21 February 2025

Department of Planning, Housing and Infrastructure
Ms Nicole Brewer
12 Darcy Street
Parramatta NSW 2150

Dear Nicole Brewer,

Uungula Wind Farm (SSD 6687) – Condition B30 – Timing of external road upgrades

UWF Nominees Pty Ltd (UWF) is writing in relation to Condition B30 of the Development Consent (SSD-6687), to request the Planning Secretary's agreement to commence a subset of construction activities prior to completing the road upgrade works along Twelve Mile Road, and prior to completing the primary project site access (the 'change request').

The change request is limited to enabling certain critical construction activities associated with TransGrid's construction of the switching station and grid connection infrastructure, scheduled to commence on the wind farm site in February 2025. Delays to the commencement of this work beyond the current scheduled date (February 2025) could have a significant adverse scheduling and financial impacts for the project overall. UWF confirms that no other construction activities will proceed prior to completing the required road and site access upgrades.

Further information is set out in the sections below to support this request, including details of consultation we have completed with the relevant Roads Authority, Dubbo Regional Council (DRC), who have provided their written support for this approach, Transport for NSW (TfNSW), and the local community.

Additionally, the Traffic Impact Assessment completed by Samsa Traffic has been included as Appendix A for consideration.

Condition B30

Condition B30 of SSD-6687 requires:

> *Unless the Planning Secretary agrees otherwise, prior to commencing construction the Applicant must implement the road upgrades identified in Appendix 7, to the standard and satisfaction of the relevant roads authority.*
>
> *If there is a dispute about the road upgrades to be implemented, or the implementation of these upgrades, then either party may refer the matter to the Planning Secretary for resolution.*

Appendix 7 of SSD-6687 includes the following road upgrades:

Roads Authority: Dubbo Regional Council				
Twelve Mile Road	Goolma Road	00 km to 13.76 km	Reconstruct the pavement full length to the horizontal and vertical alignment, generally in accordance with Appendix N of the EIS, in compliance with TfNSW's *Roadworks specifications – design and construct* (TfNSW, 2020) or its latest version	Prior to commencing construction
Twelve Mile Road	Goolma Road	13.59 km (approx.)	Construct the primary project site access, generally in accordance with Appendix N of the EIS	Prior to commencing construction

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Incorporating the business of CWP Renewables Pty Ltd

Reasons for the request

Critical Construction activities to commence in February 2025 (TransGrid)

This request is being made to enable certain critical construction activities to commence on the wind farm site in February 2025, specifically, TransGrid's construction of the switching station and grid connection point. Delays to the commencement of this work beyond the current scheduled date (February 2025) could have a significant adverse scheduling and financial impacts for the project.

Delays to Road Upgrades

The Twelve Mile Road upgrade works commenced in March 2024 and had an original scheduled completion date of 5th November 2024. Significant delays have been encountered during the works and the upgrades are now anticipated to be completed in late February 2025. The delays have been associated with:

- Significant wet weather events in 2024 resulted in delays;
- Difficulties were encountered during the reconstruction of the Twelve Mile Road sub-grade, which necessitated changes to construction methodologies and extensive sub-surface treatment / rectification was required along the entire length of the TMR upgrade. This was necessary to ensure compliance with the road technical design specifications and DRC requirements.

Status of the road upgrades

The following works have been completed to date:

- Vegetation clearing – Substantially complete
- Waterway crossings – substantially complete.
- Subgrade treatment – complete.
- Subgrade placement – complete.
- Road widening – complete.
- Fencing replacement substantially complete on Twelve Mile Road

The following work is currently scheduled for January 2025, weather permitting:

- Final basecourse placement prior to sealing – Zones 1 & 2
- Sealing of approximately 7 kilometres of the western section of Twelve Mile Road (zones 1 & 2)
- Completion of Ilgingery Road Upgrade
- Completion of site access track for main Switching Station to allow access for TransGrid.

It is anticipated that the works to be completed in February 2025 will include:

- Final basecourse placement prior to sealing on zones 3 & 4
- Sealing of approximately 6.4 kilometres of the eastern end of Twelve Mile Road
- Completion of the primary project site access point off Twelve Mile Road.

Indicative timing

As noted above, UWF forecast that the Twelve Mile Road Upgrade and primary project site access upgrade will reach completion in late February 2025. The works on the TransGrid switching station and grid connection point are scheduled to commence in early February 2025. Details of the proposed activities are outlined in Table 1 below.

Table 1: Activities Proposed to be Undertaken Concurrent with Public Road Upgrades

Activity Name	**Scheduled Start**	**Scheduled Finish**
Pre-construction minor work - minor clearing or translocation of native vegetation – construction of minor access roads and minor adjustments - windfarm proper	Jan 25	Ongoing
Critical Construction activity – access to 330 kV switching station including pavement / capping and documentation / handover	Jan 25	Ongoing
Critical Construction activity – wind farm switching station compound	Feb 25	Ongoing
Construction activity – access track cut / fill, subgrade & compact road – main site compound to site track SA011	Feb 25	April 25
Construction activity – main construction compound facilities establishment and commissioning	Mar 25	Ongoing
Construction activity – wind farm substation compound	Mar 25	Ongoing

There would be a period of approximately one (1) month where a subset of construction activities are conducted concurrent with the final completion of the road upgrades.

Figure 1 provides a high-level map of Twelve Mile Road and the site entrance in relation to the Project Site, illustrating the sections of Twelve Mile Road that have been completed. The figure also identifies areas where the proposed final upgrade works will overlap with critical construction activities associated with TransGrid's switching station construction.

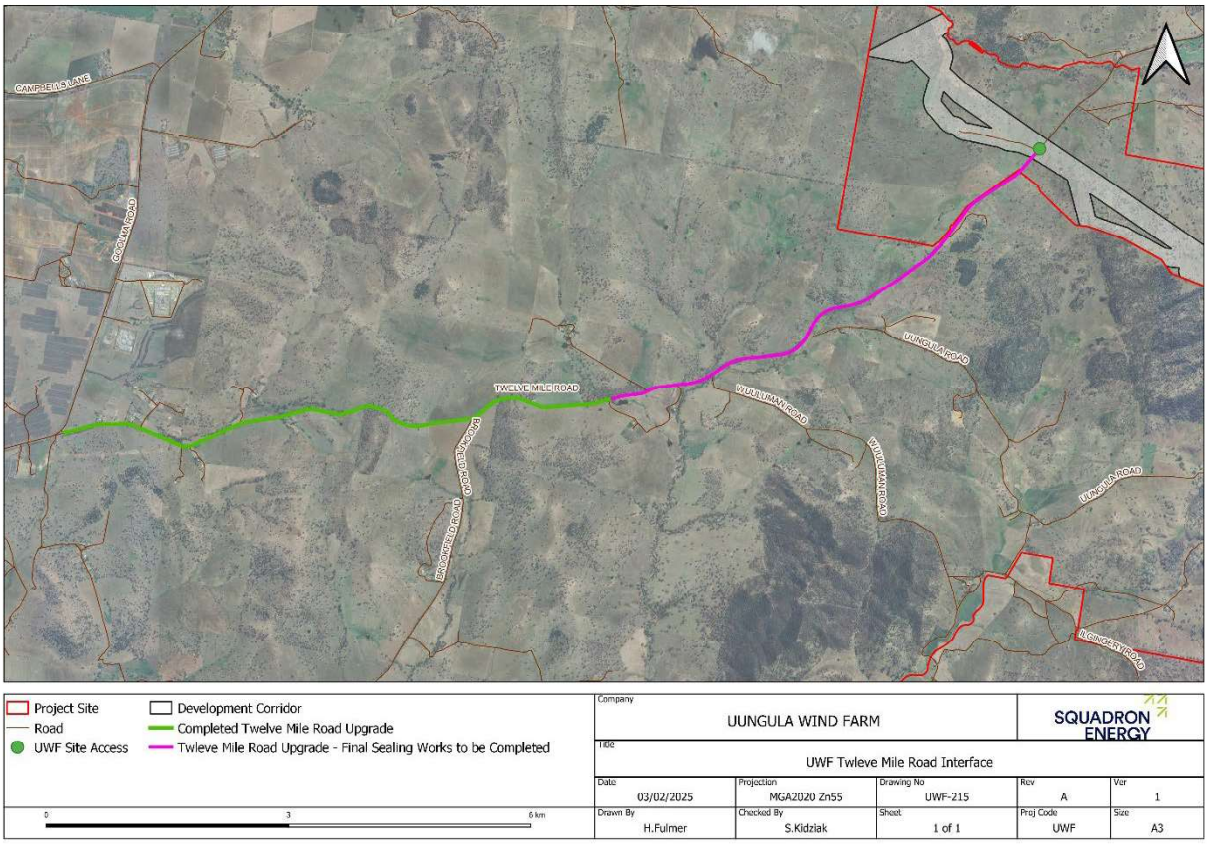


Figure 1. Overview of the completed Twelve Mile Road upgrade works and proposed section to overlap with TransGrid's construction activities.

Consideration of potential impacts

UWF has commissioned Samsa Consulting to assess potential traffic impacts associated with the concurrent road upgrades, pre-construction minor works and construction activities (**see Appendix A**). The types and volumes of construction traffic associated with the TransGrid construction activities are detailed within Appendix A.

The Samsa assessment found that the introduction of a relatively modest number of light and heavy vehicles onto Twelve Mile Road is not expected to create any specific road safety issues or generate any noticeable decline in road safety generally, especially since there is significant spare capacity on the subject road network.

The Samsa assessment concludes that with appropriate construction traffic management, the proposed construction activities could be conducted in parallel to the road upgrade works without creating any significant adverse impacts with respect to traffic operations, road capacity and road safety along Twelve Mile Road.

Based on the current schedule, the parallel use of Twelve Mile Road between the parties is expected to last approximately 4 weeks. The impact on general road users' travel time during this period is expected to be minimal, considering the existing mitigation measures already in place for the Twelve Mile Road upgrade works.

The estimated travel times along Twelve Mile Road are as follows:

1. Baseline travel time along Twelve Mile Road from Goolma Road to the site (the travel route) is approximately 10 minutes.

2. Current public road upgrades work is resulting in an additional 15 minutes along the travel route, bringing the total travel time to 25 minutes on average.
3. The subset of proposed critical construction works traffic, coinciding with the Twelve Mile Road upgrades is expected to have no significant impact on travel time, as the majority of peak traffic movements will occur during:
    - Weekdays (Monday to Friday): 6:30–7:30 AM (incoming) and 5:30–6:30 PM (outgoing)
    - Saturdays: 7:30–8:30 AM (incoming) and 12:30–1:30 PM (outgoing)
4. The resulting total travel time along the travel route for the four-week period of combined road and construction works is expected to remain at 25 minutes.

Please refer to Appendix A for further details on the impact assessment and mitigation measures.

Mitigation strategies

The mitigation measures that will be implemented during the final stages of the road upgrade completion include:

- Implementation of the traffic control measures as outlined in the existing Traffic Management Plan, including but not limited to:
    - Traffic control plans (TMP Section 6.2);
    - Traffic Guidance Scheme for the works at the primary site access point (TMP Section 6.2.1);
    - Traffic control devices and measures (TMP Section 6.2.2); and
    - Inspections and monitoring (TMP Section 6.2.3).
- The construction contractor will investigate options for construction personnel parking located at the existing compound on corner of TMR and Goolma – and bus used to mobilise people into the wind farm site.
- Although the site access point upgrades are not yet fully complete, they have been formed to a functional state as part of the Twelve Mile Road upgrades, allowing effective access to the site area.
- In the event that the impact on general road users' travel time during this period is greater than the impact described in Appendix A, and found to be a direct result of critical construction activity, mitigation measures will include:
    - ensuring scheduled deliveries do not occur during peak times (during school bus movements and AM/PM peak local movements);
    - amending site travel times to not coincide with critical community movements, and
    - carpooling to minimise the number of vehicles.

Consultation

UWF has undertaken consultation with the Roads Authority, DRC, in relation to the change request. DRC have provided a ‘letter of support’, which is provided in an attachment to this submission. In summary, DRC supports the proposed change request, subject to the four (4) conditions outlined in their letter. UWF is committed to completing the road upgrade works in compliance with the DRC conditional letter of support.

Consultation with TfNSW commenced on the 10 January 2025, however no response has been received to date. Any feedback received will be considered and appropriately addressed.

Additionally, broader consultation with the local community has been conducted regarding the proposed works and potential impacts. A notification was published on the public website, as well as a physical letter drop between 15 January to 26 residences identified as having potential impacts from the proposed works. The letter is also attached to this submission. The mailbox delivery was undertaken to all properties with

mailboxes along Twelve Mile Road, as well as Caida Place, Brookfield Road, Wuuluman Road, and Uungula Road. A resident notification letter was also sent via email using Consultation Manager to a contact list that includes all residents on Twelve Mile Road, as well as known residents from previous contact along Wuuluman Road and Uungula Road. UWF will work through all responses and feedback provided.

Conclusion

Planning Secretary's agreement is being sought for the change request, to enable a subset of critical construction activities to be undertaken concurrently with the completion of the Twelve Mile Road and primary project site access point upgrades. This approach is supported by Dubbo Regional Council.

The potential traffic impacts associated with the change request would be temporary and can be adequately managed through traffic management and communication.

Yours sincerely,

Sheree Kidziak
Environmental Advisor
For and behalf of Squadron Energy Pty. Ltd.

Appendix A Traffic Impact Assessment

SAMSA CONSULTING
TRANSPORT PLANNING & TRAFFIC ENGINEERING

6 February 2025

Squadron Energy
Wiradjuri Country
16-18 Maughan Street
WELLINGTON, NSW 2820

Our Ref: *TMR_Traffic Assessment*

Attention: Cindy Smith / Sheree Kidziak

Dear Cindy / Sheree,

UUNGULA WIND FARM PROJECT, UUNGULA
Twelve Mile Road: Traffic Assessment

This report provides an assessment of impacts associated with the proposed use of Twelve Mile Road by critical construction traffic, prior to completion of Twelve Mile Road upgrades. The report has been prepared for Uungula Wind Farm Pty Ltd (the Proponent) by *Samsa Consulting Pty Ltd – Transport Planning and Traffic Engineering Consultants*.

Development Consent Conditions

The Uungula Wind Farm Development Consent (SSD-6687), in accordance with condition B30, does not allow the commencement of construction on the wind farm proper to occur until the public road upgrades listed in Appendix 7 of the Development Consent have been completed, including the following:

- Upgrades at the Goolma Road / Twelve Mile Road intersection.
- Reconstructing the Twelve Mile Road pavement between the Goolma Road intersection and the primary project site access point.
- Upgrade of the primary project site access point off Twelve Mile Road.

Approval from the Planning Secretary was received on 23 November 2023 to use the current Twelve Mile Road / Goolma Road intersection for construction-related light and heavy vehicle traffic. The intersection upgrade is required to be completed 'prior to the route being used by over-size / over-mass (OSOM) vehicles'.

Pursuant to Condition B30, the proponent is intending to request the Planning Secretary's agreement to allow a subset of critical construction activities to commence within the wind farm site prior to the completion of the Twelve Mile Road upgrades. The associated critical construction traffic would access the project site via Twelve Mile Road and the primary project site access point during the final stages of the road upgrades.

Description of Critical Construction Activities

Table A1 below, provides a high-level summary of the critical construction activities that are proposed to be undertaken concurrently with the final stages of the Twelve Mile Road upgrades. It is noted that a range of pre-construction minor works are already scheduled to be undertaken on the project site, including minor clearing or translocation of native vegetation, construction of minor access roads and establishing temporary site offices.

Table A1: Activities Proposed to be Undertaken Concurrent With Public Road Upgrades

Activity Name	Scheduled Start	Scheduled Finish
Pre-construction minor work - minor clearing or translocation of native vegetation – construction of minor access roads and minor adjustments - windfarm proper	Jan 25	Ongoing
Critical Construction activity – access to 330 kV switching station including pavement / capping and documentation / handover	Jan 25	Ongoing
Critical Construction activity – wind farm switching station compound	Feb 25	Ongoing
Construction activity – access track cut / fill, subgrade & compact road – main site compound to site track SA011	Feb 25	April 25
Construction activity – main construction compound facilities establishment and commissioning	Mar 25	Ongoing
Construction activity – wind farm substation compound	Mar 25	Ongoing

Twelve Mile Road: Current Conditions

The current upgrade of Twelve Mile Road is in varying stages of completion. The road widening and subgrade remediation are in advanced stages. The eastern end near the primary project site access is in the final stages of completion. Further, placement of the subsequent pavement layers are also progressing with traffic traversing all sections of the road in its current state.

Twelve Mile Road: Current Traffic Activity

The current traffic volumes along Twelve Mile Road have been estimated based on previous information (2019 traffic flows) from the Project's Transport Assessment[1]. The estimated 2025 traffic volumes were evaluated by adopting a conservative (high) traffic growth rate of 3% per annum (compounded) or approximately 19.4% over the six-year period between 2019 and 2025. The 19.4% growth over a six-year period is higher than the traffic growth rate from various RMS data stations in the regional area and thus is considered to be a reasonable (conservative) assumption. Moreover, this growth rate along Twelve Mile Road is considered to be further conservative (high) because of the insignificant change in land use / traffic generators in the surrounding rural areas and the 'closed' nature of the local road network, which result in minimal through traffic flows.

Therefore, current (estimated) 2025 traffic volumes in vehicles per day (vpd) and vehicles per hour (vph) for Twelve Mile Road are a maximum of 124 vpd and 26 vph. It is estimated that some 10% of the current total traffic are heavy vehicles, ie. 12 heavy vehicles per day and 3 heavy vehicles per hour.

1 Samsa Consulting "*Uungula Wind Farm Project: Transport Assessment*", April 2020

Twelve Mile Road: Traffic Assessment

Critical Construction Traffic Generation

The activities described above in *Table A1* are expected to occur either side of Twelve Mile Road from the main wind farm access location. It is anticipated that light vehicle movements would be up to 60 vehicles or 120 vehicle trips per day, across the north and south of Twelve Mile Road. The incoming morning peak movements would occur around 6:30 am to 7:30 am and typically end (exit movements) around 5:30 pm to 6:30 pm on weekdays (Monday to Friday) and 7:30 am to 8:30 am (incoming) and 12:30 pm to 13:30 pm (outgoing) on Saturdays. There may be some limited movements during working hours back to the temporary office located at the Goolma Road / Twelve Mile Road intersection.

Based on the above, maximum daily movements are estimated at some 150 light vehicle trips and corresponding maximum hourly movements are estimated at some 60 light vehicle trips.

Heavy vehicles will deliver plant at the beginning of the work activities with the expectation that these will remain on the wind farm site accessible for the activity work areas, with delivery of construction material expected during the course of the work. The initial number of plant and equipment for the combined work fronts (either side of Twelve Mile Road) is expected to be 16 heavy vehicle movements at the beginning of the activity periods. In addition, up to 8 heavy vehicle trips per day could be generated by Transgrid and other miscellaneous deliveries. It is anticipated that all heavy vehicle movements would occur outside any peak hourly periods and not coincide with the peak light vehicle traffic generation described above. A nominal maximum 4 heavy vehicle trips per hour could be expected to be generated during any hour.

Road Network Assessment

In order to assess the potential impacts of the temporary traffic generation on road capacity, the traffic generation of light and heavy vehicles have been added to current daily and peak hour traffic flows to obtain future traffic flows along Twelve Mile Road. Future traffic volumes in vehicles per day and vehicles per hour for Twelve Mile Road are broken up into light vehicles (LV) and heavy vehicles (HV) and shown following in *Table A2*.

Table A2: Future Traffic Volumes

Traffic Scenario		Twelve Mile Rd
Daily Traffic – vehicles per day		
Current traffic	LV	112
	HV	12
Temporary traffic generation	LV	150
	HV	24
Combined future traffic	LV	262
	HV	36
Hourly (Peak) Traffic – vehicles per hour		
Current traffic#	LV	23
	HV	3
Temporary traffic generation	LV	60
	HV	4
Combined future traffic	LV	83
	HV	7

Road capacity for two-lane, two-way sections of a rural road network is largely based on a combination of design speed, travel lane and shoulder width, sight distance restrictions, traffic composition, directional traffic splits and terrain[2]. This provides a basic level of service and associated service flow rate under prevailing road and traffic conditions. Based on the road and traffic characteristics of Twelve Mile Road, the levels of service and flow rates are shown in *Table A3* following.

Table A3: Road Network Service Flow Rates

Road Section	Level of Service (LoS)				
	A	B	C	D	E
Twelve Mile Rd	85 vph 850 vpd	210 vph 2,250 vpd	390 vph 4,250 vpd	590 vph 6,300 vpd	1,160 vph 12,200 vpd

Based on the level of service (LoS) flow rates shown above in *Table A3*, Twelve Mile Road currently operates at LoS A. Once critical construction traffic is added to the road network, Twelve Mile Road is anticipated to operate at LoS A / B, with no significant impacts on road network performance.

2 Austroads "*Guide to Traffic Engineering Practice: Part 2 – Roadway Capacity*", Section 3

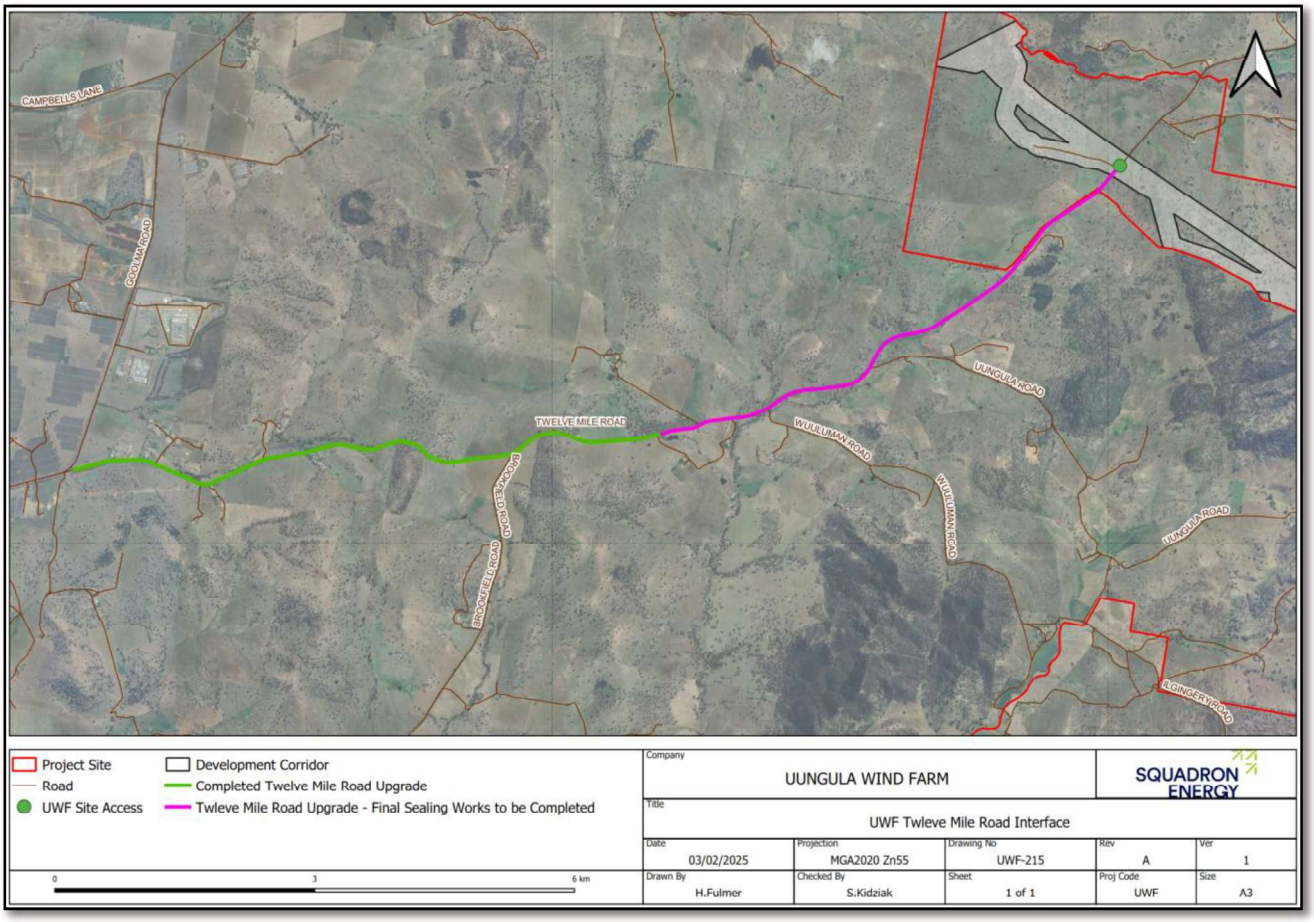
Travel Time Assessment

During the road upgrade works along Twelve Mile Road, speed limits have been reduced and various traffic control measures, such as 'stop/go' operations and traffic signals, have been implemented. Multiple drive-throughs in both directions have been conducted to determine current travel times, which were found to be approximately 25 mins between Goolma Road and the Project site entrance. The current impact on travel time for general, public road users is estimated to be approximately 15 mins (estimated travel time for general, public road users prior to the road upgrades was some 10 mins based on the background speed zone of 100 km/h, road section length of approximately 13 km and road alignment).

During the proposed increase in construction-related traffic to facilitate critical construction activities (expected to overlap with the ongoing Twelve Mile Road upgrade works for approximately 3 to 4 weeks) the western 6 km section of the road (shown in **green** in the diagram below) will remain unaffected apart from the existing 60 km/h construction speed zone.

For the eastern 7 km section (shown in **magenta** in the diagram below), road works are being finalised with ongoing traffic control measures, including 'stop/go' operations and traffic signals at some single-lane sections. During this overlap period, travel times will vary depending on whether vehicles are stopped at these controls.

The only potential, additional impact on travel time may result from the increased number of construction vehicles accessing the site (travelling along Twelve Mile Road) but this impact is expected to be minimal because the road has significant spare capacity.



Road Safety Assessment

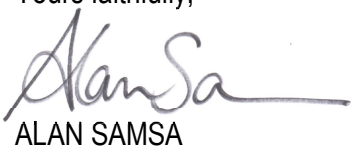
The introduction of a relatively modest number of light and heavy vehicles onto Twelve Mile Road is not expected to create any specific road safety issues or generate any noticeable decline in road safety generally, especially since there is significant spare capacity on the subject road network. The traffic generated during these critical construction activities along Twelve Mile Road nearing final completion can be suitably managed via traffic management controls and protocols outlined in the approved Traffic Management Plan (TMP).

Conclusions

With appropriate traffic management, the traffic generated by critical construction activities would not result in any significant adverse impacts with respect to traffic operations, road capacity and road safety along the subject section of Twelve Mile Road during the final stages of the road upgrade completion.

If you have any queries with respect to the above, please do not hesitate to contact the undersigned.

Yours faithfully,



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