

24 June 2025

TfNSW reference: REN25/00091/002|SF2025/063368

DPHI reference: SSD-50587460

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

Attention: Samantha Oyston

SSD-50587460 – Panorama BESS, TfNSW advice on Response to Submissions and Amendment Report

Transport for NSW (TfNSW) is responding to the Response to Submissions (RtS) and amendment report referred via the Major Projects Portal. TfNSW has reviewed the additional information prepared by the proponent, including the updated Traffic Impact Assessment prepared by NGH, revision 3.2, dated 17 April 2025, as key documents for preparing this response.

The application has not addressed all items from TfNSW previous request for information from the response to the Environmental Impact Statement (EIS) dated 21 August 2024. TfNSW have provided further advice to clarify the remaining outstanding additional information previously requested within TfNSW response to the EIS (refer to Attachment 1).

TfNSW key rationale for requesting the information is to demonstrate that the designs comply with Austroads, establish the scope of works and mitigate the impacts of the project on the state road network from a safety, efficiency and asset management perspective.

TfNSW can meet with DPHI and the applicant to discuss the information in Attachment 1. If you have any questions, please contact Glen Hanchard, Development Services Case Officer, at 1300 019 680 or email development.renewables@transport.nsw.gov.au.

Yours sincerely,



Alexandra Power
Development Services Team Leader- Renewables
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Attachment 1

SSD-50587460 – Panorama BESS, TfNSW Advice on Amendment Report, Bathurst Local Government Area

This attachment relates to TfNSW’s response dated 18 June 2025 reference REN25/00091/002.

Additional required information | TfNSW comments

TfNSW requests the additional information, as detailed below, to be included in a revised TIA and EIS (where applicable) and submitted for review. It must be clear where changes have been made in the revised TIA, which can be a document with tracked changes or a table provided in the updated TIA detailing where and what changes have been made.

Refer to the advisory notes at the end of this response for information to assist with the revisions to the TIA.

TfNSW Advisory Notes

1. Strategic concept designs are required for works along the state road network route. Please review the factsheet below and ensure designs comply with the factsheet below:
[Strategic-Design-requirements-for-DA-Factsheet.pdf](#)
2. The updated route study must include reference to a Route ID utilising the [NHVR](#) portal website.
3. The Australian Guide to Road Design Part 4A is available for review to assist with the intersection design at the below link.
<https://austroads.gov.au/publications/road-design/agrd04a>
4. The proponent will need a Road Occupancy License, and a Section 138 applied for through the council with concurrence from TfNSW, as core log samples with a maximum diameter of 100mm will be required. The supporting documentation will need to detail within a report the pavement layers and type.
5. Regarding considerations for left in, left out intersection restrictions please review Austroads Part 6 Guide to Traffic Management left in left out section and Figure 3.9.

Outstanding additional information previously requested by TfNSW in response to EIS and TfNSW response in relation the RTS and Amednment Report

No.	TfNSW comments from EIS requiring RFI	TfNSW response in relation to RTS and request for information for revised TIA
1	<p>Attachment 1 Traffic Characteristics The Safe Sight Intersection Distance (SISD) assessment for the proposed site access within the TIA identifies the sight</p>	<p>OPEN – the updated SISD assessment identifies that SISD is compliant. However, based on TfNSW review of the SISD it appears vegetation will limit safe sight of the intersection. The proponent should consider tree</p>

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	<p>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 SISD assessment is to be revised to identify measures to achieve compliant SISD for the design speed.</p>	<p>removal/trimming to ensure that there is a clear sight to the intersection. The vegetation removal and trimming is to be identified on the strategic concept designs as a mitigation measure to achieve compliant SISD.</p> <p>The location of the intersection will also need to be considered in conjunction with issues raised in section 8 of this letter.</p>
<p>2</p>	<p>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.</p> <p>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 Austroads Guide to Traffic Management (AGTM) and must be assessed on the conservative traffic scenario, defined below:</p>	<p>OPEN –</p> <p>Midwestern Highway / Project Access</p> <p>The proponent has proposed to prohibit the turning movements for the Mid-western Highway/Project access to a left in and left out turning movement for project traffic. The design submission however does not address how the right turn movements from the Mid-western Highway will be prohibited (refer to advisory notes for the left in left out section of Austroads) The provided left in and left out sign will not provide adequate control to prevent the right turns from Mid-western Highway into the property access. The strategic concept designs and TIA are to be revisited to identify mitigation measures that would control the left in left out and prohibit the right turn movements from the Mitchell Highway into the site.</p> <p>The current warrants have concluded a BAL and BAR would be required however the proponent has only provided a BAL. Sufficient justification hasn't been provided as to why only a BAL is to be included when the updated turn warrants in the latest TIA conclude that a BAL / BAR should be provided.</p>

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<ul style="list-style-type: none"> • 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. 	<p>Further, the BAL treatment is considered unsafe given the location of the proposed intersection access located at the start of an existing east bound overtaking lane diverge and considering the increase in traffic competing with the needs of turning and through traffic of the highway.</p> <p>The proponent must consider moving the intersection or consider a suitable auxiliary left turn lane treatment into the new access to reduce the relative speed differential between turning and through traffic. As raised above, a channelised right must also be considered.</p> <p><i>Mitchell Highway / Evans Plains Road</i></p> <p>This intersection already contains a CHR and AUL however there is a nexus to this intersection for the project traffic and still requires a full assessment that considers all items raised in point 2 of the previous letter. The intersection of <i>Evans Plains Road / Midwestern Highway</i> will also require full assessment to be provided in the updated TIA.</p> <p>Temporary nature of the works is not a sufficient reason for not including appropriate works to mitigate impacts. A construction timeframe of two years is a serious impact to road users and is required to be mitigated to maintain the safety and efficiency of the road network. On this point, the assessment of the use of accesses, intersections and routes is to cover the entirety of the life of the project (i.e construction, operation, upgrades and decommissioning).</p> <p>The proponent must ensure the updated turn warrants have considered the worst case scenario by applying the peak project traffic volumes to the background traffic (with growth</p>
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		<p>rate applied).</p> <p>Proponent has also not clearly distinguished the pre-construction minor works from the main works as requested by the previous letter. Please ensure specific delineation of what pre-construction minor works may be required and the traffic volumes and impacts of these.</p>
3	<p>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.</p>	<p>CLOSED - The proponent has completed an updated traffic survey for one full week on Mitchell Highway and Evans Plains Road. The peak hours identified were:</p> <p>Weekday Peaks - 8-9AM, 4-5PM Saturday Peaks - 12-1PM</p> <p>Table 10 provides a breakdown of light to heavy vehicles.</p>
4	<p>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.</p>	<p>OPEN – Current proposal retains BAL treatment left in, left out that TfNSW raised issues with in the previous letter. The Issue of safe right turn access has not been considered from a safe systems approach to road design. As per point 2 above, and issues raised in this document regarding the strategic concept design below. Further detail is needed on the intersection upgrades and as a result further detail will also be needed on the eventual mitigation measures also.</p>

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<p>5</p>	<p>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:</p> <ul style="list-style-type: none"> • 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. 	<p>CLOSED – Proponent has searched for other cumulative projects in the vicinity.</p>
	<ul style="list-style-type: none"> • 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. 	<p>CLOSED – The proponent will need include a schedule of movements within the TMP that considers cumulative timing of other projects from Port Kembla to the project site.</p>
	<ul style="list-style-type: none"> • 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. 	<p>OPEN – Section 7.0 notes that information regarding workforce accommodation is provided in the TIA that will inform the post consent CTMP however on review of Section 7 workforce accommodation does not appear to be specifically discussed. Please ensure all this detail is included in the turn warrant assessments.</p>

<p>6</p>	<p>Oversize and Overmass (OSOM) vehicles 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:</p> <ul style="list-style-type: none"> • The route from port or point of origin to site access and intersections required to facilitate high risk OSOM movements required for the project. 	<p>CLOSED – Route from Port Kembla has been provided.</p>
	<ul style="list-style-type: none"> • Details of all high risk OSOM loads and vehicle configurations for the project. 	<p>CLOSED – Proponent has identified the transformer is the only high risk OSOM component and will utilize a platform trailer with drop frame with:</p> <ul style="list-style-type: none"> Length – 40 m Width – 4.2 m Height – 4.9m Combination Mass - 208 tonnes
	<ul style="list-style-type: none"> • 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). 	<p>OPEN – Proponent has provided swept paths for pull over locations identified. The route includes a long section between Mundoonan and Cowra where a pull over location is not identified. Proponent is to provide clarity that the amount of pullover locations complies with NHVR fatigue requirements particularly along the long stretch along the Lachlan Valley Way.</p>
	<ul style="list-style-type: none"> • Road geometry details and alignment along identified transport route(s), including existing formations, crossings, bridges, intersection treatments and any identified hazards, including: <ul style="list-style-type: none"> o Bridge Assessments for any at risk bridges on the classified road network due to dimensions and weight of OSOM vehicles. o Swept path analysis demonstrating the largest design vehicle can enter and exit 	<p>OPEN – The proponent has not identified all road geometry considers along the route. In particular:</p> <p>Bridge assessments have not been provided. This combination will require bridge assessments for TfNSW and third part assets. See advisory note. Outcome of bridge assessments must be provided in the updated TIA.</p> <p>The swept path diagrams for the intersection are provided. The intersection strategic concept</p>

<p>the site and simultaneously pass through intersections along the proposed transport route(s).</p> <ul style="list-style-type: none"> o 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). o 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. 	<p>designs do not comply with the strategic design factsheet, in particular as dimensions are missing. Please review the advisory note to ensure this is provided.</p> <p>Whilst the template hasn't been provided, the design vehicle has been identified as a 19m B Double.</p> <p>Some at risk road structures have been identified along the haulage route however the proponent has not provided full mitigation measures or works required for these structures.</p>
<ul style="list-style-type: none"> • Identify and provide the following measurement parameters of OSOM components / materials to be moved: <ul style="list-style-type: none"> o Types and numbers of high risk OSOM vehicles. o Overall combination type, configuration, load and vehicle configuration. o Wheelbase dimensions. o Length, width, height and mass (GCM, tare, weight to axle and payload) for components and nominated vehicles. o Maximum trailer articulation angle(s). o Minimum overhang heights above the road surface. o Vehicle configurations. o Traffic mitigation measures or road works, modifications or road upgrades to facilitate the movement of high risk OSOM(s). o 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). 	<p>OPEN – Proponent has identified the transformer is the only high risk OSOM component and will utilize a platform trailer with drop frame with dimensions provided.</p> <p>A diagram is provided on page 10 of the OSOM Route study completed by ARES. The maximum trailer articulation angles are still required to be identified.</p> <p>The full extent of Impacts and works to state road assets have not been completely identified. The proponent is to investigate the structural integrity of the medians that will be traversed by the high-risk OSOM vehicle configuration (which will involve core log testing). TfNSW will need to review the outcome of this investigation. This includes:</p> <ul style="list-style-type: none"> -The turn from the M1 motorway onto Picton Road demonstrates the OSOM swept path tracking over the concrete median. Further investigations are to be completed at this location.

		<p>-Roundabout on Lachlan Valley Way is shown to be impacted by the vehicle swept path as well as the medians either side of the roundabout at the locations of the sign removal.</p> <p>-The corner of Mid Western Highway and Lachlan Valley requires further investigation. If the existing pavement is not suitable, the proponent will need to provide strategic designs of the median that identify the scope of work required to strengthen the pavement of the median(s). Strategic concept designs are required for any identified works, see advisory notes.</p> <p><i>Note: core log samples will need to be taken as part of this investigation, which will require a s138 Roads Act approval and ROL.</i></p>
	<ul style="list-style-type: none"> Identify and assess implications of any road and rail projects that may be under construction during the indicative schedule for the OSOM movements. <p>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.</p> <p>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</p>	<p>CLOSED – proponent has identified the Mt Ousley upgrade project. Proponent is to make contact with the team prior to movements occurring to ensure. This should be done prior to determination of the consent to ensure the proponent has considered all impacts.</p> <p>Regarding rail, The OSOM Route Study identifies two railway level crossings on CRN rail corridors along the proposed OSOM route:</p> <ul style="list-style-type: none"> Mid Western Hwy, Cowra (Blayney to Cowra non-operational CRN corridor) Adelaide St (Mid Western Hwy), Blayney (Taranga to Orange Junction Operational CRN corridor) <p>The proponent must note, if required to traverse UGLRL-managed assets or infrastructure, including level crossings for OSOM/heavy</p>

	<p>TfNSW’s Development Services Renewables team to discuss the requirements of the route assessment</p>	<p>vehicles, the applicant must lodge a request for a permit via the National Heavy Vehicle portal or send the request directly to UGLRL via “heavyvehicle@uglregionallinx.com.au”. The applicant must submit the request at least two (2) months before passage and include the specifications of their OSOM and heavy vehicles (axial loading and axial spacing as well as dimensions of the heavy vehicles) with the lodgment of the request.</p>
<p>7.</p>	<p>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.</p>	<p>CLOSED - The transformer is provided as the only OSOM load required in the ARES route study and also in Section 2.5.1. The proponent notes in Section 2.3.2 that no other OSOM are required and the largest vehicle used will be a standard 20m long articulated vehicle or 19m B Double.</p>
<p>8.</p>	<p>Strategic Designs</p> <p>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)</p> <p>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,</p>	<p>OPEN – The provided strategic designs are still deficient. The designs do not achieve the minimum requirements as per TfNSW strategic design fact sheet. Please ensure all plans are dimensioned. Further issues with strategic designs are detailed in the points following.</p>

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.	PARTIALLY CLOSED - The proponent has identified some drainage detail at the intersection including culvert locations through photographs. The proponent is required to provide typical cross section diagrams that demonstrate drainage detail including identification of batter slopes (these should not exceed 6:1 in steepness). Typical cross section drainage diagrams are required by TfNSW Strategic Concept Design factsheet. See advisory note.
10.	Updated plans are required to show subsurface utilities located to QL-B (AS5488-2022) or better.	CLOSED – Proponent is to ensure this is completed for detailed design.
11.	Updated plans are required to clearly show site boundary and road reserve based on a survey.	OPEN – The proponent has identified the property boundary of the Strategic Concept Designs. Works for the intersection are shown to be located within the road reserve and the subject property of the application however it is not clear this is based on a survey as required by point 11 of the previous letter. The strategic concept designs are to be updated to identify the cadastral boundaries of the road reserve and subject property.
12.	<p>There are concerns over current location of the site access due to the following constraints:</p> <ul style="list-style-type: none"> • 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). <p>If the above issues cannot be addressed</p>	<p>OPEN – The proponent has included further information regarding SISD, please see section discussing this component. The other items however are not wholly addressed.</p> <p>The TIA also does not address the site access location at the bottom of the vertical grade. The updated TIA includes a heading for a section 8.1.2 titled Bridge to the West of the Driveway however the section is empty. Proponent is to address the bridge as per item 12 of the previous letter.</p>

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	an alternative location to the site will be required.	The proponent is to consider another access if the limitations above are not addressed appropriately.
	<p>General comments</p> <ul style="list-style-type: none"> 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. 	CLOSED – to be addressed with Council.
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.	Track changes or table not provided.