

Tom Parry
Principal Consultant
ERM
Level 14, 207 Kent Street
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10 June 2026

Issued via email: **tom.parry@erm.com**

Dear Tom

Keri Keri Wind Farm – Response to Submissions (TfNSW)

Amber Organisation has been engaged to assist with response to agency advice received from Transport for NSW (dated 11 March 2026) related to Keri Keri Wind Farm. Table 1 provides a summary of the comments which have been addressed herein.

Reference is also made to the Amended Traffic Impact Assessment prepared for the project by The Transport Planning Partnership Pty Ltd (TTPP) dated 13 January 2026.

Table 1: TfNSW Response to Submissions

Ref.	TfNSW Comment	Response
1	Preconstruction Minor Works for workers accommodation camp traffic assessment requirements A complete assessment of the wind farms and workers' accommodation camp construction pre-construction minor works is required and is to include: a. Assessment of traffic volumes and identification of the types of vehicles that will be used during this period, including the largest design vehicle. b. Perform a swept path analysis for the largest heavy vehicle at the existing intersection, ensuring it can navigate within the current pavement. If the design vehicle cannot turn easily, implement necessary mitigation or temporary works. c. Assess existing Safe Intersection Sight Distance (SISD) and propose measures to achieve compliance. d. Identify AM/PM peak hour traffic volumes and proposed volumes during this time. Traffic volumes during the AM/PM peak hours are to be comparable to those of the existing land use. e. Identify measures to minimise project-related traffic during peak periods, like carpooling or shuttle buses. f. Outline methods to monitor and enforce traffic volumes during peak hours and other proposed mitigation measures. g. Provide a timeline and schedule for pre-construction minor works. h. Describe how to inform the community and stakeholders about increased traffic. i. Specify the hours for pre-construction minor works. j. Assess traffic associated with any temporary workforce accommodations during the pre-construction minor works period. k. Identify any necessary temporary widening or works for the design vehicle. <i>Note: No oversized overmass (OSOM) vehicles are permitted unless a swept-path analysis demonstrates compliance.</i> <i>Note: Temporary traffic controls are not allowed at intersections undergoing pre-construction minor works unless otherwise agreed with TfNSW.</i>	Traffic assessment of pre-construction minor works is provided in Section 1. The traffic generation during pre-construction minor works is largely consistent with the existing agricultural land use and would be within the daily variation of traffic along Sturt Highway and can therefore be suitably accommodated on the road network with no additional mitigation and management measures required. The Applicant confirms that pre-construction minor works will not include construction of the on-site workforce accommodation camp. Refer to Response 2 for further detail regarding the workforce accommodation camp.
2	Workforce Accommodation Camp (previously requested 20 June 2024) a. Identify timing and sequencing of workforce accommodation camp construction. b. Provide a turn warrant assessment for the worst-case scenario of workforce accommodation camp construction and post-completion (entire operation). c. Identify traffic volumes required for pre-construction work that will occur in parallel. d. Assess operational traffic volumes for servicing accommodation camps, vehicle types, and AM/PM peak hour changes for traffic generation at each intersection with the state road network along construction transport routes.	Assessment of the workforce accommodation camp is provided in Section 2.

Ref.	TfNSW Comment	Response
3a/b	Strategic Concept Design Amendment <u>a. Revision D civil Design, RJ Andrews SPA - Murray Valley Hwy onto Sturt Highway</u> - The existing fill embankment is high, with swept paths showing to track close to cadastre boundaries. Hardstand areas will need to be quantified to determine the scope and footprint of the fill required for the embankment and to confirm whether land acquisition is required. <u>b. Revision D Civil Design, RJ Andrews SPA - Murray Valley Hwy onto Sturt Highway</u> - There appear to be numerous underground utilities located on the south-east corner of the intersection. Further investigation required to determine the level of impact.	Refer comment 3i.
3c/d	<u>c. Revision D, Civil Design, RJ Andrews SPA - Sturt Highway at Balranald</u> - TfNSW preference is to maintain the current intersection configuration with medians and kerb and channel. Revised strategic concept designs required that references to the barrier kerb be removed and replaced with a roll-over kerb to facilitate movements onto the hardstand. <u>d. Drainage pits</u> will need to be assessed and made trafficable as required. To be annotated on the strategic concept designs.	Revised strategic concept design for this intersection is provided in Appendix A (Sheets 04-07). The design includes a dish crossing with trafficable grates to facilitate movements onto the hardstand area.
3e	<u>e. Revision D, Civil Design RJ Andrews SPA - Keri Keri Northern Site Entrance</u> - A swept path analysis has been provided. A strategic concept design of this intersection will be required prior to determination to confirm the impacts on the Sturt Highway.	An updated strategic concept design for this intersection is provided in Appendix B.
3f	<u>f. Revision D, Civil Design RJ Andrews SPA - Keri Keri Road intersection</u> - A hardstand strategic concept design will be required prior to determination to confirm the impacts on the Sturt Highway and how it will interact with Keri Keri Road. How will the hardstand be managed to reduce the likelihood that light vehicles will use the hardstand daily?	An updated strategic concept design for this intersection is provided in Appendix C. The OSOM hardstand area has been reduced significantly, and edge line marking would direct light vehicles to remain within the marked lane.
3g	<u>g. Revision D Civil Design RJ Andrews SPA - Sturt Highway at Euston</u> - TfNSW requires a strategic concept hardstand design prior to determination, that includes the kerb replacement, existing drainage and other infrastructure checks that will impact on the scope of the road upgrades/modifications.	Strategic concept design for this intersection is provided in Appendix A (Sheets 08-10). The design includes a dish crossing with trafficable grates to facilitate movements onto the hardstand area.
3h	<u>h. Revision D Civil Design RJ Andrews SPA - Parking Bay @86m near Balranald (Left turn into Duryea Street)</u> - The proposed parking bay is adjacent to the left turn lane into Duryea Street and private service centre. It is unsealed and poses safety concerns given the number of conflict points at this location. Is there another viable location with reduced conflict points that can be utilised/constructed?	This parking bay is no longer proposed to be utilised. An alternative location where OSOM vehicles would be able to pull over if required is available in Balranald along Sturt Highway (Market Street) adjacent to Balranald Lions Park, as outlined on page 49 of the RJA report (Revision 03).

Ref.	TfNSW Comment	Response
3i	<u>i. Revision D Civil Design - 21012CAD003 Figure 2</u> - The existing fill embankment is high, with swept paths showing to track close to the cadastre boundaries. Hardstand areas will need to be modelled as part of the strategic concept designs to be revised prior to determination, to quantify the fill embankment and confirm the exact scope of the road works, and to determine whether acquisitions are required. - There appear to be numerous underground utilities located on the southeast corner of the intersection. Further investigation required to determine the level of impact.	Revised strategic concept design for this intersection is provided in Appendix A (Sheets 01-03). The vehicle swept path and hardstand areas have been adjusted to provide additional clearance to the adjacent property boundaries for embankments/batters and drainage which would be determined during detailed design. Underground utilities would also be confirmed as part of the detailed design process. Furthermore, it is understood that EnergyCo is in the planning stages for the South-West REZ and high-level strategic designs have been prepared for this intersection to accommodate OSOM movements. TfNSW is progressing the intersection upgrade through concept and detailed design stage¹.
3j	<u>j. Revision D, Civil Design, 21012CAD003 Figure 5 –</u> - TfNSW preference is to maintain the current intersection configuration with medians and kerb and channel. Please replace the barrier kerb with a roll-over kerb to facilitate movements onto the hardstand. Drainage pits will need to be assessed and made trafficable as required. - Where the raised island is proposed to be removed, TfNSW's preference is to retain this island and make parts of or the whole length trafficable.	Revised strategic concept design for this intersection is provided in Appendix A (Sheets 04-07). The design includes a dished crossing with trafficable grates to facilitate movements onto the hardstand area, as well as strengthening of the impacted traffic island.
3k/l	<u>k. Revision D, Civil Design, 21012CAD003 Figure 9 - Keri Keri Road</u> - The intersection of Sturt Highway, Keri Keri Road and Loorica Road is a four-way intersection. This arrangement is undesirable, as road users may not perceive that they are approaching an intersection and may continue through, increasing the likelihood of a side-impact crash. Austroads Guide to Road Design provides guidance on modifying four-way intersections to a staggered T intersection to mitigate this risk. Due to this development, traffic on Keri Keri Road will increase significantly, increasing the likelihood of this crash type. <u>l. Revision D, Civil Design 21012CAD003 Figure 9 - Keri Keri Road</u> - The intersection angle is 70 degrees, which is allowable by the standards; however, it is the absolute minimum. Is there an opportunity to better align Keri Keri Road with the Sturt Highway?	Revised strategic concept design for this intersection is provided in Appendix C. The design includes realignment of the minor road approaches to form 90-degree staggered T-intersections with BAL and CHR(s) treatments for each approach.
3m/n	<u>m. Revision D, Civil Design, 21012CAD003 Figure 14 - Northern Access</u> – revise strategic concept designs to identify that the shoulder will be sealed along the length of the Sturt Highway to prevent edge breaking. <u>n. Revision D, Civil Design, 21012CAD003 Figure 14 - Northern Access</u> – All shoulders adjacent to the intersection are to be sealed.	Revised strategic concept design for this intersection is provided in Appendix B. The design includes sealing of all road shoulders.

¹ Source: [TfNSW website](#)

Ref.	TfNSW Comment	Response
3o	<u>o. Revision D, Civil Design, 21012CAD003 Figure 14 - Northern Access</u> - Pavement joint appears to be located under wheel path. Please revise the box-out location.	Revised strategic concept design for this intersection is provided in Appendix B. The pavement box out location has been modified to be along the lane line.
3p	<u>p. Revision D, Civil Design 21012CAD003 Figure 17 - Typical Cross Section</u> - Austroads states that 4:1 batters are traversable, but are not recoverable and are not to be included in the hazard free zone. TfNSW preference is to provide 6:1 batters that are consider both traversable and recoverable. Anything steeper than this will require safety barrier to protect the batter slope.	Revised indicative cross sections are provided in Appendix A (Sheet 03) which specify 6:1 batters.
4	Confirmation of completion of bridge assessments The revised Keri Keri Wind Farm Amended Traffic and Transport Impact Assessment, inclusive of the revised RJA Route Study (in appendix B), does not provide evidence or confirm that a bridge assessment of the TfNSW assets has been completed. The TIA is to be revised to include evidence of the bridge assessment being completed and to provide the report as an appendix to the TIA. If a bridge assessment has not commenced, then it is advised that the proponent complete the bridge assessments by contacting spu@transport.nsw.gov.au and providing the NHVR Route ID and the following information: • Overall dimensions (width, height and length) of the laden load (laden load is the vehicle combination and the load to be transported), • Total weight of the laden load, • GSM, • Payload, • deck height, • axle configuration, • axle spacing, including from the prime mover, and • axle masses (including split axle and group axle masses).	Structural assessment of the bridges and culverts along the state road network has been requested from TfNSW for the proposed OSOM routes and critical load combinations with the highest laden mass and axle loads. The response received from TfNSW (Appendix D) indicates that the Route 2A/2B vehicles (loads under 40m overall length travelling via Mildura) comply with the Heavy Load Platform network and do not require bridge assessments. The assessment report for Route 1A/1B for the transformer vehicle travelling via Euston has not been received as of the date of this letter (ref: PT3104). However, confirmation has been received that all other OSOM vehicle combinations comply with the Heavy Load Platform network and do not require bridge assessments as they are under 16 tonnes per axle (refer Appendix D).

Ref.	TfNSW Comment	Response
5	Additional assessment requirement not previously raised- travel time delay for narrow segments of the state road network and suitability of existing pull-over locations TfNSW advises that there are narrow paved segments of the state road network below 9.6m that will be traversed by the wider loads, which will impact the ability of oncoming and following vehicles (in particular, heavy vehicles) to safely pass the proposed widest loads for the project. TfNSW recommends, prior to determination, assessing the maximum travel time delay to oncoming and following vehicles based on the average speed of following and oncoming vehicles and the average travel speed of the widest loads proposed to travel along the narrow segments of the network below a paved surface width of 9.6m. TfNSW advises that the maximum delay that would be considered acceptable would be 10-15minutes and that suitable existing pull-over bays and rest areas will need to be identified along the state road network to achieve the maximum travel delay. As part of this assessment, swept-path analysis and diagrams showing that the widest loads can access and park wholly within the pull-over lane, clear of the through lanes, will be required. TfNSW notes that known narrow segments include segments from Buronga to the Keri Keri project site on the Sturt Highway. TfNSW notes that this advice has not been provided at EIS and therefore acknowledges that this may not be addressed prior to determination. However, it is strongly advised that travel time delays are considered, given the high proportion of heavy vehicles using this route and known crash occurrences on this network associated with overtaking.	Assessment provided in Section 3.

1. Pre-Construction Minor Works Assessment

The pre-construction phase will generally occur prior to the construction of any road upgrades including turn treatments at the site access locations. In the event of any overlap between on-site pre-construction minor works and construction of road upgrades, traffic management measures would be in place to ensure that vehicles are able to safely manoeuvre through the work zones and enter/exit the site where required. The traffic management measures would be confirmed through the future Traffic Management Plan to be prepared in consultation with the relevant authorities.

The Applicant has advised that pre-construction minor works would be expected to include various site establishment tasks including but not limited to field surveys and geotechnical investigations including drilling boreholes and digging test pits. These tasks are expected to occur over a period of approximately 14-18 weeks, with all works to occur during standard daytime construction hours as outlined below:

- 7am–6pm on weekdays
- 8am–1pm on Saturdays
- No work on Sundays or public holidays.

A vehicle trip is defined as a one-way movement of people or goods (i.e. a vehicle servicing the project would generate one inbound trip and another outbound trip for a total of two trips). Traffic generation during the pre-construction phase is generally expected to result in up to 20 vehicle trips per day consisting of 12 light vehicle trips and 8 heavy vehicle trips (two-way totals). Given the low level of traffic, no specific carpooling program or use of shuttle buses is proposed, although it is likely that some personnel may travel together.



Traffic data provided within the TIA indicates that Sturt Highway currently accommodates approximately 1,289 vehicles per day (two-way weekday total). Accordingly, the estimated traffic generation represents a negligible increase relative to existing traffic volumes on Sturt Highway.

Light vehicles would be associated with personnel including engineers, drillers and supervisors travelling to/from the site from local accommodation, while heavy vehicles would be utilised for the transport of materials and equipment including sampling gear, water, and drilling rigs. Light vehicle trips may coincide with the road network peak hours, while heavy vehicles would travel outside of the peak hours. No OSOM vehicles are expected to access the site during the pre-construction phase.

The majority of vehicles are expected to travel to/from the west including Balranald which is the closest town, however there may also be limited movements to/from the east in the event that materials and equipment are not readily available from the local area. The largest vehicle would consist of 12.5m long heavy rigid drilling rigs.

All light and heavy vehicles accessing the project area during the pre-construction phase would utilise existing farm tracks along Sturt Highway and Keri Keri Road which have catered for similar heavy vehicle configurations as part of the existing agricultural land use. All existing access gates are set back from the road to allow vehicles to stop clear of the carriageway if required to open or close the access gate. Accordingly, swept path assessment for these vehicles is not required as the pre-construction site access points are currently able to accommodate similar General Access Vehicles and have historically done so in line with the existing agricultural use.

The road network adjacent to the existing access gates provides relatively straight, flat sections of road which have been verified to provide compliant Safe Intersection Sight Distances (SISD) for approaching vehicles. Therefore, all vehicles are able to suitably access the site during pre-construction minor works. Detailed assessment of the SISD at the proposed construction site access locations is provided within Section 5.4 of the TIA.

Accordingly, the traffic generation during pre-construction minor works is largely consistent with the existing agricultural land use and would be within the daily variation of traffic along Sturt Highway and can therefore be suitably accommodated on the road network with no additional mitigation and management measures required.

2. Workforce Accommodation Camp Assessment

The Applicant has advised that the workforce accommodation camp would be constructed as part of construction phase site establishment activities (including the site compound and offices). The on-site camp would not be required during the pre-construction minor works phase as the small number of workers would be able to utilise local accommodation.

Vehicles associated with the construction and operation of the workforce accommodation camp are expected to include heavy vehicles for the transport of modular buildings, furniture and materials, as well as regular light vehicles and smaller trucks/vans associated with ongoing operational tasks including maintenance/repairs, cleaning, catering and waste management.

The Applicant has confirmed that all traffic associated with the construction and operation of the workforce accommodation camp is included within the broader project construction traffic volumes which were assessed as part of the TIA. Accordingly, the vehicle movements associated with the camp have been previously assessed as part of the project construction works and are able to be accommodated on the road network based on the TIA, noting that all traffic associated with the camp would be generated after the road upgrades (including site accesses) have been completed. The proposed road upgrades / turn treatments are therefore suitable to cater for the construction peak AM/PM traffic volumes including vehicles associated with the workforce accommodation camp.

The camp would be decommissioned once the construction phase is complete. The traffic volumes associated with the decommissioning of the camp would be significantly lower than the construction peak traffic volumes which were assessed as part of the TIA, and accordingly these vehicles can be readily accommodated on the road network.

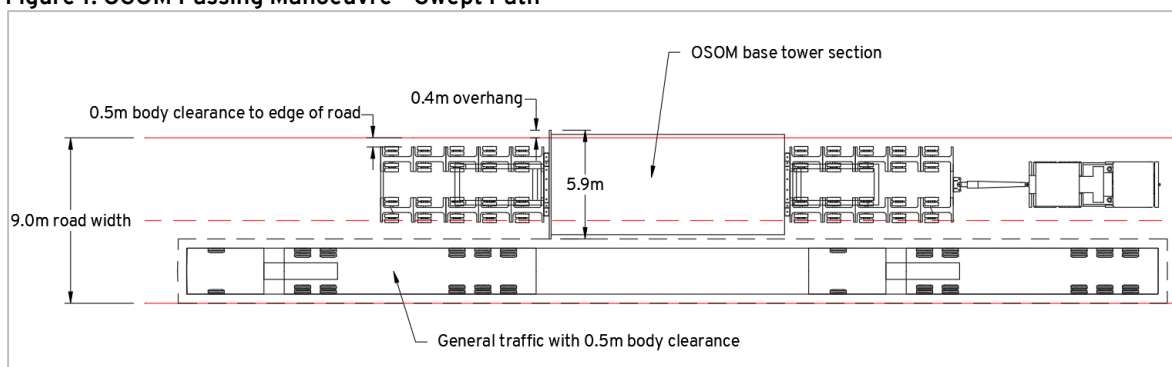
3. OSOM Road Width and Travel Time Delay Assessment

An assessment of the existing sealed road widths has been undertaken based on aerial imagery along the proposed transport routes from Euston (1A and 1B) which would accommodate all OSOM loads. Assessment of the transport routes from Mildura (2A and 2B) would be undertaken post-approval and prior to OSOM transport as part of the preparation of the project TMP. It is noted that all OSOM components could be transported along routes 1A and 1B which demonstrates that there is a viable route for all OSOM loads. Alternatively, the Applicant acknowledges that further assessments and/or approvals may be required for Routes 2A and 2B which are currently proposed only for smaller loads with a total transport length of under 40 metres.

The assessment is provided in Appendix E and indicates that the sealed road widths along the relevant sections of Murray Valley Highway and Sturt Highway are in the order of 12.5m and 9.0m, respectively. It is noted that the road width along Murray Valley Highway reduces to approximately 8.0m at three bridges over the Murray River.

It is considered that a minimum clear width of 3.5m would be suitable to allow for general traffic including a typical 2.5m wide heavy vehicle configuration (e.g. B-double or Road Train) to comfortably pass the OSOM loads with 500mm clearance on either side of the vehicle body. A swept path assessment is provided in Figure 1 for the passing manoeuvres reflecting the base tower section which forms the widest load width at 5.9m (maximum flange width).

Figure 1: OSOM Passing Manoeuvre - Swept Path



The assessment indicates a minimum road width of 9.0m is sufficient to allow for passing manoeuvres with the aforementioned 0.5m body clearances. The OSOM base tower section would overhang the edge of the road by up to 0.4m during passing manoeuvres which is acceptable as roadside assets are generally set back further from the road edge, and the base tower section would overhang any adjacent guardrails due to its circular shape. Reduced vehicle clearances could also be managed for slow speed passing manoeuvres where guardrails are situated immediately adjacent to the roadway, for example at the Sturt Highway bridge over the Murrumbidgee River.

It is noted that the road width of 8.0m across the bridges on Murray Valley Highway over the Murray River may require temporary closure of the bridges to oncoming traffic for transport of loads above 4.9m in width. The OSOM movements would occur outside of peak times to minimise any delays on the road network, which would be kept to under 5 minutes reflecting the short travel time required for the OSOM vehicles to traverse the bridges (under 1.5km total temporary road closure distance for all three bridges). The road closure would be facilitated by the NSW police escort vehicles and is a standard operating procedure along the OSOM route at all locations where the vehicle is required to temporarily encroach into adjacent lanes (e.g. at intersections).

Several overtaking locations have been identified which would allow the OSOM vehicle to slow or stop if required to facilitate overtaking manoeuvres. An overview of the identified passing locations is provided in Table 2.

Table 2: Proposed Overtaking Locations – Euston to Keri Keri Wind Farm

Chainage from NSW Border (km)	Location Description	Coordinates and Map Link
21.0	Meilman East Rest Area (Sturt Highway)	-34.529402, 142.940047
64.3	Prungle Mail Rest Area (Sturt Highway)	-34.621784, 143.398725
78.7	Lions Park, Balranald (Sturt Highway)	-34.633345, 143.555038
120.0	Willowvale Rest Area (Sturt Highway) <i>Route 1A only – northern site entrance</i>	-34.723313, 143.925747

The OSOM vehicles are expected to be able to utilise the existing sealed road surface at all locations while maintaining sufficient width for overtaking vehicles without any necessary road upgrades based on swept path assessment provided in the RJA report and in Appendix F. It is noted that the vehicles may travel through the Meilman East, Prungle Mail and Willowvale² rest areas if a suitable clear width is available at the time of transport, which is the preferred approach based on consultation with TfNSW. In the event that the rest areas are occupied or otherwise deemed unsuitable, there is sufficient road width to allow for overtaking vehicles along the Sturt Highway carriageway as shown in the swept path assessment.

The Applicant is committed to implementing suitable traffic management measures to facilitate safe overtaking manoeuvres which would include use of Variable Message Signs (VMS) along Sturt Highway to inform approaching motorists. Pilot vehicles would accompany each load providing additional support and advanced warning to ensure road user safety is maintained at all times. Specific details of the traffic management measures would be included within the TMP to be prepared post-approval and prior to OSOM transport.

Assessment of the expected travel time delays for general traffic has been carried out for the relevant section of the route with the detailed assessment provided in Appendix E and a summary in Table 3.

Table 3: Travel Time Delay Assessment Summary – Euston to Keri Keri Wind Farm

Segment Length (km)	Segment Description	Average Delay (mins)	
		Light Vehicles	Heavy Vehicles
21.0	NSW border to Meilman East Rest Area	4.8	4.0
43.3	Meilman East Rest Area to Prungle Mail Rest Area	7.6	6.3
14.4	Prungle Mail Rest Area to Lions Park, Balranald	3.3	2.8
41.3	Lions Park, Balranald to Willowvale Rest Area ³	6.7	5.3
35.8	Willowvale Rest Area to Keri Keri Wind Farm <i>Route 1A only – northern site entrance</i>	0.9	0.8

² Excluding the blade transport vehicle which would utilise the existing road width provided as part of the entry left turn lane.

³ Assessment based on worst-case transport scenario which is Route 1A continuing to the northern site entrance. Route 1B (western site entrance) would turn off the state road network onto Keri Keri Road at approximately 37.7km from Lions Park in Balranald.



The assessment indicates that general traffic along the route would experience average delays of up to 7.6 minutes which is understood to be acceptable in consultation with TfNSW. Accordingly, the proposed overtaking locations are considered to be appropriate with detailed traffic management measures to be included within the future TMP.

It is noted that use of either the Lions Park or Willowvale Rest Area pullover locations may not be required to achieve average travel time delays of 10 minutes or less for general traffic. These locations could therefore be omitted from the TMP if they are deemed unsuitable for any reason by TfNSW/Council.

If you have any questions, please feel free to contact the undersigned.

Yours sincerely
Amber Organisation

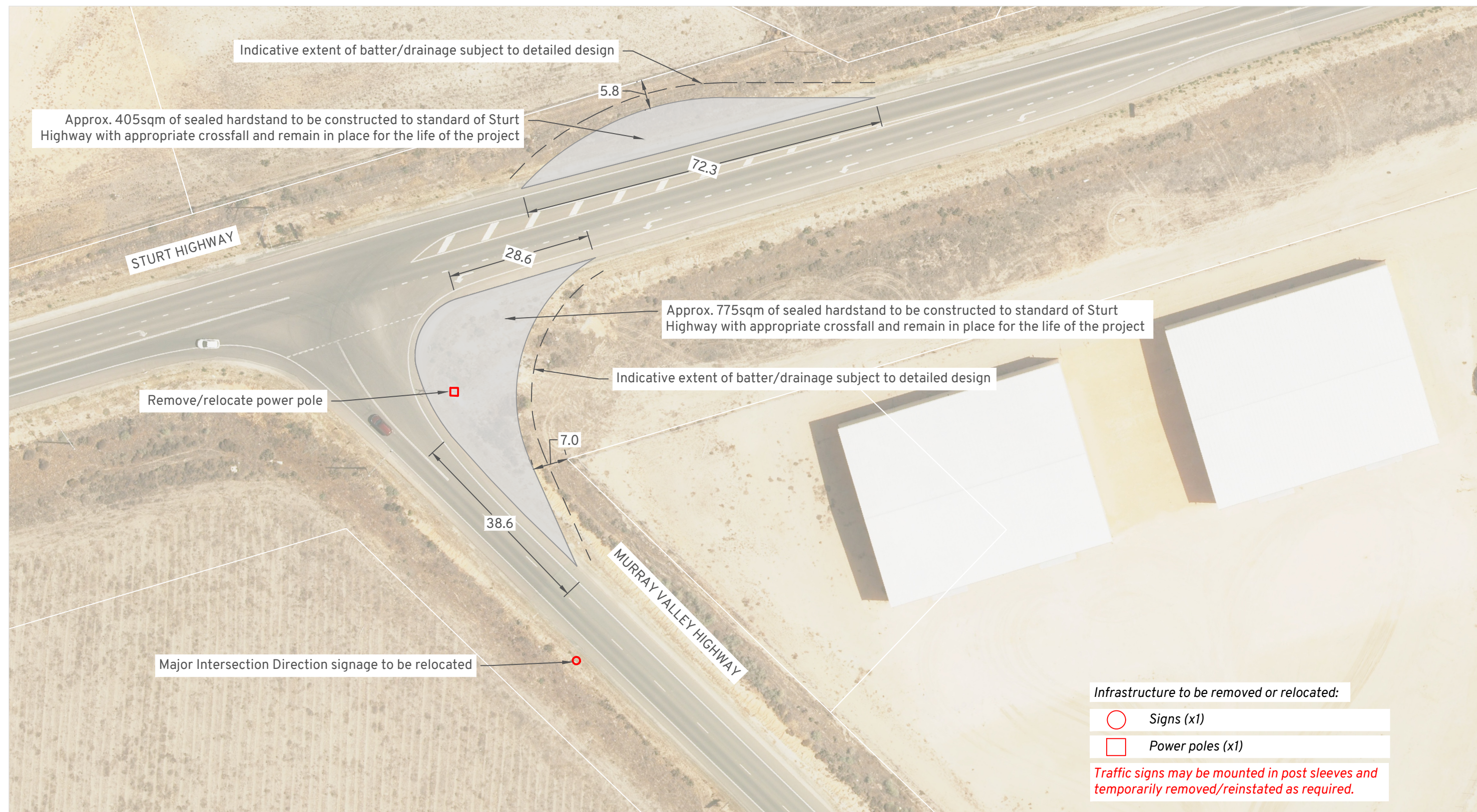
A handwritten signature in black ink, appearing to read 'Oliver Mihaila'.

Oliver Mihaila
Associate



Appendix A

Updated Strategic Concept Designs – OSOM Route Upgrades



Notes:

- Property boundaries shown indicatively based on mapping data.
- Vehicle swept paths provided within RJA report and on Sheet 02.
- Hardstand areas are to remain for the life of the project to allow for future replacement of turbine components.
- Drainage design to be undertaken as part of detailed design process. Refer Sheet 03 for indicative cross section.
- Pavement design to be undertaken in detailed design as per Austroads Guide to Pavement Technology Part 2: Pavement Structural Design to accommodate all vehicle types and traffic volumes.
- Underground services to be assessed as part of detailed design.

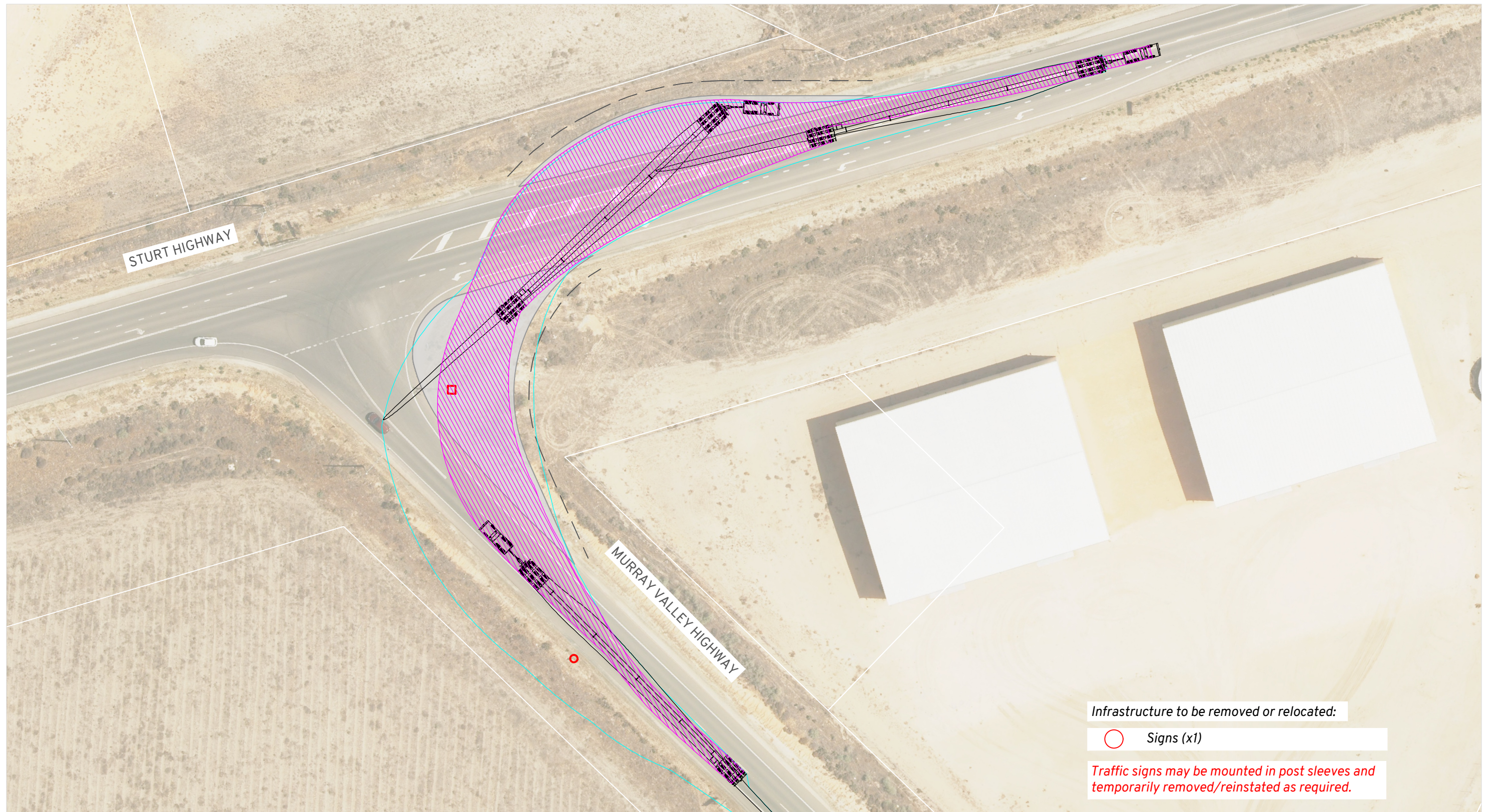
Site Location: Sturt Highway / Murray Valley Highway, Euston NSW



Keri Keri Wind Farm - OSOM Routes 1A/1B
 KM Index 2.7: Sturt Highway / Murray Valley Highway, Euston
 Strategic Concept Design

DRAWN: OM
 DATE: 20/05/2026
 DWG NO: 1652 RA01C
 SCALE at A3: 1:750

Amber 01



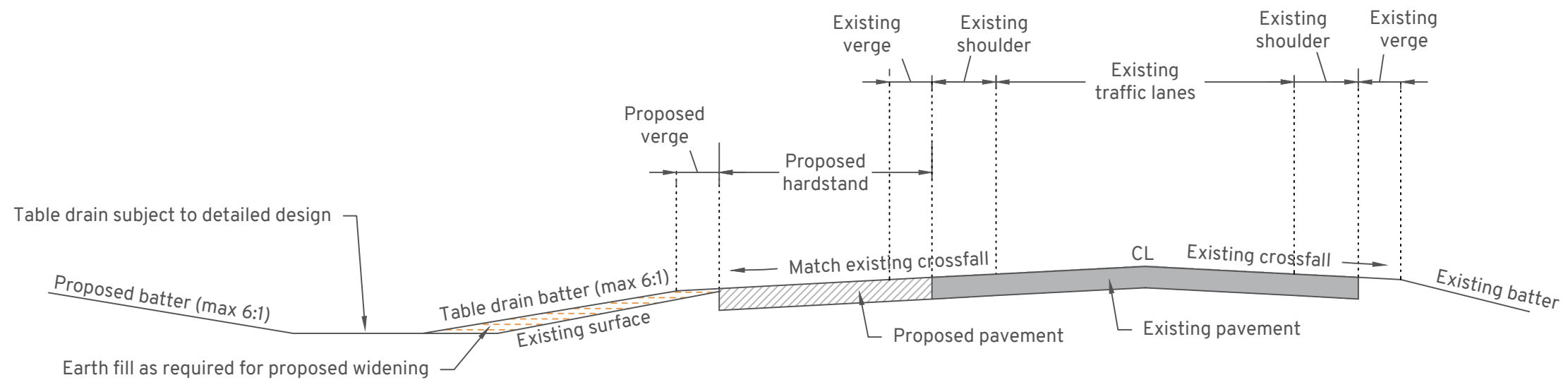
Notes:

- Refer to RJA report for vehicle specifications.

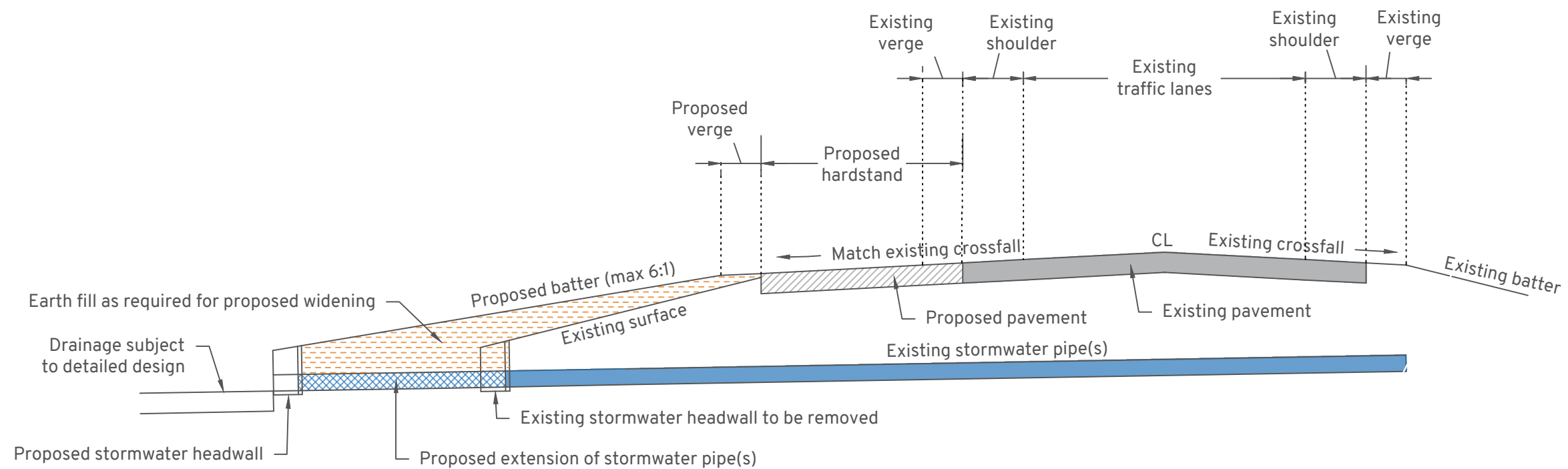


Keri Keri Wind Farm - OSOM Routes 1A/1B
KM Index 2.7: Sturt Highway / Murray Valley Highway, Euston
Blade Swept Path Assessment prepared by RJA

DRAWN: OM
DATE: 20/05/2026
DWG NO: 1652 RA01C
SCALE at A3: 1:750



Typical Cross Section



Typical Cross Section - Culvert Extension

Notes:

- Drainage design to be undertaken as part of detailed design process.

Keri Keri Wind Farm - OSOM Routes 1A/1B
 KM Index 2.7: Sturt Highway / Murray Valley Highway, Euston
 Typical Cross Sections

DRAWN: OM
 DATE: 20/05/2026
 DWG NO: 1652 RA01C
 SCALE at A3: NTS



Notes:

- Property boundaries shown indicatively based on mapping data.
- Vehicle swept paths provided within RJA report and on Sheets 05, 06.
- Traffic signs may be mounted in post sleeves and temporarily removed/reinstated as required.
- Street lighting to be relocated in accordance with AS/NZS 1158 and to satisfaction of road authority.
- Road upgrades to remain for the life of the project to allow for future replacement of turbine components.
- Drainage design to be undertaken as part of detailed design process. Refer Sheet 07 for indicative cross section.
- Pavement design to be undertaken in detailed design as per Austroads Guide to Pavement Technology Part 2: Pavement Structural Design to accommodate all vehicle types and traffic volumes.

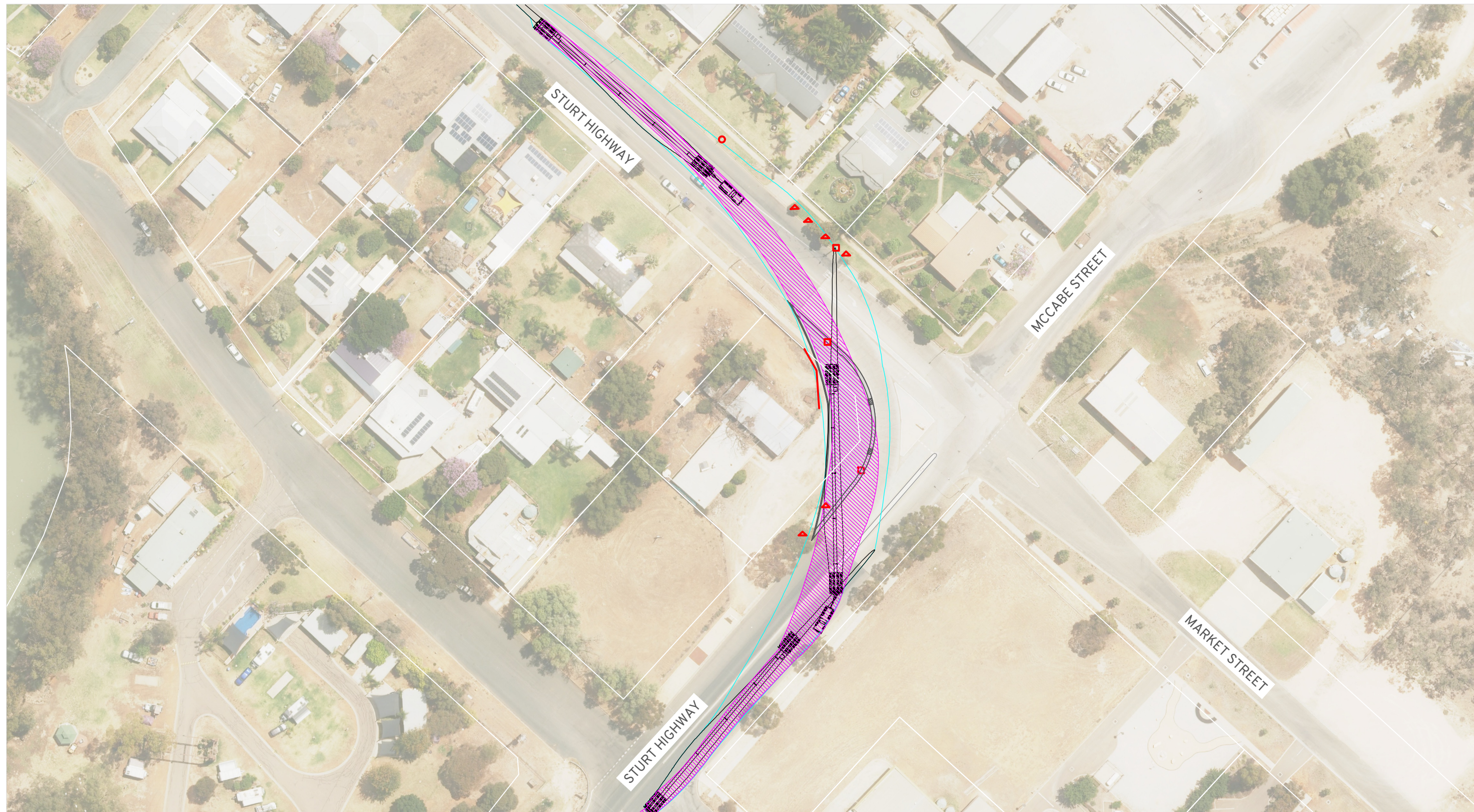
Site Location: Sturt Highway / Market Street / McCabe Street, Balranald NSW



Keri Keri Wind Farm - OSOM Routes 1A/1B/2A/2B
KM Index 83.0/158.0: Sturt Highway / Market Street, Balranald
Strategic Concept Design

DRAWN: OM
 DATE: 20/05/2026
 DWG NO: 1652 RA01C
 SCALE at A3: 1:1000

Amber 04



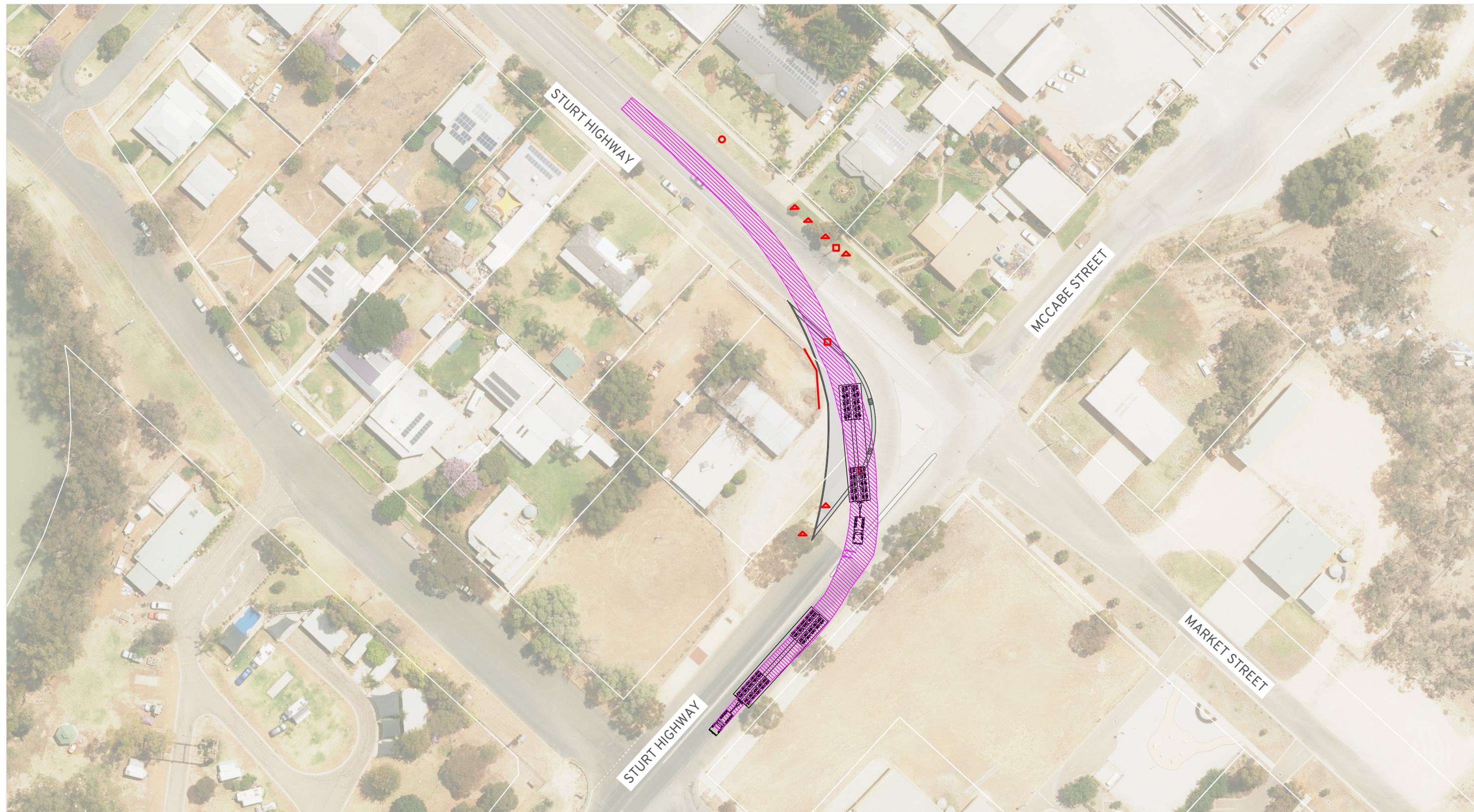
Notes:

- Refer to RJA report for vehicle specifications.



Keri Keri Wind Farm - OSOM Routes 1A/1B
KM Index 83.0: Sturt Highway / Market Street, Balranald
Blade Swept Path Assessment prepared by RJA

DRAWN: OM
DATE: 20/05/2026
DWG NO: 1652 RA01C
SCALE at A3: 1:1000



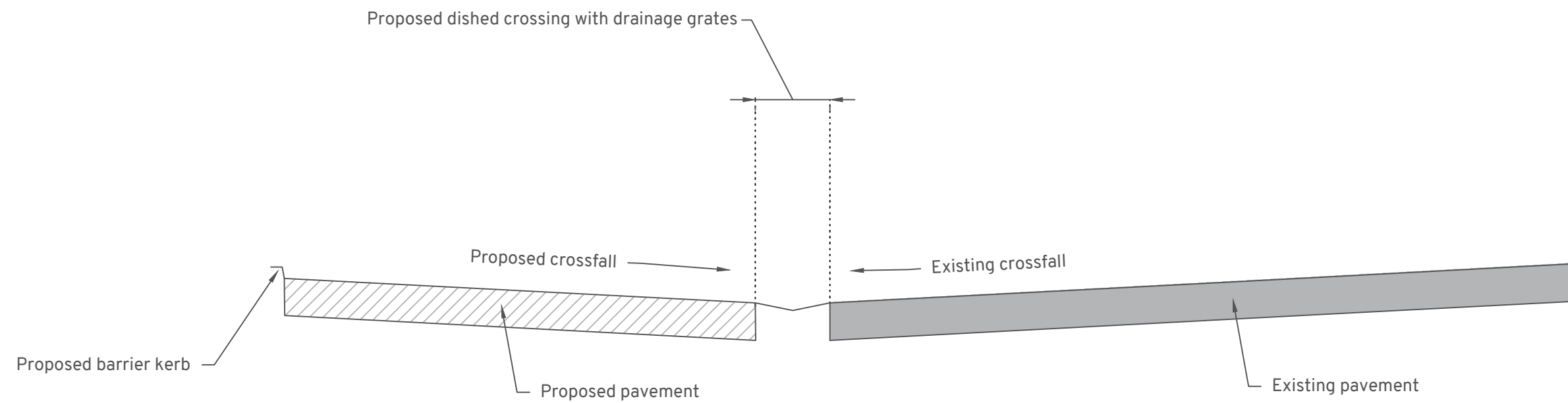
Notes:

- Refer to RJA report for vehicle specifications.



Keri Keri Wind Farm - OSOM Routes 2A/2B
 KM Index 158.0: Sturt Highway / Market Street, Balranald
 Tower Swept Path Assessment prepared by RJA

DRAWN: OM
 DATE: 20/05/2026
 DWG NO: 1652 RA01C
 SCALE at A3: 1:1000



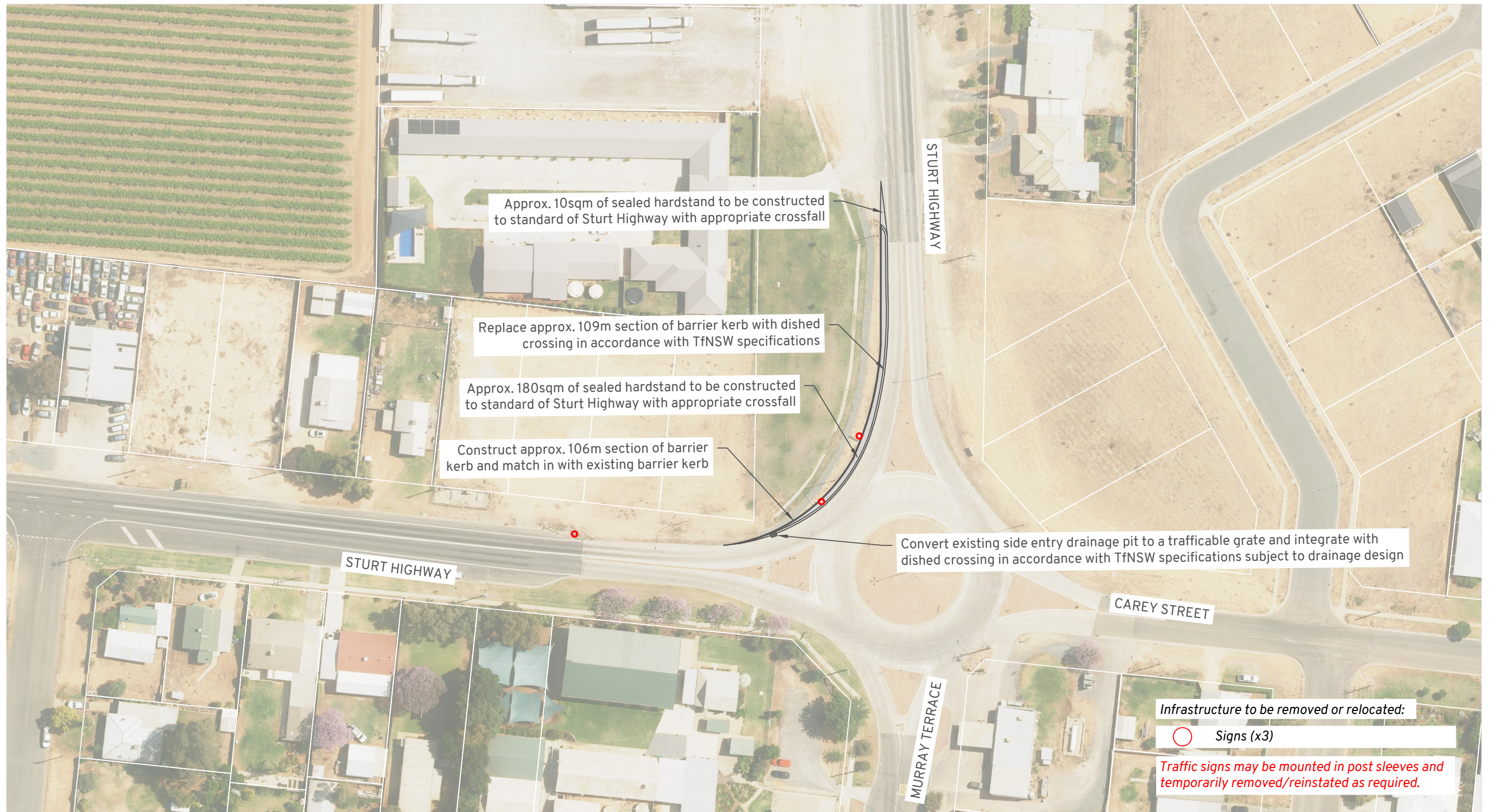
Typical Cross Section - Road Widening (Balranald)

Notes:

- Drainage design to be undertaken as part of detailed design process.

Keri Keri Wind Farm - OSOM Routes 1A/1B/2A/2B
 KM Index 83.0/158.0: Sturt Highway / Market Street, Balranald
 Typical Cross Sections

DRAWN: OM
 DATE: 20/05/2026
 DWG NO: 1652 RA01C
 SCALE at A3: NTS



Notes:

- Property boundaries shown indicatively based on mapping data.
- Vehicle swept paths provided in RJA Report and on Sheet 09.
- Road upgrades to remain for the life of the project to allow for future replacement of turbine components.
- Drainage design to be undertaken as part of detailed design process. Refer Sheet 10 for indicative cross section.
- Pavement design to be undertaken in detailed design as per Austroads Guide to Pavement Technology Part 2: Pavement Structural Design to accommodate all vehicle types and traffic volumes.

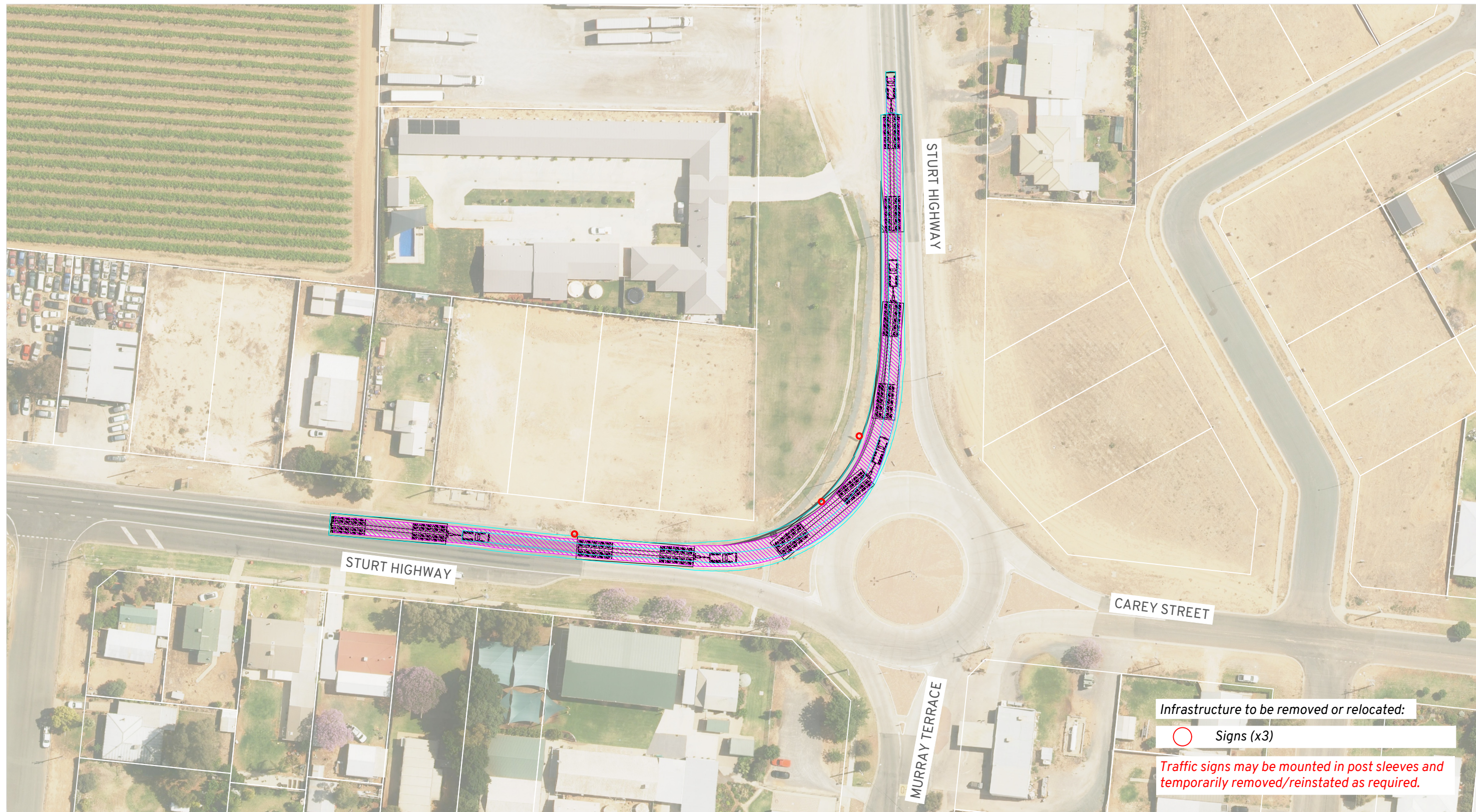
Site Location: Sturt Highway / Carey Street / Murray Terrace, Euston NSW



Keri Keri Wind Farm - OSOM Routes 2A/2B
KM Index 77.0: Sturt Highway / Murray Terrace, Euston
Strategic Concept Design

DRAWN: OM
DATE: 20/05/2026
DWG NO: 1652 RA01C
SCALE at A3: 1:1000

Amber 08



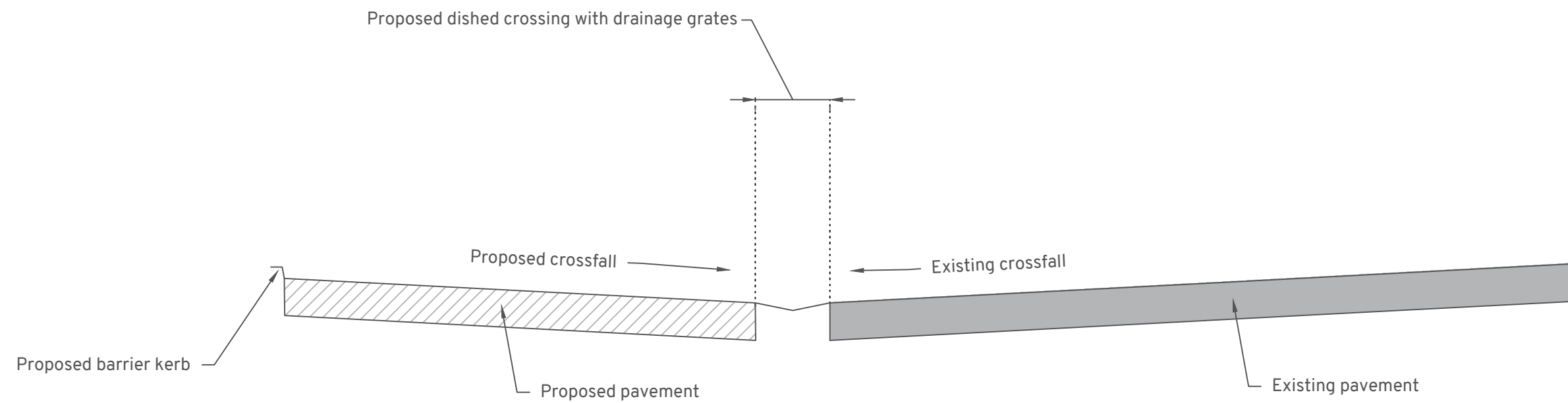
Notes:

- Refer to RJA report for vehicle specifications.



Keri Keri Wind Farm - OSOM Routes 2A/2B
 KM Index 77.0: Sturt Highway / Murray Terrace, Euston
 Tower Swept Path Assessment prepared by RJA

DRAWN: OM
 DATE: 20/05/2026
 DWG NO: 1652 RA01C
 SCALE at A3: 1:1000



Typical Cross Section - Road Widening (Euston)

Notes:

- Drainage design to be undertaken as part of detailed design process.

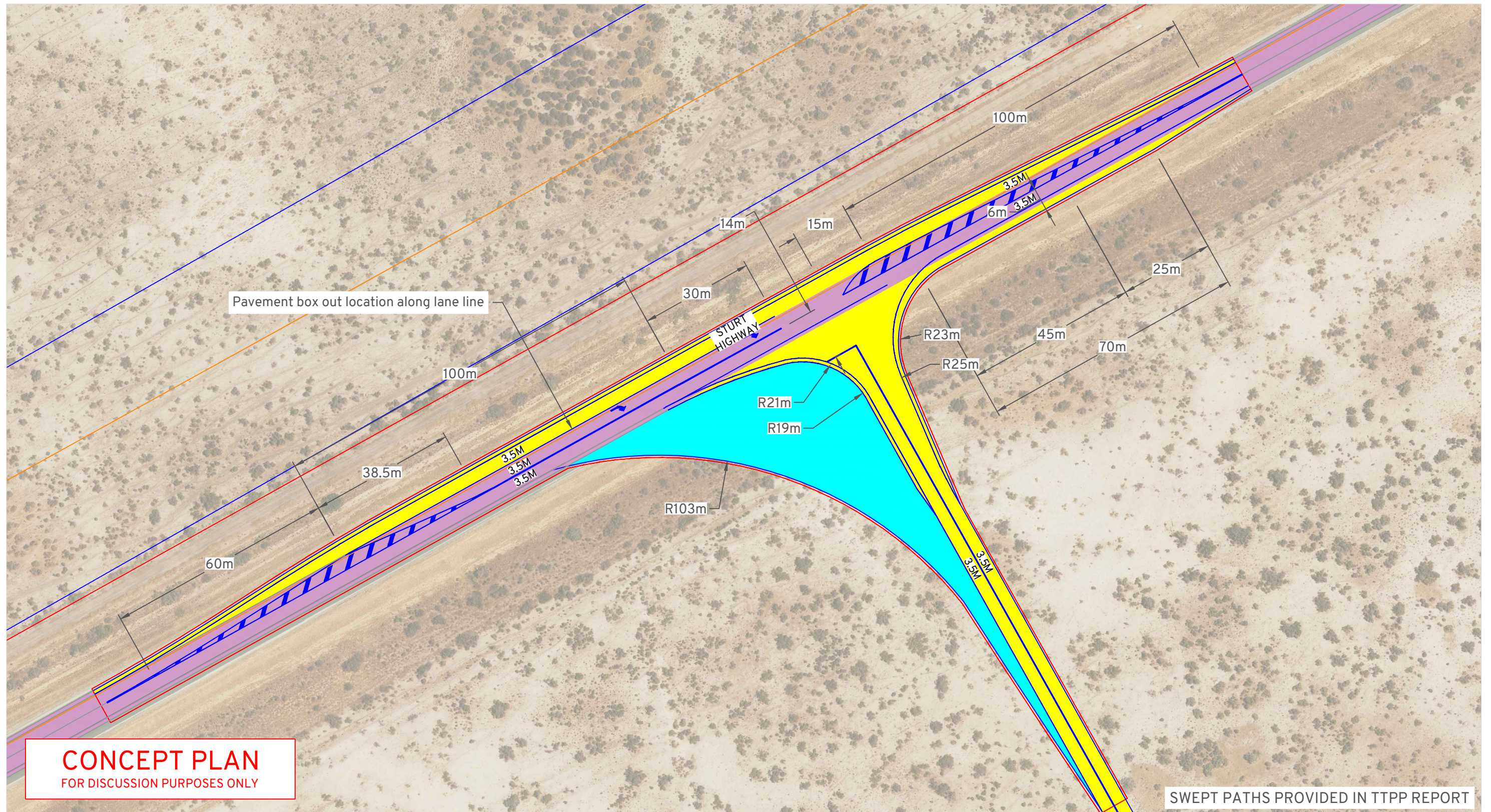
Keri Keri Wind Farm - OSOM Routes 2A/2B
 KM Index 77.0: Sturt Highway / Murray Terrace, Euston
 Typical Cross Sections

DRAWN: OM
 DATE: 20/05/2026
 DWG NO: 1652 RA01C
 SCALE at A3: NTS

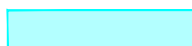


Appendix B

Updated Strategic Concept Design –
Northern Site Entrance (Sturt Highway)



Legend

	EXISTING HARDSTAND AREA (PAVEMENT)		PROPERTY BOUNDARY
	HARDSTAND AREA (PAVEMENT)		EXTENT OF WORKS
	HARDSTAND AREA (GRAVEL)		600 MM DRAINAGE CLEARANCE
			NEW KERBLINE & LINEMARKING
			EXISTING KERBLINE & LINEMARKING



Northern Site Access / Sturt Highway
Concept Design (Amended TTPP DWG 21012CAD003 Figure 13)
Keri Keri Wind Farm

DRAWN: LG
DATE: 21/05/2026
DWG NO: 1652 SD01C V2
SCALE at A3: 1:1000

Amber 01



Appendix C

Updated Strategic Concept Design –
Sturt Highway / Keri Keri Road



The following design details have been taken from Austroads Guide to Road Design Part 4A:

Short Channelised Right-turn Treatment [CHR(s)] Section 7.2.3.

1. Design speed of 120km/h.
2. Lane widths: 3.5m Sturt Highway through lanes (existing), 3.5m turn lane.
3. Minimum lateral movement (A) is 100m.
4. Desirable radius of 600m has been used.
5. Taper length used is 38.5m.
6. Storage length is 30m for one B-Double Vehicle.

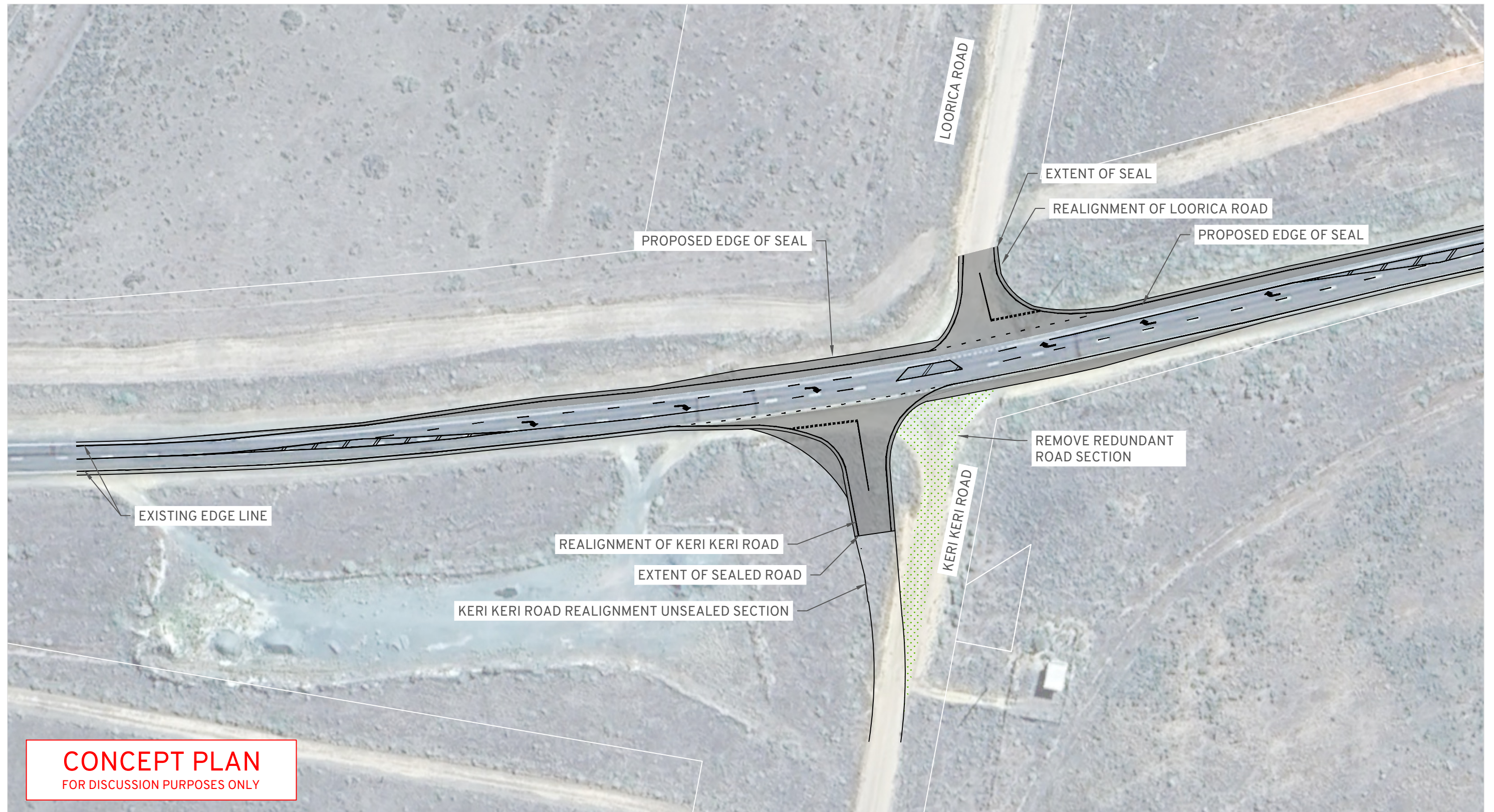
- Notes:**
- Road lighting is not proposed as there are no raised/solid medians.
 - Drainage design to be undertaken as part of detailed design process and allow existing drainage to function.
 - Pavement design to be undertaken in detailed design as per Austroads Guide to Pavement Technology Part 2: Pavement Structural Design to accommodate all vehicle types and traffic volumes.
 - Property boundaries based on publicly available cadastral data - to be verified on-site.



Keri Keri Road/Sturt Highway
Concept Design - Staggered Intersection With BAL / CHR(s)
Keri Keri Wind Farm

DRAWN: SS
DATE: 27/05/2026
DWG NO: 1652 SD01B V3
SCALE at A3: 1:1500





The following design details have been taken from Austroads Guide to Road Design Part 4A:

Short Channelised Right-turn Treatment [CHR(s)] Section 7.2.3.

1. Design speed of 120km/h.
2. Lane widths: 3.5m Sturt Highway through lanes (existing), 3.5m turn lane.
3. Minimum lateral movement (A) is 100m.
4. Desirable radius of 600m has been used.
5. Taper length used is 38.5m.
6. Storage length is 30m for one B-Double Vehicle.

- Notes:**
- Road lighting is not proposed as there are no raised/solid medians.
 - Drainage design to be undertaken as part of detailed design process and allow existing drainage to function.
 - Pavement design to be undertaken in detailed design as per Austroads Guide to Pavement Technology Part 2: Pavement Structural Design to accommodate all vehicle types and traffic volumes.
 - Property boundaries based on publicly available cadastral data - to be verified on-site.



Keri Keri Road/Sturt Highway
 Concept Design - Staggered Intersection With BAL / CHR(s)
 Keri Keri Wind Farm

DRAWN: SS
 DATE: 27/05/2026
 DWG NO: 1652 SD01B V3
 SCALE at A3: 1:1000



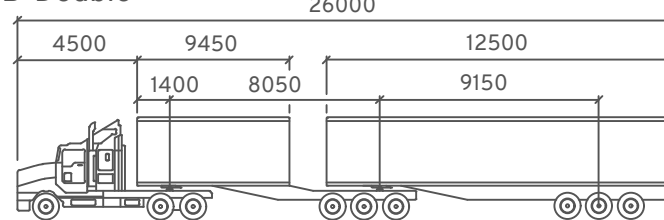
Keri Keri Road Right in/Left out



Keri Keri Road Left in/Right out

Vehicle Envelope
 500mm Clearance
 Reverse Manoeuvre
 Min. Design Speed 15km/h

26.0m B-Double



Tractor Width	: 2500	mm
Trailer Width	: 2500	
Tractor Track	: 2500	
Trailer Track	: 2500	
Lock to Lock	: 6.0s	
Steering Angle	: 22.2	
Articulating Angle	: 70.0	



Keri Keri Road/Sturt Highway

Concept Design - Staggered Intersection With BAL / CHR(s)
 Keri Keri Wind Farm

DRAWN: SS
 DATE: 27/05/2026
 DWG NO: 1652 SD01B V3
 SCALE at A3: 1:1000

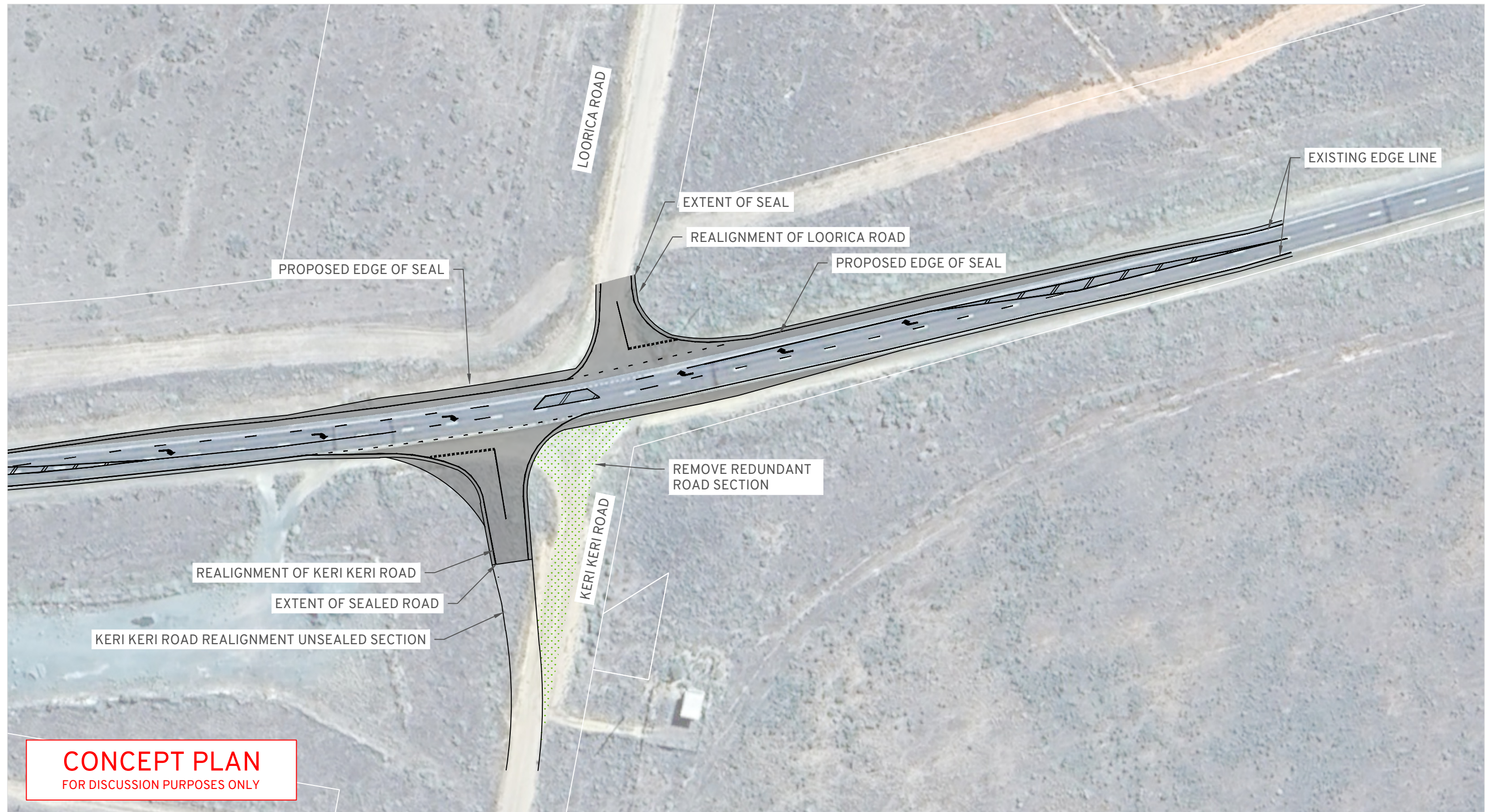


Notes:
- Refer to RJA report for vehicle specifications.



Keri Keri Road/Sturt Highway
Blade Swept Path Assessment prepared by RJA
Keri Keri Wind Farm

DRAWN: SS
DATE: 27/05/2026
DWG NO: 1652 SD01B V3
SCALE at A3: 1:1000



The following design details have been taken from Austroads Guide to Road Design Part 4A:

Short Channelised Right-turn Treatment [CHR(s)] Section 7.2.3.

1. Design speed of 120km/h.
2. Lane widths: 3.5m Sturt Highway through lanes (existing), 3.5m turn lane.
3. Minimum lateral movement (A) is 100m.
4. Desirable radius of 600m has been used.
5. Taper length used is 38.5m.
6. Storage length is 30m for one B-Double Vehicle.

- Notes:**
- Road lighting is not proposed as there are no raised/solid medians.
 - Drainage design to be undertaken as part of detailed design process and allow existing drainage to function.
 - Pavement design to be undertaken in detailed design as per Austroads Guide to Pavement Technology Part 2: Pavement Structural Design to accommodate all vehicle types and traffic volumes.
 - Property boundaries based on publicly available cadastral data - to be verified on-site.



Keri Keri Road/Sturt Highway
Concept Design - Staggered Intersection With BAL / CHR(s)
Keri Keri Wind Farm

DRAWN: SS
DATE: 27/05/2026
DWG NO: 1652 SD01B V3
SCALE at A3: 1:1000

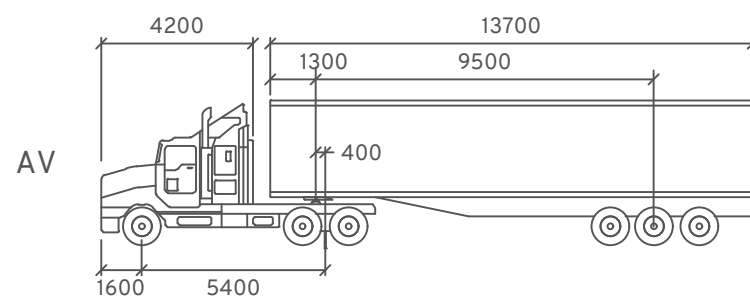


Loorica Road Right in/Left out



Loorica Road Left in/Right out

Vehicle Envelope
 500mm Clearance
 Reverse Manoeuvre
 Min. Design Speed 15km/h



Tractor Width : 2500
 Trailer Width : 2500
 Tractor Track : 2500
 Trailer Track : 2500
 Lock to Lock : 6.0s
 Steering Angle : 28.3
 Articulating Angle : 70.0



Keri Keri Road/Sturt Highway
 Concept Design - Staggered Intersection With BAL / CHR(s)
 Keri Keri Wind Farm

DRAWN: SS
 DATE: 27/05/2026
 DWG NO: 1652 SD01B V3
 SCALE at A3: 1:1000



Appendix D

TfNSW Bridge and Culvert Assessment

Oliver Mihaila

From: Sam Correy <Saleem.Correy@transport.nsw.gov.au>
Sent: Thursday, 4 June 2026 9:45 AM
To: Oliver Mihaila; Rico Kobelt
Subject: RE: Request: Bridge and Culvert Assessment (SSD-38358962)

Hi Oliver,

This route is also suitable as per below.

Assessment Results

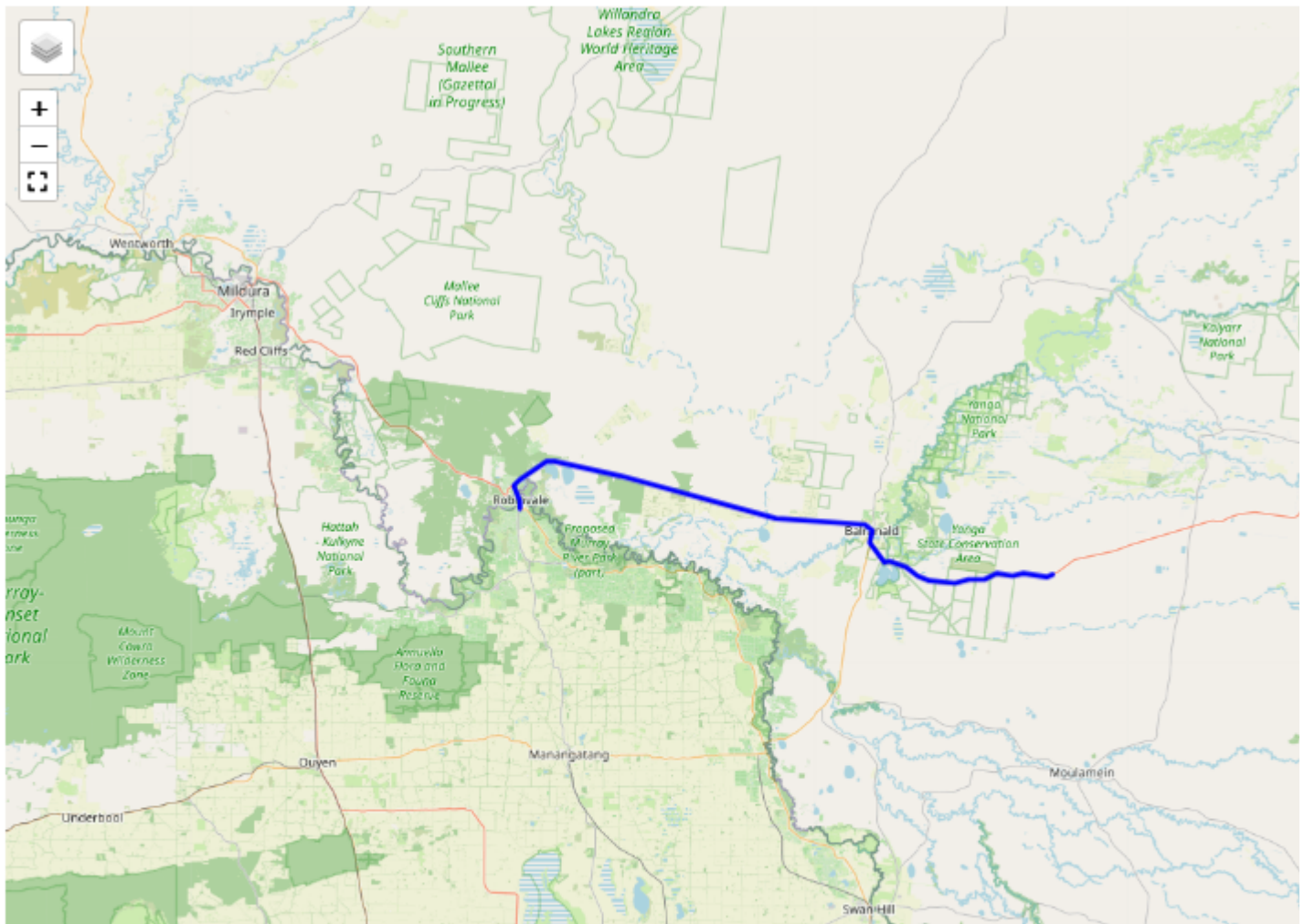
OSOM Vehicle



Platform Type	11x8	Axle Loading	16t/axle
With Dolly?	NO	Axle Spacing (m)	1.8
Vehicle Height (m)	5.26	Vehicle Width (m)	6.19
Gross Contact Width (m)	4.2	Route ID (Version)	2QETS-1_1

*Image Disclaimer

Route Map



Route Insights

Kind Regards,
Saleem Correy
Manager Restricted Vehicle Access
Freight Branch
Planning, Integration and Passenger
Transport for NSW

T 1300 656 371 E saleem.correy@transport.nsw.gov.au

Level 2
358 – 374 Grey St
Glen Innes NSW 2370

transport.nsw.gov.au



**Transport
for NSW**



I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

Please consider the environment before printing this email.

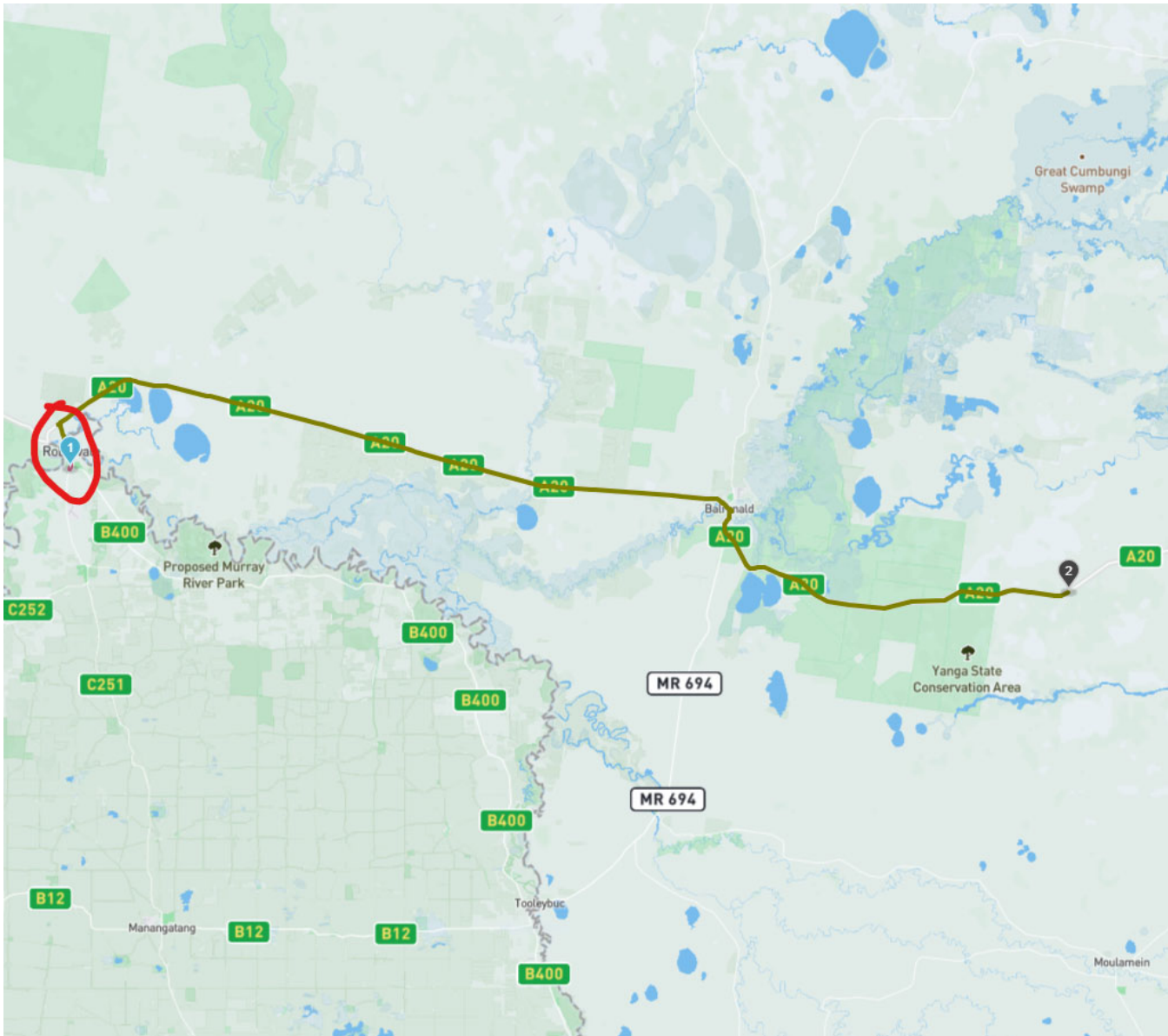
OFFICIAL

From: Oliver Mihaila <omihaila@amberorg.com.au>
Sent: Thursday, 4 June 2026 8:43 AM
To: Sam Correy <Saleem.Correy@transport.nsw.gov.au>; Rico Kobelt <rkobelt@amberorg.com.au>
Subject: RE: Request: Bridge and Culvert Assessment (SSD-38358962)

CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi Saleem,

The Euston Route (2QETS-1) includes an additional section of Murray Valley Highway – could you please clarify if this is also suitable, noting there is a bridge over the Murray River?



Thanks,

Oliver Mihaila

BEng (Hons) RPEV
Associate

Ph: 0481 997 387



From: Sam Correy <Saleem.Correy@transport.nsw.gov.au>

Sent: Monday, 1 June 2026 2:06 PM

To: Oliver Mihaila <omihaila@amberorg.com.au>; Rico Kobelt <rkobelt@amberorg.com.au>

Subject: RE: Request: Bridge and Culvert Assessment (SSD-38358962)

Hi Oliver,

PT3104 is currently still awaiting assessment. Please be advised that bridge assessments are currently taking 8-10 weeks due to the high volume being received.

No bridge assessment is required for the 11x8 platform trailer for your requested route at 16t/axle as it is suitable as per the below results in the Heavy Load Platform Dashboard.

Assessment Results

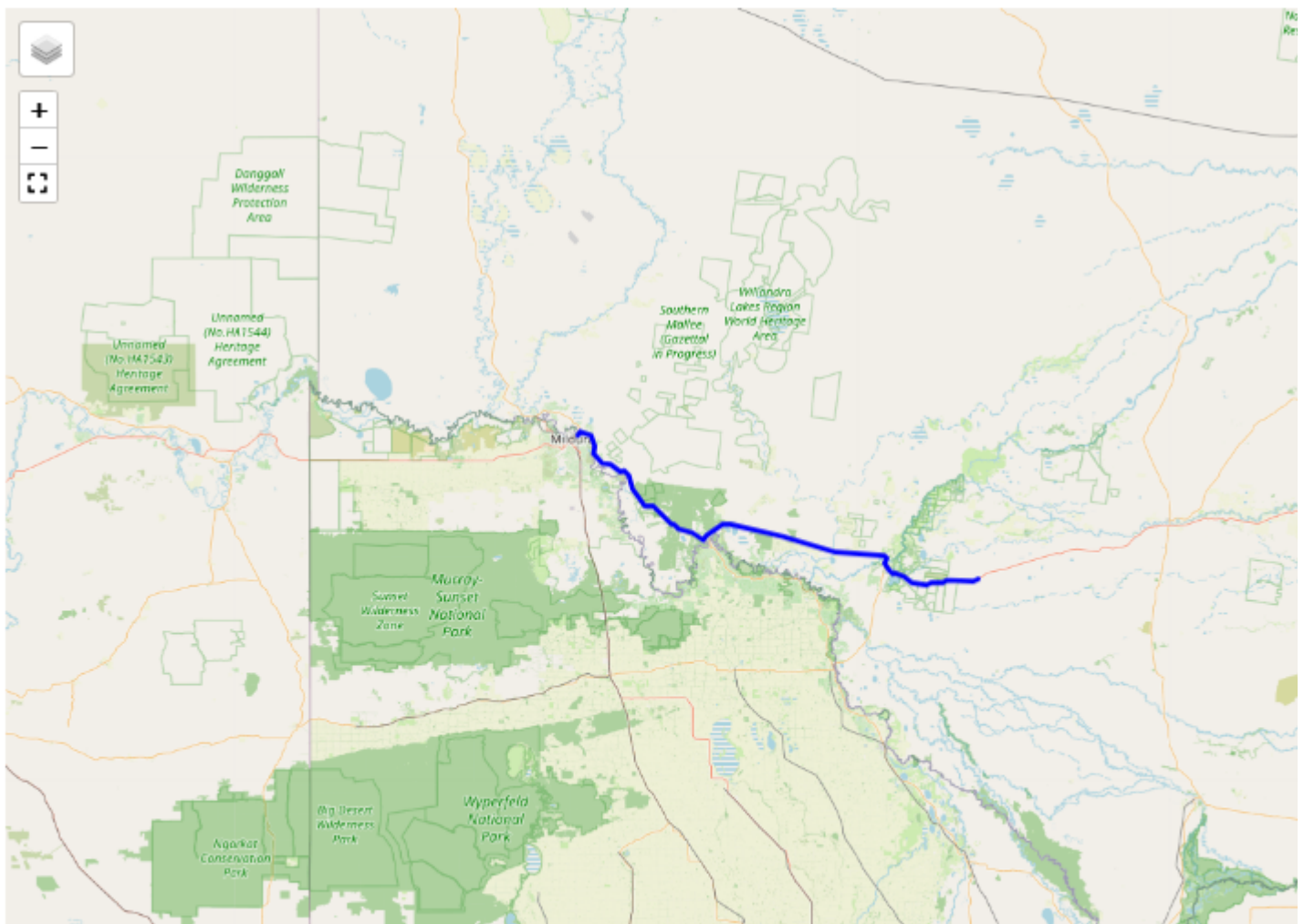
OSOM Vehicle



Platform Type	11x8	Axle Loading	16t/axle
With Dolly?	NO	Axle Spacing (m)	1.8
Vehicle Height (m)	5.26	Vehicle Width (m)	6.19
Gross Contact Width (m)	4.2	Route ID (Version)	2QF06-4_1

*Image Disclaimer

Route Map



Route Insights

Kind Regards,
Saleem Correy
Manager Restricted Vehicle Access
Freight Branch
Planning, Integration and Passenger
Transport for NSW

T 1300 656 371 E saleem.correy@transport.nsw.gov.au

Level 2
358 – 374 Grey St
Glen Innes NSW 2370

transport.nsw.gov.au



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OFFICIAL

From: Oliver Mihaila <omihaila@amberorg.com.au>
Sent: Monday, 1 June 2026 12:26 PM
To: Sam Correy <Saleem.Correy@transport.nsw.gov.au>; Rico Kobelt <rkobelt@amberorg.com.au>
Subject: RE: Request: Bridge and Culvert Assessment (SSD-38358962)

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Hi Saleem

Hope you're doing well. Just wanted to check in on the status of this assessment PT3104?

Additionally could you please confirm if the platform trailer w/ generator (attached) would be suitable for Route 1 from Euston (NHVR ID 2QETS-1)?

Thanks,

Oliver Mihaila
BEng (Hons) RPEV

Associate

Ph: 0481 997 387



From: Sam Correy <Saleem.Correy@transport.nsw.gov.au>

Sent: Friday, 1 May 2026 12:18 PM

To: Rico Kobelt <rkobelt@amberorg.com.au>

Cc: Oliver Mihaila <omihaila@amberorg.com.au>; Shehani Samaranayake <ssamaranayake@amberorg.com.au>

Subject: RE: Request: Bridge and Culvert Assessment (SSD-38358962)

Hi Rico,

Please be advised that the Bookend trailer w/ tower and the Platform trailer w/ generator do not require bridge assessments as they are both suitable for the selected routes according to the HLP Dashboard.

The 10x8 Beamset w/ transformer combination has been set for assessment under PT3104.

Kind Regards,

Saleem Correy

A/ Manager Road Access

Freight Branch

Planning, Integration and Passenger

Transport for NSW

T 1300 656 371 E saleem.correy@transport.nsw.gov.au

Level 2

358 – 374 Grey St

Glen Innes NSW 2370

transport.nsw.gov.au



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OFFICIAL

From: Tobias Shannon <Tobias.SHANNON@transport.nsw.gov.au>
Sent: Thursday, 30 April 2026 2:12 PM
To: Sam Correy <Saleem.Correy@transport.nsw.gov.au>
Subject: FW: Request: Bridge and Culvert Assessment (SSD-38358962)

Kind Regards

Tobias Shannon
A/ Manager Road Access
Freight Branch
Planning, Integration and Passenger

Transport for NSW

T 1300 656 371 E tobias.shannon@transport.nsw.gov.au

transport.nsw.gov.au

Cnr Grey & Ferguson St
Glen Innes NSW 2370



**Transport
for NSW**



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OFFICIAL

From: Kym Hanna <Kym.Hanna@transport.nsw.gov.au> **On Behalf Of** special_permits_unit@rms.nsw.gov.au
Sent: Wednesday, 22 April 2026 3:41 PM
To: Tobias Shannon <Tobias.SHANNON@transport.nsw.gov.au>; Sam Correy <Saleem.Correy@transport.nsw.gov.au>
Subject: FW: Request: Bridge and Culvert Assessment (SSD-38358962)

Hi Toby/Sam.
Forwarding for action.
Regards.
Kym

Kym Hanna (she/her)

Acting Road Freight Operations Coordinator
Road Freight Strategic Operations
Freight Branch
Planning, Integration and Passenger
Transport for NSW

E kym.hanna@transport.nsw.gov.au

Level 8, 4 Parramatta Square, Parramatta NSW 2150



**Transport
for NSW**

OFFICIAL

From: Rico Kobelt <rkobelt@amberorg.com.au>

Sent: Wednesday, 22 April 2026 3:29 PM

To: special_permits_unit@rms.nsw.gov.au <spu@transport.nsw.gov.au>

Cc: Oliver Mihaila <omihaila@amberorg.com.au>; Shehani Samaranayake <ssamaranayake@amberorg.com.au>

Subject: Request: Bridge and Culvert Assessment (SSD-38358962)

CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi there,

Amber are assisting with the preparation of an updated Traffic Impact Assessment report for the Keri Keri Wind Farm (refer: <https://www.planningportal.nsw.gov.au/major-projects/projects/keri-keri-wind-farm>).

We have been requested by the TfNSW Development Renewables team to seek a bridge and culvert assessment of the anticipated OSOM vehicle combinations transporting various components from the VIC/NSW border at Euston or Mildura to the site in Keri Keri. This is on behalf of Environmental Resource Management Australia Pty Ltd (we will forward the fees onto them).

The proposed vehicle combinations are shown attached with relevant details provided, and summarised as follows:

- Route 1: Euston to site
 - o Bookend trailer w/ tower (1st attached)
 - o Beamset w/ transformer 2 (2nd attached)
- Route 2: Mildura to site
 - o Platform trailer w/ generator (3rd attached)

We have presented two vehicle combination options for the first route, as we're not sure which is the critical design combination. One has a higher weight per axle group, but the other has a greater total weight. Insight on this would be greatly appreciated.

Note these are relatively approximate given that the project is yet to be approved and loads and transit times are yet to be confirmed.

NHVR Route IDs:

- Route 1: **2QETS-1** (4th attached is screenshot of route on NHVR portal)
- Route 2: **2QF06-4** (5th attached is screenshot of route on NHVR portal)

Please feel free to contact me if any further information is required to begin the process.

Kind regards,

Rico Kobelt
BE (Hons) BSc
Traffic Engineer

Ph: +61 431 099 588



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Appendix E

Road Width and Travel Time Delay Assessment

NSW OSOM Route 1A/1B Euston to Keri Keri WF													Max Delay - Following (mins)		Average Delay - Following (mins)		Max Delay - Oncoming (mins)		Average Delay - Oncoming (mins)	
			Minimum Carriageway Width - Eastbound Only (m)	Minimum Carriageway Width - Total (m)	Speed Limit (km/h)	Leapfrog Required (Y/N)	Light Vehicles		Heavy Vehicles		OSOM		LV	HV	LV	HV	LV	HV		
Segment ID	Segment Length (km)	Description					Average Speed (km/h)	Travel Time (mins)	Average Speed (km/h)	Travel Time (mins)	Average Speed (km/h)	Travel Time (mins)								
A-B	21.0	A (NSW border) to B (Meilman East Rest Area)	4.0	9.5	50-110	N	95	13.3	85	14.8	55	22.9	9.6	8.1	4.8	4.0	N/A - Total carriageway width is sufficient to accommodate two-way traffic (9.5m)			
B-C	43.3	B (Meilman East Rest Area) to C (Prungle Mail Rest Area)	4.8	9.5	110	N	105	24.7	95	27.3	65	40.0	15.2	12.6	7.6	6.3	N/A - Total carriageway width is sufficient to accommodate two-way traffic (9.5m)			
C-D	14.4	C (Prungle Mail Rest Area) to D (Lions Park, Balranald)	4.8	9.5	50-110	N	95	9.1	85	10.2	55	15.7	6.6	5.5	3.3	2.8	N/A - Total carriageway width is sufficient to accommodate two-way traffic (9.5m)			
D-E	41.3	D (Lions Park, Balranald) to E (Willowvale Rest Area)	4.8	9.5	50-110	N	100	24.8	90	27.5	65	38.1	13.3	10.6	6.7	5.3	N/A - Total carriageway width is sufficient to accommodate two-way traffic (9.5m)			
E-F	5.2	E (Willowvale Rest Area) to F (Keri Keri Windfarm)	4.8	9.5	110	N	105	3.0	95	3.3	65	4.8	1.8	1.5	0.9	0.8	N/A - Total carriageway width is sufficient to accommodate two-way traffic (9.5m)			

Notes:
[Map Link](#)
LV/HV travel times estimated based on speed limit and Google Maps data.
Max delay is worst-case assuming a vehicle is impeded for the full segment.
Average delay is half of max delay as vehicles will arrive at random intervals.
Carriageway widths measured from aerial imagery.



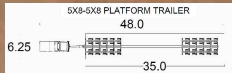
Appendix F

Passing Area Swept Paths
(prepared by RJA)

5X8-5X8 PLATFORM TRAILER	
6.25	48.0
35.0	

STURT HWY PARKING BAY
MEILMAN EAST





STURT HWY PARKING BAY
PRUNGLE MALL



SURVEY KEY

VEHICLE PATH: 

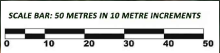
LOAD ENVELOPE: 

NO CONFLICT: 

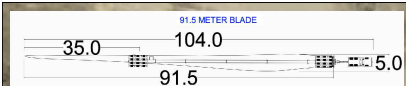
MODIFICATIONS REQUIRED: 

CAUTION: 

PROPERTY BOUNDARIES: 







STURT HWY PARKING BAY WILLOWVALE

