700028 for Tallawang Solar Farm at Castlereagh Highway, Tallawang.  
(various land parcels)**

30 November 2022

**Dear Nestor,**

Thank you for referring the abovementioned application via the NSW Major Projects Planning Portal dated 27 October 2022 inviting further comment from Transport for NSW (TfNSW).

TfNSW's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

Castlereagh Highway (HW18) is a classified (State) road and an approved B-Double (26m) route. Mid-Western Regional Council is the roads authority for the Castlereagh Highway in this location and other public roads in the area, in accordance with Section 7 of the *Roads Act 1993* (Roads Act).

TfNSW understands the proposal seeks approval for construction, operation and decommissioning of a 500 MWh Solar Farm comprising a 200MW (400 MWh) battery energy storage system (BESS) and supporting ancillary infrastructure, to be constructed over approximately 34 months with a peak workforce of 580 workers.

In addition, the proposal seeks to include an upgrade to the existing intersection of the Castlereagh Highway & Jacksons Lane, consisting of a short Channelised Right turn (CHRs) and an Auxiliary Left turn (AUL), through which all project construction and operational traffic are proposed to access the project site.

TfNSW has reviewed the information provided, including a Traffic Impact Assessment (TIA) (dated July 2022) prepared by Samsa Consulting Pty Ltd, and the Environmental Impact Assessment (EIS) (dated August 2022), prepared by Umwelt (Australia) Pty Ltd, and is not satisfied that the proposed development has adequately addressed the anticipated construction traffic impacts. Accordingly, TfNSW does not support the application as proposed.

TfNSW recommends that the Consent Authority ensure that the following matters are addressed should any further submissions be made for comment:

**1. The proposed intersection upgrade and site access:**

- *Appendix19 - Concept drawings for Project access*, includes a BAR / BAL design in addition to a (short) CHR / AUL. It is unclear why the BAR / BAL has been provided, as it is not addressed in the TIA or the EIS. Notwithstanding this, TfNSW does not consider a CHR(s) is sufficient to provide the required storage length, to accommodate the proposed turning (construction) traffic volumes.
- *Appendix19* further shows a section of unsealed road between the site access and the Castlereagh Highway intersection proposed upgrades along Jacksons Lane. TfNSW requires Jackson Lane be sealed between the site access and intersection connection to the Castlereagh Highway (inclusive of all proposed works), to reduce the extent of wear and road damage.
- As the proposed works are within the classified (state) road reserve, TfNSW concurrence (with Council as the Roads Authority) will be required, under Section 138 of the Roads Act 1993. Further to this, the developer will be required to enter into a 'Works Authorisation Deed' (WAD) with TfNSW, or other suitable arrangement as agreed to by TfNSW.

### 2. Cumulative Impacts

- A number of large scale / renewable developments within proximity to the project site either recently approved or in planning stages, have been included within *Appendix 17 – Cumulative Impact Assessment*, a comparative assessment table, identifying where potential cumulative impacts may need to be considered.

*Table 4.7 - Potential Total Cumulative Traffic Generation* of the TIA, directly address (“worst case”) cumulative traffic impacts along the transport route/s (in particular) Golden Highway and North and South of the site on the Castlereagh Highway. Only a limited number of developments (Barneys Reef Wind, Stubbo Solar Farm and Dunedoo Solar Farm) have been included. TfNSW notes further consideration of the cumulative impacts needs to be given to other nearby projects such as Birriwa Solar Farm (EIS exhibition completed), Bellambi Heights Solar Farm & the Liverpool Ranges Wind Farm (approved), which may potentially have overlapping construction timeframes with Tallawang Solar Farm.

- Furthermore, the assessment undertaken primarily focuses on the cumulative impacts of traffic passing the key intersection and the Golden Highway transport route, however additional assessment is required to consider additional cumulative impacts, such as accommodation availability, infrastructure, services, worker transportation (shuttle buses).

### 3. OSOM & Largest Design Vehicles

- The project proposes a maximum of four (4) 16 axle OSOM vehicle movements to site over the 34 month construction period, with the potential for two (2) OSOM vehicles to arrive to site on the same day. TfNSW note, the swept paths of OSOM turn movements into Jacksons Lane from the Castlereagh Highway demonstrate the need to use the opposing travel lanes, which will need to be addressed further in the Traffic Management Plan (TMP), and a Traffic Guidance Scheme (TGS), detailing how the key movement will be managed under approved traffic control conditions. TfNSW require further details regarding the dimension and mass of the proposed loads.
- Section 4.2.1 in the TIA proposes B-Doubles (size unknown) as the largest design vehicle (excluding OSOM), furthermore it is stated that the use of “*Type A road trains or B-triples for transport*” is preferred and may be considered by the transport contractor. However, the proposed intersection upgrade is demonstrated to accommodate the swept paths of a B-Double (size unknown) only. Further clarification needs to be provided to clearly identify the vehicle type and dimensions of the largest design vehicle/s proposed by the development.

### 4. Rail Impacts

- Section 4.3.4 of the TIA refers to a (yet to be appointed) transport contractor undertaking (future) detailed assessment of the construction transport impacts to the Wallerawang – Gwabegar Railway line. TfNSW understand the proponent has commenced consultation with ARTC, the Rail Infrastructure Manager (RIM) for this location, to address rail impacts of the development. The Consent Authority should ensure ARTC has had the opportunity to review and provide comment on this application regarding any rail related matters to determine if any actions are required and if applicable, captured in any future consent conditions.

### 5. Traffic Management Plan (TMP)

- Further to the proposed inclusions in a TMP (Section 5.1 of the TIA), the TMP is to be prepared and implemented, in accordance with *Australian Standard 1742.3, Work Health and Safety Regulation 2017* and in consultation with relevant Councils and TfNSW. The TMP needs to identify strategies to manage the impacts of project related traffic. TfNSW further recommends that the TMP includes:
  - OSOM transportation details, including but not limited to, the requirements for permits, pilot vehicles, identification of route/s, pull-over bays, processes and approvals for contraflow / traffic control to manage restricted OSOM vehicle movements etc.
  - Traffic-related impacts of cumulative construction projects, not only at the site access intersection but also along the transport routes, in particular identifying relevant projects, key locations, pull-over bays.
  - A Driver Code of Conduct (DCoC) for haulage / transport operations which addresses, but not limited to:
    - A map of the primary transport route/s (Light Vehicle, Heavy Vehicle & OSOM) highlighting critical locations.
    - Identifying cumulative impacts relating to other large-scale projects and seasonal traffic (such as harvest), which may have concurrent construction timeframes, transport routes and / or collection locations. Including but not limited to relevant maps, inter-project consultation, relevant contact details, processes, policies and / or mitigation measures to manage any identified impacts.
    - Any proposed temporary measures such a Traffic Guidance Scheme (TGS)
    - Identification of local bus operations, including maps of routes/bus stops, and consultation with local bus operators.
    - Safety initiatives for haulage through residential areas and/or school zones.

## Transport for NSW

- An induction process for vehicle operators and regular toolbox meetings.
- A public complaint resolution and disciplinary procedure.
- A complaint resolution and disciplinary procedure.
- Procedures for transport in adverse weather conditions.
- Community consultation measures for peak haulage periods.
- Fatigue Management
- Appendices of documentation relevant to external contractors and employee responsibilities, where applicable to the TMP and DCoC inclusions.

### 6. Intersection & Site Access Upgrade.

As identified above in the preceding points, amendments and / or additional information is required to address the impacts of the development on the classified road network in particular the intersection of the Castlereagh Highway & Jacksons Lane. TfNSW highlights that in determining the application under Part 4 of the *Environmental Planning & Assessment Act, 1979* it is the consent authority's responsibility to consider the environmental impacts of any road works which are ancillary to the development, such as (inter alia) removal of trees, relocation of utilities, stormwater management, etc.

It is recommended that the Consent Authority request the applicant to provide an updated scaled strategic design of the proposed access addressing the below points for consideration, showing:

- Updated plans, cross sections & long sections, demonstrating the full scope of works required for any upgrade to the Castlereagh Highway and Jacksons Lane intersection. Including but not limited to provision of:
  - The intersection upgrade is to include standard (full sized) CHR & AUL turn treatments, designed and constructed in accordance with the relevant *Austrroads Guidelines*, *Australian Standards* and related *TfNSW Supplements*, demonstrating all relevant line-marking, with 3.5m lane widths, 1m wide centre line, 2m sealed shoulders (addition to turning lanes), 1m verge & 6:1 or flatter batters.
  - The extent of the proposed sealed road surface, to further include the full section of Jacksons Lane between the site access and the Castlereagh intersection connection (inclusive of the site access).
  - Tree removal, relocation of utilities, stormwater management, and signage etc.
- Safe Intersection Sight Distance (SISD) requirements in accordance *Austrroads Guide to Road Design Part 4A* with for a design speed of 110km/h are achieved in both directions at the intersection with Castlereagh Highway.
- Dedicated swept path diagrams, clearly identifying the size & type of the relevant design vehicles, the swept path of both the wheel base, any vehicle (load) overhang and stationary vehicle positioning demonstrating the largest design vehicle will be able to safely and efficiently arrive and depart the key intersection in both directions to access the site, travelling wholly within the required travel lanes and no additional works will be required to accommodate those vehicles. Over Sized Over Mass (OSOM) swept paths should include pull-over bays required to undertake the required traffic control processes to enable the required turn movements.
- Note: The design needs to comply with *TfNSW Strategic design requirements for DAs*. To assist you in preparing the designs, please refer to link below:  
<https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/documents/planning-principles/strategic-design-fact-sheet-02-2022.pdf>

If you wish to discuss this matter further, please contact the undersigned on ph. 0429 270 678 or via [development.west@transport.nsw.gov.au](mailto:development.west@transport.nsw.gov.au)

Yours faithfully,



**Katrina Wade**

A/ Team Leader Development Services (Renewables)  
West Region | Community and Place  
Regional and Outer Metropolitan