

21 August 2024

TfNSW reference: WST24/00204/002 | SF2024/098885)

Your reference: SSD-50587460 (PAE-73616208)

Department of Planning, Housing and Infrastructure  
Locked Bag 5022  
PARRAMATTA NSW 2124

**Attention: Samantha Oyston**

**TfNSW response to EIS - SSD-50587460 – Panorama Battery Energy Storage System - 800 Mid-Western Highway (HW6), Evans Plains**

Dear Samantha,

Transport for NSW (TfNSW) is responding to the EIS exhibition of SSD-50587460 - Panorama Battery Energy Storage System (BESS) referred on 19 July 2024.

TfNSW has reviewed the information submitted in the Environmental Impact Statement (EIS) and Traffic Impact Assessment (TIA) prepared by SLR Consulting. TfNSW requires additional information to assess the impacts on the State road network associated with this project. Details of **additional required information** are set out in **Attachment 1**.

On request, TfNSW can participate in a meeting with DPHI and the Applicant to further discuss the information in **Attachment 1**.

If you have any questions, please contact Ruvimbo Timba, Development Services Case Officer, on 1300 019 680 or email [development.renewables@transport.nsw.gov.au](mailto:development.renewables@transport.nsw.gov.au).

Yours faithfully



**Alexandra Power**

Team Leader Development Services - Renewables  
Community & Place  
Regional and Outer Metropolitan

---

OFFICIAL

A 51-55 Currajong Street, PARKES NSW 2870 | PO Box 334 PARKES NSW 2870 | DX20256

E [development.renewables@transport.nsw.gov.au](mailto:development.renewables@transport.nsw.gov.au) | ABN 18 804 239 602

P 1300 207 783

[transport.nsw.gov.au](http://transport.nsw.gov.au)

## Attachment 1

### TfNSW response to EIS - SSD-50587460 – Panorama Battery Energy Storage System - 800 Mid-Western Highway (HW6), Evans Plains

This attachment relates to TfNSW's response dated 21 August 2024 reference WST24/00204/002.

#### TfNSW Additional information required

TfNSW requires revision of the Traffic Impact Assessment (TIA) prepared by SLR Consulting to address the following:

##### Traffic Characteristics

1. The Safe Sight Intersection Distance (SSID) assessment for the proposed site access within the TIA identifies the sight distance achieved is 270 metres to the west, 30 metres short of the required 300 metres (100km+10km/hr for a 2.5 sec reaction time). The SSID assessment is to be revised to identify measures to achieve compliant SSID for the design speed.
2. A turn warrant assessment has not been provided for the intersection of Mitchell Highway and Evans Plains Road and the turn volumes provided for the proposed site access warrant a BAL/BAR yet only a BAL is proposed at this access intersection. Further, the figures provided in the turn warrant assessment in Appendix F warrant a higher turning treatment of a BAL/CHR(s). Noting light vehicles movements into the site (right turn only) trigger the higher turning treatment (CHR(s)), the development will need to either provide for the higher turn treatment or demonstrate that traffic volumes can be within the lower order treatment.

A revised turn warrant assessment is required for the site access and intersection of Mitchell Highway and Evans Plains Road. The turn warrant assessments are to be prepared in accordance with Part 6 *Austrroads Guide to Traffic Management* (AGTM) and must be assessed on the conservative traffic scenario, defined below:

- Peak project traffic volumes applied to background traffic during network peak hours.
  - Growth rates applied linearly to peak construction and background traffic volumes.
  - Cumulative traffic volumes applied to background and turning volumes (where applicable) of other Major Projects at EIS or approved stage that will be present in the background and turning volumes during pre-construction and construction background peak hours.
3. Updated traffic volumes are required that breakdown AM/PM peak vehicle distribution as well as ratio of light to heavy vehicles for both the site access and the intersection of Mitchell Highway and Evans Plains Road.

---

OFFICIAL

4. The development proposes a left in and left out for heavy vehicles and a right in and left out for light vehicles. Details of the measures to be employed to ensure compliance with these arrangements and safety on the public road network during construction, operation and decommissioning of the project is required. This includes enforcement to managing traffic volumes, driver behaviour and access paths to the site.

*Note: This excludes use of temporary traffic mitigation measures as identified in Austroads and TfNSW requirements. Temporary traffic mitigation measures are only permitted for activities occurring in the road reserve.*

5. The Environmental Impact Statement (EIS) mentions projects which may have overlapping schedules with the proposal, however, this information has not been included in the TIA. An assessment should be undertaken in the TIA to identify projects that will have overlapping construction periods and assess the cumulative traffic impacts with emphasis on the following:
  - Cumulative impacts from traffic generated from construction workforces in terms of the origin - destination routes, access and AM/PM peaks that overlap with other projects.
  - Cumulative impacts of heavy vehicle movements in terms of AM/PM peaks and routes that overlap with other projects.
  - Cumulative impacts and considerations in relation to the timing of movements of OSOMs where other projects will be utilising the same routes as proposed for this development.
  - Further consideration identifying accommodation (and transport) needs and facilities available within the local region to service the proposed project's staff, in addition to understanding cumulative impacts of concurrent accommodation (and transport) needs of staff from other projects.

#### **Oversize and Overmass (OSOM) vehicles**

6. OSOM vehicle for the transformer is classified as [high risk OSOM \(as defined on TfNSW website in this link\)](#) due to its proposed height exceeding 5.20m. A Concept Level Route Analysis is required with the following information:
  - The route from port or point of origin to site access and intersections required to facilitate high risk OSOM movements required for the project.
  - Details of all high risk OSOM loads and vehicle configurations for the project.
  - Location of pull-over bays / rest areas along the high risk OSOM routes (including GPS coordinates) and demonstration swept paths of high risk OSOMs can be physically accommodated (in terms of size, width and accessibility).
  - Road geometry details and alignment along identified transport route(s), including existing formations, crossings, bridges, intersection treatments and any identified hazards, including:
    - Bridge Assessments for any at risk bridges on the classified road network due to dimensions and weight of OSOM vehicles.
    - Swept path analysis demonstrating the largest design vehicle can enter and exit the site and simultaneously pass through intersections along the proposed transport route(s).
    - Design vehicle templates used in the swept path analysis software in order for TfNSW to review performance (e.g. Autodesk Vehicle Tracking or Transoft AutoTURN).

---

OFFICIAL

- Highlighting each at-risk road structures that haulage route(s) cross including bridges, traffic signals, signage, major culverts and minor culverts that may not meet desirable cover to cater for proposed axle loads.
- Identify and provide the following measurement parameters of OSOM components / materials to be moved:
  - Types and numbers of high risk OSOM vehicles.
  - Overall combination type, configuration, load and vehicle configuration.
  - Wheelbase dimensions.
  - Length, width, height and mass (GCM, tare, weight to axle and payload) for components and nominated vehicles.
  - Maximum trailer articulation angle(s).
  - Minimum overhang heights above the road surface.
  - Vehicle configurations.
  - Traffic mitigation measures or road works, modifications or road upgrades to facilitate the movement of high risk OSOM(s).
  - Potential high level mitigation measures or commitments to mitigate known traffic, safety and impacts to road users along the high risk OSOM route(s) (i.e school bus routes, mining shift changes, TSRs, harvest periods and events).
- Identify and assess implications of any road and rail projects that may be under construction during the indicative schedule for the OSOM movements.

*Note: NHVR permits do not cover road works or upgrades and environmental approvals required for proposed OSOM route(s). Any road works or upgrades works required along the OSOM route must be included within scope of works in the SSD to ensure constructability.*

*Note: Given high number of renewable energy and other large scale projects requiring haulage of OSOM components on the road network, restrictions and limitations on OSOM movements may be imposed. In this regard, it is recommended you engage early with TfNSW's Development Services Renewables team to discuss the requirements of the route assessment.*

7. A description of all non-high risk OSOM vehicles and materials to be transported is required. The shortest and least trafficked route is to be given priority for movement of materials and machinery to minimise risk and impact to other motorists, so far as is reasonably practicable.

## Strategic Designs

8. TfNSW is not able to assess the suitability of the proposed site access due to lack of suitable information. Any road upgrades along state classified roads are to be accompanied by Strategic Designs, prepared in accordance with TfNSW Strategic Design Requirements for DAs [Strategic design requirements for DAs - February 2022 \(nsw.gov.au\)](https://www.transport.nsw.gov.au/strategic-design-requirements-for-das)

In addition to these requirements the Strategic Designs will need to be accompanied by revised swept paths for the design vehicle and OSOM vehicle entering the site and accessing the intersection of Mitchell Highway and Evans Plains Road. The swept paths must demonstrate the design vehicle can turn concurrently in all directions without crossing into the incorrect lane,

---

OFFICIAL

tracking off the proposed/existing pavement and within the proposed/existing intersection treatment. Swept paths for OSOMs will need to demonstrate manoeuvrability within the existing or proposed pavement or, detail further pavement widening to accommodate movements.

*Note: Swept Path Analyses for the design vehicle are to be prepared in accordance with the Austroads Design Vehicles and Turning Path Templates Guide.*

9. Information is required to verify existing road drainage system (including longitudinal drainage) will accommodate post-development discharge. TfNSW requires post-development flows be managed using interface drainage and/or subsurface drainage to convey 1% Annual Exceedance Probability. The strategic concept designs are to be revised to address this point.
10. Updated plans are required to show subsurface utilities located to QL-B (AS5488-2022) or better.
11. Updated plans are required to clearly show site boundary and road reserve based on a survey.
12. There are concerns over current location of the site access due to the following constraints:
  - The curve in the road restricts SISD compliance, particularly towards the west.
  - The site access is located at the bottom of a vertical grade, where speed is likely to be higher, potentially causing issues for heavy vehicles trying to slow down to access the site.
  - The short distance between the site access and an existing bridge west of the site (approximately 40m).

If the above issues cannot be addressed an alternative location to the site will be required.

## **General comments**

- The use of Evans Plains Road will require consultation with the relevant Council due to being a local road. Please note the TIA states Evans Plains Road is a low-speed road, however as a rural road with no sign posted speed limits the default rural 100km/h speed limit applies.
13. It must be clear where changes have been made in the revised TIA, this can be in the form of a document with tracked changes or an excel sheet detailing where changes have been made.

---

OFFICIAL