

Uungula Wind Farm Project

Traffic Management Plan (DRAFT)

June 2022

SAMSA CONSULTING TRANSPORT PLANNING & TRAFFIC ENGINEERING

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- B Designated OSOM Transport Route
- C Additional Compliance Requirements

1. Introduction

1.1 Background

This Traffic Management Plan (TMP) has been prepared in accordance with *Schedule 2, Condition B33* of the Development Consent. The TMP is based on the *Uungula Wind Farm Project, Transport Assessment* (TA document prepared by Samsa Consulting in April 2020), the *Uungula Wind Farm Amendment Report* (prepared by CWP Renewables in November 2020) and an indicative Route Study (*Uungula Wind Farm – Route Study*)prepared by Rex J Andrews, May 2020.

The purpose of this TMP is as follows:

- Detail the transport routes to be used for all development-related traffic.
- Detail the road upgrade works required.
- Detail the dilapidation surveys required under the Development Consent.
- Detail the measures that will be implemented to minimise traffic safety impacts and disruptions to local road users during construction, upgrading or decommissioning works including cumulative impacts.
- Detail measures that will be implemented to comply with the traffic / transport consent conditions.
- Include general details for a driver's code of conduct.

1.2 Stakeholder Consultation

The TMP has been reviewed and prepared in consultation with the following road authorities:

- Transport for NSW (TfNSW).
- Dubbo Regional Council.

1.3 Scope and Methodology

The preparation of this TMP report included the following tasks:

- Review of background information for the Project.
- Project discussions with Uungula Wind Farm Project team.
- Discussions with Dubbo Regional Council as well as TfNSW.
- Site inspections of the wind farm project area and surrounding road network, including the preferred transportation routes.
- Development of measures to mitigate and/or manage potential impacts, including construction traffic control, road dilapidation surveys and measures to control dust generated by development related traffic.

This TMP is to be used during the construction, operation and decommissioning phases of the subject Project.

Once approved, in accordance with Development Consent Condition C16, the TMP will be

published and made publicly available on the Uungula Wind Farm website:

https://cwprenewables.com/our-projects/uungula-wind-farm

1.4 Development Consent Requirements for Traffic Management

This report is a requirement of the Development Consent for Application number SSD 6687 provided under *Section 4.38* of the *Environmental Planning and Assessment Act* [1979], granted 7 May 2021 and Modified 21 April 2022.

This TMP addresses *Conditions B27* to *B33* of the subject Development Consent in the following document sections as shown in *Table 1.1* below.

Condition Number	Condition				
B27	Designated Heavy and Over-Dimensional Vehicle Routes				
	All over-dimensional associated with the development must travel to and from the site via Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road and the approved site access point off Twelve Mile Road, unless the Planning Secretary agrees otherwise.	Section 3 Appendix B			
	Notes:				
	 The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network. 	Section 6.14			
	 To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for over- dimensional access unless the Planning Secretary agrees otherwise. 				
B28	All heavy and light vehicles associated with the development must travel to and from the site via Twelve Mile Road (west) and the approved site access point off Twelve Mile Road, unless the Planning Secretary agrees otherwise.	Section 3 Appendix B			
	Note: To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for heavy or light vehicle access, unless the Planning Secretary agrees otherwise.				
B29	Uungula Road, Wuuluman Road and Ilgingery Road must only be used by over-dimensional, heavy and light vehicles at the following locations to allow access between portions of the site:	Section 3 Appendix B			
	(a) the secondary intersection on Uungula Road;				
	(b) the four secondary intersections on Ilgingery Road; and				
	(c) between secondary intersection (A) and secondary intersection (C) on Ilgingery Road.				
	In addition, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road and Ilgingery Road for the purposes of upgrading the intersections in B29(a) and B29(b) above.	Section 4			
B30	Road Upgrades				
	Unless the Planning Secretary agrees otherwise, prior to commencing construction the Applicant must implement the required road upgrades identified in the Development Consent, to the standard and satisfaction of the relevant roads authority.	Section 4			
	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				

Table 1.1: Conditions of Consent relating to this TMP

Condition Number	Condition			
	Planning Secretary for resolution.			
B31	Road Maintenance The Applicant must:			
	 (a) undertake an independent dilapidation survey to assess the: existing condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), prior to construction, upgrading or decommissioning works; and 	Section 5		
	 condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29): within 1 month of the completion of any construction, upgrading or decommissioning works; on an annual basis during construction works; rehabilitate and/or make good any development-related damage. 			
	(b) repair Twelve Mile Road, on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), if dilapidation surveys identify that the road has been damaged during construction, upgrading or decommissioning works;			
	in consultation with the relevant road's authority, to the satisfaction of the Planning Secretary.			
B32	Unformed Crown Roads The Applicant must ensure any unformed Crown road reserves affected by the development are maintained for future use, unless otherwise agreed with the DPIE Crown Lands.	Section 6.1		
B33	Traffic Management Plan			
	Prior to commencing road upgrades, the Applicant must prepare a Traffic Management Plan for the development in consultation with TfNSW and Council, and to the satisfaction of the Planning Secretary. This plan must include:	This document		
	(a) details of the transport route to be used for all development-related traffic;	Section 3		
	(b) details of the road upgrade works required by condition B30 of Schedule 2 of this consent;	Appendix B Section 4		
	 (c) details of the measures that would be implemented to: minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including: 			
	 details of the dilapidation surveys required by Condition B31; temporary traffic controls, including detours and signage; notifying the local community about development-related traffic impacts; 	Section 5.1 Section 6.2 Section 6.3		
	 procedures for receiving and addressing complaints from the community about development-related traffic; 	Section 6.4		
	 minimising potential cumulative traffic impacts with other State significant development projects in the area; 	Section 6.6		
	 minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queuing on the public road network; implementing measures to minimize development related traffic on the 	Sections 6.7 Section 6.8		
	 implementing measures to minimise development-related traffic on the public road network outside of standard construction hours; 	Secuon 6.8		

Condition Number	Condition	Where Addressed
	 minimising dirt tracked onto the public road network from development-related traffic; 	Section 6.9
	 details of the employee shuttle bus service (if proposed), including pick-up and drop-off points and associated parking arrangements for construction workers, and measures to encourage employee use of this service; 	Section 6.10
	 encouraging car-pooling or ride sharing by employees; 	Section 6.11
	 scheduling of haulage vehicle movements to minimise convoy length or platoons; 	Section 6.12
	 responding to local climate conditions that may affect road safety such as fog, dust, wet weather and flooding; 	Section 6.13
	 ensuring loaded vehicles entering or leaving the site have their loads covered or contained; 	Section 6.9
	 responding to any emergency repair or maintenance requirements; a traffic management system for managing over-dimensional vehicles; and 	Section 6.16.4 Section 6.14
	– fatigue management.	Section 6.15
	comply with the traffic conditions in this consent;	
	(d) include a Driver's Code of Conduct that addresses:	Section 6.16
	travelling speeds;	Section 6.16.1
	 procedures to ensure that drivers to and from the development adhere to the designated over-dimensional and heavy vehicle routes; 	Section 6.16.2
	 procedures to ensure that drivers to and from the development implement safe driving practices; and 	Section 6.16.3
	 include a detailed program to monitor and report on the effectiveness of these measures and the code of conduct. 	Section 6.16.4
	Following the Planning Secretary's approval, the Applicant must implement the Traffic Management Plan.	

In addition to the Conditions listed in Table 1.1, Appendix C outlines how the Project will comply with a range of additional Development Consent Conditions, including:

- Evidence of Consultation (Condition A9);
- Compliance (Condition A13);
- Community Consultative Committee (Condition A20);
- Revision of Strategies, Plans and Programs (Condition C2);
- Staging, Combining and Updating Strategies, Plans or Programs (Condition C3, C4, C5 & C6);
- Notification of Department (Condition C7);
- Submission of Final Layout Plans (Condition C8);
- Submission of Works as Executed Plans (Condition C9);
- Incident Notification (Condition C10);
- Non-compliance Notification (Conditions C11, C12 & C13); and
- Access to Information (Condition C16).

1.5 Statement of Commitments

The Proponent's Statement of Commitments that relate to traffic and transport are as follows:

- Prior to the commencement of construction, a TMP will be prepared for the Project in consultation with Transport for NSW and the relevant Councils.
- Prior to transport, the over-size / over-mass (OSOM) transport route and port of entry will be confirmed by the construction contractor. Following which, the TMP will be updated and accompanied with a route survey for approval from the DPE.
- Road dilapidation surveys will be undertaken in accordance with guidelines and standards established by Austroads of the designated vehicle route prior to construction and decommissioning works and post-construction and decommissioning. Following completion of construction and decommissioning works, any development related damage identified in post dilapidation survey will be rehabilitated / repaired.
- Road infrastructure upgrade works will be undertaken to allow heavy vehicle and OSOM movements along the transport routes, subject to final Port selection and transport route identification. Road upgrades will be undertaken in consultation with relevant road authorities and permits / approvals obtained under the *Roads Act 1993*.
- During peak traffic generation activities and movement of OSOM vehicles, escort vehicles and appropriate traffic management will be adopted to ensure safe passage from the public road network onto the Project site. Relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles will be sought by the construction contractor.
- The Twelve Mile Road intersection with Goolma Road will be upgraded prior to the commencement of construction generally in accordance with the drawing set entitled *"TMR / Goolma Road Intersection Preliminary Upgrade Design Version 2".*
- Twelve Mile Road will be upgraded prior to the commencement of construction generally in accordance with the drawing included in the EIS as *Appendix N* (which are subject to detailed investigations and design).
- The parts of Ilgingery and Uungula Roads within the Development Corridor will be upgraded and maintained generally in accordance with *Table 1* of the DRC submission "Uungula Wind Farm Dubbo Regional Council Road Upgrades / Rectification Works": "Construct intersections for safe exit and entry movements and to provide adequate wind farm component access.".
- Access to the Project site by all OSOM, heavy and light vehicles travelling from Goolma Road will only be via the western end of Twelve Mile Road.

1.6 Project Environmental Management Strategy

This TMP has been written to complement other management plans and has been developed as a component of, and must be read in conjunction with, the Project's Environmental Management Strategy (EMS).

The EMS has been prepared to meet the requirements of Condition C1 of the Development Consent. Condition C1 requires the EMS to provide the strategic framework for environmental management of the Project. Accordingly, the EMS details how the Project will comply with the development consent requirements including but not limited to:

Management Plan review and revision (Condition C2);

- Incident notification (Condition C10);
- Non-compliance notification (Conditions C11, C12 & C13); and
- Access to Management Plans (Condition C16);
- Community Consultative Committee (Condition A20);
- Notification of Department (Condition C7);
- Submission of Final Layout Plans (Condition C8);
- Submission of Works as Executed Plans (Condition C9); and
- Access to information (Condition C16).

1.7 Traffic Management Plan Structure

The remainder of this TMP is presented as follows:

- **Chapter 2** provides an overview of the Project including typical activities during the construction and decommissioning phases.
- Chapter 3 describes the designated transport routes for standard and OSOM vehicles.
- Chapter 4 describes the road upgrade works required for the construction phase.
- **Chapter 5** discusses road maintenance and dilapidation reporting.
- Chapter 6 summarises assorted traffic management measures including management of potential conflicts and driver conduct.
- Chapter 7 provides miscellaneous information related to the Project's TMP.

2. **Project Description**

2.1 Project Background

Uungula Wind Farm (the 'Project') is proposed to be located on rural land between Wellington and Twelve Mile in New South Wales (NSW). The Project site is located within Dubbo Regional Council Local Government Area (LGA) to the west of Cudgegong River.

Development Consent (SSD 6687) was granted by the NSW Department of Planning, and Environment (DPE) on 7 May 2021. The Development Consent was modified by the Department on 21 April 2022 (Modification 1).

This TMP addresses the requirements of the Development Consent.

2.2 Overview of the Development

The Project generally consists of the installation, operation, maintenance and decommissioning of up to 93 wind turbine generators (WTGs) up to 250 m in height, an energy storage facility (ESF), ancillary infrastructure and temporary facilities. It is estimated to have an installed generating capacity of approximately 400 MW.

The Project will connect to the 330 kV transmission line running approximately east-west within the northern part of the Project site.

The approved layout of the Uungula Wind Farm Project is shown in *Appendix A: Proposed Wind Farm Layout* and described in the Project's EMS document.

Other features of the Project include the following:

- Operation and maintenance facility incorporating a control room and equipment storage.
- Temporary concrete batching plants and construction facilities.
- Access tracks required for each wind turbine and the related ancillary facilities above.
- Minor upgrades to local roads, as required for the delivery of the wind turbines.
- Up to six temporary meteorological masts and up to six permanent monitoring masts for wind speed verification, weather and general monitoring purposes.

2.3 Construction and Decommissioning

It is anticipated that the Project will take approximately 24 to 30 months to construct and will be operational over an initial term of approximately 30 years. The Project could extend for a longer term depending on market and commercial circumstances.

Decommissioning and restoration will occur at the end of the operational life of the Project.

Construction activities will generally be split into three stages:

Pre-construction Activities

Public road network upgrades to enable site access for wind farm construction vehicles.

- Building / road dilapidation surveys.
- Investigative drilling, excavation or salvage.
- Minor clearing or relocation of native vegetation.
- Establishing temporary site offices (in locations meeting the criteria identified in the conditions of this approval).
- Installation of environmental impact mitigation measures, fencing, enabling works, etc.
- Minor access roads and minor adjustments to services / utilities, etc.

Wind Farm Construction

- On-site civil works for internal access roads, crane pads, lay-down areas, wind turbine footings and cable trenching.
- Delivery and installation of OSOM components / materials.
- Transport of non-OSOM wind turbine infrastructure to the Project site.
- Installation of wind turbines on site using cranes.
- Construction of electrical sub-stations.
- Construction of site control room and operations and maintenance facilities.
- Construction of electrical transmission lines.
- Rehabilitation of disturbed areas.

Decommissioning

- Similar staging as construction but in reverse and across a shorter timeframe.
- Site restoration activities.

3. Transport Routes

Condition Number	Condition
B27	 Designated Heavy and Over-Dimensional Vehicle Routes All over-dimensional vehicles associated with the development must travel to and from the site via Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road and the approved site access point off Twelve Mile Road, unless the Planning Secretary agrees otherwise. Notes: The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network. To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for over-dimensional access unless the
B28	 Planning Secretary agrees otherwise. All heavy and light vehicles associated with the development must travel to and from the site via Twelve Mile Road (west) and the approved site access point off Twelve Mile Road, unless the Planning Secretary agrees otherwise. Note: To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road east of the Planning Secretary agrees otherwise.
B29	 Uungula Road, Wuuluman Road and Ilgingery Road must only be used by over-dimensional, heavy and light vehicles at the following locations to allow access between portions of the site: (a) the secondary intersection on Uungula Road; (b) the four secondary intersections on Ilgingery Road; and (c) between secondary intersection (A) and secondary intersection (C) on Ilgingery Road. In addition, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road and Ilgingery Road for the purposes of upgrading the intersections in B29(a) and B29(b) above.

3.1 Major Road Network

Golden Highway

Golden Highway is a State Highway (SH84), which forms an arterial route from New England Highway to the Newell Highway. Between Dunedoo and Elong, Golden Highway is generally a two-lane, undivided road with varying shoulder widths and formations. The pavement condition is generally good, commensurate with its status as a State Highway and its suitability as a route for larger heavy vehicles, eg. B-doubles.

The general road environment can be described as flat to gently rolling terrain with some moderate curved alignments requiring lower advisory speeds within the background 100 km/h speed zone. The road environment and alignment are generally conducive to OSOM vehicle transport with any specific OSOM vehicle transport issues to be covered under the National Heavy Vehicle Regulator (NHVR) permit system.

Mitchell Highway

Mitchell Highway is a State Highway (SH7) and only an approximate 2.5 km section (north of Wellington) will be required for OSOM transport between Saxa Road in the north and Goolma Road in the south.

Approaching Wellington, Mitchell Highway is a two-lane, undivided road with relatively wide shoulder widths and formations. The speed zoning is 80 km/h south of Saxa Road and reduces to 60 km/h prior to Goolma Road. The pavement condition is generally good, commensurate with its status as a State Highway and its suitability as a route for larger heavy vehicles, eg. B-doubles.

The general road environment can be described as flat terrain with some gentle curves. The road environment and alignment are generally conducive to OSOM vehicle transport with any specific OSOM vehicle transport issues to be covered under the NHVR permit system.

3.2 Minor Road Network

Saxa Road

Saxa Road (formerly known as Cobbora Road) is a Regional Road (MR 353), forming a regional connection between Mitchell Highway at Wellington and the Golden Highway at Elong. It is a single carriageway, two-lane road with a 100 km/h speed zone.

Saxa Road is relatively consistent in condition and standard along its length. For the majority of its length, it is generally some 6 m wide incorporating two travel lanes and varying shoulder conditions. Centreline marking is generally provided with edge-line marking also available along wider carriageway sections. The pavement is asphalt, which is generally in good / passable condition.

The general road environment can be described as relatively flat with sections of gently rolling terrain and some gentle curved alignments requiring lower advisory speeds within the background 100 km/h speed zone.

Saxa Road is a major link to the local community as it is the main access for the population in the area. The road is a B-Double route and there is one school bus that completes two runs per day servicing schools in Wellington.

Goolma Road

Only approximately 3.2 km of Goolma Road (at its western end) will be required for OSOM transport between Mitchell Highway in the west and Twelve Mile Road in the east. Goolma Road is a State Road (MR 233) with a single carriageway, two-lane road and a 100 km/h speed zone.

Goolma Road varies in condition and standard along the relevant length at its western end. It is generally some 7 m to 8 m wide incorporating two travel lanes and varying shoulder conditions. Centreline marking is generally provided with edgeline marking also available. While pavement conditions vary, in general they are average to good with some below average sections characterised by potholes, rutting and soft shoulder areas.

The general road environment at Goolma Road's relevant, western end can be described as relatively flat terrain with some moderate curved alignments requiring lower advisory speeds within the background 100 km/h speed zone. Goolma Road is a B-Double route and there is also a school bus route that runs along its length.

Twelve Mile Road

At its western end, Twelve Mile Road is sealed with an approximate pavement width of 5 m to 6 m and a generally soft shoulder area. The road width generally reduces east of Uungula Road although there are sections of similar standard to those at the western end.

The road pavement condition is considered to be above average although there are some minor sections with rutting and potholes as well as previous patching works.

The road is generally not line-marked except for sporadic centreline marking through curved sections of the road to provide vehicle guidance. Guide posts are also provided at irregular intervals for guidance.

The general road environment can be described as flat to gently rolling terrain and there is no speed limit signage. There is a school bus route along this section of Twelve Mile Road.

The road is unsealed from approximately 22.7 km east of Goolma Road. The unsealed section is generally of average condition and up to approximately 5 m wide. East of Uamby Road, Twelve Mile Road narrows considerably and only provides 3 m to 4 m width.

Uungula Road / Wuuluman Road/ Ilgingery Road

Uungula Road, Wuuluman Road and Ilgingery Road are unclassified local roads. Uungula Road starts at Twelve Mile Road in the north and continues in an easterly direction, through the Project site through farming land to Guroba Road which is located east of the Project site.

A short section of Wuuluman Road (approximately 800 metres in length) connects Uungula Road to Ilgingery Road.

From its junction with Wuuluman Road, Ilgingery Road continues to the south and terminates at the state water boundary of Lake Burrendong.

In general, the Uungula Road / Wuuluman Road / Ilgingery Road routes have relatively consistent conditions and standards along its length. The pavement is unsealed with a varying carriageway width of up to approximately 4 m, although there are numerous sections of narrower carriageway width and poor pavement, especially at the southern end. Although unsealed, the pavement conditions generally appear to be relatively stable although poor to average at best with substantial rutting, potholes and corrugations.

The general alignment is relatively flat to gently undulating with some smaller radius curves. There are some localised hilly sections also with relatively sharp crest alignments. The roads are currently used for large stock transport vehicles and other heavy vehicles during road maintenance works by Council.

3.3 Road Network Access During Road Upgrade works

In accordance with Condition B30 of the Development Consent, the road upgrades listed in Appendix 7 of the Development Consent must be completed prior to commencing construction of the Wind Farm.

In accordance with Condition B29 of the Development Consent, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road, and Ilgingery Road for the purposes of upgrading the intersections noted in Condition B29(a) and B29(b), being:

• The secondary intersection on Uungula Road; and

• The four secondary intersections on Ilgingery Road.

Figure 4.1 highlights the sections of Uungula Road, Wuuluman Road and Ilgingery Road that may be used for the purpose of undertaking the road intersection upgrades on Uungula Road and Ilgingery Road.

The road upgrades are described in Section 4 of this TMP.

3.4 Road Network Access During Construction and Operation

3.4.1 Site Access Points

Once construction of the Wind Farm commences, the Project site will be accessed via the Primary Project site entry off Twelve Mile Road (west), approximately 17 km east of Wellington. This will be the Primary access point for OSOM vehicles and heavy and light vehicles.

Additionally, the secondary intersections and cross-over locations along Uungula and Ilgingery Roads may be used as part of the internal site road network during wind farm construction and operation. These secondary access points will facilitate the internal site road network, which will allow access within the Project site (required for construction and operational vehicles) and linking the public road network with the wind turbine locations throughout the Project site.

For the avoidance of doubt, during Wind Farm construction, all Wind Farm traffic will first gain entry to the Project site via the Primary Access point on Twelve Mile Road, prior to using Uungula Road and Ilgingery Road to access between portions of the site.

3.4.2 Road Network Access – Transport Routes

Transport of materials, components and equipment will travel along the major road network surrounding the site, namely Golden Highway and Mitchell Highway. This will include all OSOM loads.

All routes from the port of entry at Newcastle¹ to the Project site areas are via National Routes or State Highways to Saxa Road and then Goolma Road. The major road network provides a high standard of road infrastructure with relatively wide carriageways and road formations, pavement line marking and controlled access to side roads. In general, it has 100 km/h speed limits and subject to statutory permit conditions, the road network can readily accommodate OSOM vehicles.

Components of the turbines (including nacelles, drive-trains, hubs, blades and tower sections) that are to be imported to Australia will arrive at the Port of Newcastle. The designated heavy vehicle and OSOM transport route to site is summarised as follows (refer to *Appendix B: Designated OSOM Transport Route*):

 Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road (to primary site access point).

It is noted that for wider loads (exceeding 6.5 m) and higher loads (exceeding 5.6 m), there is a detour route around Denman Bridge available via Bengalla and Wybong Roads. This

¹ The port of entry is still to be determined, however an indicative transport route study (Rex J Andrews "Route Study – Uungula Wind Farm Ex Port of Newcastle", May 2020) has been undertaken assuming entry via Newcastle Port

detour route has been included in the Transport Study prepared by Rex J Andrews, May 2020.

Transport of other construction materials such as gravel, concrete, steel, cement, water, construction plant and other miscellaneous equipment will be transported to the site via the above designated transport route and along the applicable public road network for the class of vehicle used.

Condition B28 of the Development Consent does not allow the use of Twelve Mile Road east of the approved primary site access point for heavy or light vehicle access unless the Planning Secretary agrees otherwise. In this regard, only those vehicles that are legitimate users of the minor road network east of the primary Project site entry (ie. for travel along Twelve Mile Road to the east) and that have been agreed to by the Planning Secretary will be permitted to travel along this route to access the primary Project site entry.

Light vehicles are able to use other surrounding major and local road networks west of the approved site access point and will not be constrained to the designated transport route approved for OSOM vehicles.

It is likely that light vehicles associated with construction will include workers travelling to and from the from the centres of Wellington and Dubbo. Light vehicles travelling from Wellington will use Goolma Road and Twelve Mile Road. Light vehicles travelling from Dubbo will use Mitchell Highway, Goolma Road and Twelve Mile Road.

The workforce for the site will be encouraged to arrive by site using car-pooling and ride-sharing from nearby centres to minimise construction and operational staff trips (refer to Section 6.11).



EGEND	Residences: Involved Non-involved Existing Unsealed Road	Wind Turbine Generator (WTG) Site Compound Substation Energy Storage Facility Existing Powerlines: 132kV Proposed powerlines:	UUNGULA WIND FARM PTY LTD				
	Existing Sealed Road Development Corridor Project Site Access tracks						
▼ ⊕	Primary Project Site entry Secondary intersections Waterway Crossing	Overhead (high voltage) Overhead (medium to low voltage) Underground (medium to low voltage)	DATE 20/04/2022	SCALE 1:48000	DWG NO UWF-146	REV C	VER 1
SCALE BAR 0		5 km	DRAWN BY B KRONENBERG	CHECKED BY M FLOWER	SHEET 1 OF 1	јов NO 110247	SIZE A3

Figure 3.1: Site Access Locations

4. Road Upgrades and Temporary Modifications

Condition Number	Condition
B29	 Uungula Road, Wuuluman Road and Ilgingery Road must only be used by over-dimensional, heavy and light vehicles at the following locations to allow access between portions of the site: (a) the secondary intersection on Uungula Road; (b) the four secondary intersections on Ilgingery Road; and (c) between secondary intersection (A) and secondary intersection (C) on Ilgingery Road. In addition, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road and Ilgingery Road for the purposes of upgrading the intersections in B29(a) and B29(b) above.
B30	Road Upgrades Unless the Planning Secretary agrees otherwise, prior to commencing construction the Applicant must implement the required road upgrades identified in the Development Consent, 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.

The required road infrastructure upgrades fall into two categories – those that were specified in the Development Consent (*Appendix 7: Schedule of Road Upgrades*) and others (including temporary modifications and proposed traffic controls) identified by an indicative Route Study² prepared for the Project. The road upgrade works and temporary modification works are detailed in *Table 4.1* following. The full extent of the temporary modifications are subject to final assessment and confirmation of the selected Port.

The road upgrade designs will be further developed and finalised in consultation with the relevant Roads Authorities. The appropriate authorisations and permits will be obtained from the Roads Authority prior to commencing the road upgrade work.

Road Section / Intersection	Start to End	Length (km)	Upgrade	Timing
Temporary Modif	fications (from indicat	ive Route	Study - Rex J Andrews, 2020)	
Mayfield #4 berth and Selwyn Street intersection	Mayfield	-	Relocate fencing on both sides and construct a hardstand area at the intersection (exit of the corner).	Prior to commencing the use of Mayfield #4 berth and Selwyn Street intersection for any OSOM vehicle transport.
Selwyn Street / George Street intersection	Mayfield	-	Construct a hardstand area and make a sign removable on the inside of the corner.	Prior to commencing the use of the Selwyn Street / George Street intersection for any OSOM transport.

Table 4.1: Road Infrastructure Upgrades & Temporary Modifications

² Rex J Andrews "Route Study - Uungula Wind Farm Ex Port of Newcastle", May 2020

Road Section / Intersection	Start to End	Length (km)	Upgrade	Timing
George Street / Industrial Drive intersection	Mayfield	-	Construct a hardstand area on the southern side of the intersection and relocate a traffic signal.	Prior to commencing the use of the George Street / Industrial Drive intersection for any OSOM transport.
Industrial Drive / Maitland Road intersection	Mayfield West	-	Concrete median strip will need to be reduced in height and re-profiled with a gentle slope.	Prior to commencing the use of the Industrial Drive / Maitland Road intersection for any OSOM transport.
New England Highway / Golden Highway intersection	Whittingham	-	Amend a number of signs to make them removable.	Prior to commencing the use of the New England Hwy / Golden Highway intersection for any OSOM transport.
Golden Highway at Pagan Street (through Jerrys Plains township)	Jerrys Plains	-	Some signs will need to be made removable and some hardstand added on the northern side of the T- junction. Additionally, some trees will need to be trimmed / removed.	Prior to commencing the use of Golden Highway for any OSOM vehicle transport.
Golden Highway / Denman Road intersection	Denman	-	Hardstands will be required on the outside approach and departure sides of the left-turn at the junction, some signs made removable and some trees will need to be trimmed / removed inside an adjacent property.	Prior to commencing the use of the Golden Highway / Denman Road intersection for any OSOM transport.
Golden Highway intersection with Wargundy Street	Dunedoo	-	A no parking area is required on the exit of the corner.	Prior to commencing the use of the Golden Highway / Wargundy intersection for any OSOM transport.
Golden Highway onto Saxa Road	Elong Elong	-	Hardstand is required on both sides of the road. Drainage works are required on the outside of the corner. Some slide markers will need to be relocated, and 2 signs made removeable.	Prior to commencing the use of the Golden Highway / Saxa Road intersection for any OSOM transport.
Saxa Road onto the Mitchell Highway	Wellington	-	1 Giveway sign will need to be made removeable, and a hardstand added to the inside of the corner.	Prior to commencing the use of the Golden Highway / Mitchell Highway intersection for any OSOM transport.

Road Section / Intersection	Start to End	Length (km)	Upgrade	Timing
Mitchell Hwy / Goolma Road intersection	Wellington	-	Hardstand will be required on the outside of the corner, several signs are to be relocated or made removable and two light poles will need to be relocated.	Prior to commencing the use of the Mitchell Highway / Goolma Road intersection for any OSOM transport.
Road Upgrade W	orks (from Appendix	7, Develop	oment Consent)	
Goolma Road / Twelve Mile Rd intersection (refer to ① in <i>Figure</i> <i>4.1</i> following)	Wellington	-	Construct an upgraded intersection arrangement (incorporating a channelised right-turn lane and an auxiliary left-turn lane treatment) in accordance with the agreed Roads Authority design and relevant road design guidelines and standards – refer to <i>Appendix</i> 7 of the Development Consent (<i>pages 33 and 34</i>). Permanently remove and close the existing intersection.	During pre-construction works, prior to the commencement of Project construction generally.
Twelve Mile Rd (refer to ② in <i>Figure 4.1</i> following)	Wellington to Uungula	13.8	Reconstruct the full length of pavement to the horizontal and vertical alignment generally in accordance with relevant road design guidelines and standards and in compliance with TfNSW's 'Roadworks specifications – design and construct' (TfNSW 2020) or its latest version – refer to Appendix N of the EIS.	During pre-construction works, prior to the commencement of Project construction generally.
Twelve Mile Rd / Primary site access intersection (refer to ③ in <i>Figure</i> <i>4.1</i> following)	Uungula / Wuuluman	-	Construct intersection in accordance with relevant road design guidelines and standards and requirements for safe entry / exit movements and suitable wind farm component transport. Refer Appendix N of the EIS.	During pre-construction works, prior to the commencement of Project construction generally.

Road Section / Intersection	Start to End	Length (km)	Upgrade	Timing
Uungula Road / Secondary site access intersection / cross-over (refer to ④ in <i>Figure</i> 4.1 following)	Uungula / Wuuluman	-	Construct intersection / cross- over in accordance with relevant road design guidelines and standards and requirements for safe access movements and suitable wind farm component transport.	Prior to the use of any traffic associated with Project construction.
Ilgingery Road / Secondary site access intersections / cross-overs (refer to ⑤ in <i>Figure</i> <i>4.1</i> following)	Uungula / Wuuluman	-	Construct intersections / cross-overs in accordance with relevant road design guidelines and standards and requirements for safe access movements and suitable wind farm component transport.	Prior to the use of any traffic associated with Project construction.
Ilgingery Road approximately 3.89 km from Wuuluman Road (refer to © in <i>Figure 4.1</i> following)	Uungula / Wuuluman	-	Extend stock grid approach seal to 20 m x 4.5 m each side of grid with a two-coat flush seal.	Prior to the use of any traffic associated with Project construction.

The road upgrade works detailed in the Development Consent are shown in *Figure 4.1* following. Figure 4.1 highlights (in yellow) the sections of Uungula Road, Wuuluman Road and Ilgingery Road that may be used for the purpose of accessing and undertaking the road intersection upgrades on Uungula Road and Ilgingery Road.

The staging of upgrade works will be planned to minimise the impacts on the major and minor road networks and facilitate cost effective construction phases.

In the event of a dispute in relation to road upgrades either party may refer the matter to the DPE Secretary for resolution. Advice may also be sought if mediation is considered to be required to resolve the dispute.

Temporary road modification works have been identified by an indicative 'Route Study' based on assumptions of specific OSOM vehicles to be used and the use of Newcastle Port as the entry port.

Once OSOM deliveries have been completed, road modifications will either be left in place (subject to agreement from the relevant roads authority) or removed and/or reinstated to ensure the intended swept path and traffic control devices of the road for typical usage are maintained, ie. to maintain safe operations. This could include reinstatement of temporary in-fill areas, landscaping works and relocation of road furniture, signage, etc.



Existing Roads:	 Primary Project Site entry Secondary intersections 	Existing powerlines:		GULA WIND FARM PT	Y LTD		CWP
Existing Sealed Road Proposed Transport Route: Indicative OSOM Route	Residence Project Site Wind Turbine Generator	330kV Proposed powerlines: Overhead (high voltage)	TITLE	Trans	port Map 1		
Project Access Route Wind Farm Access tracks	Site Compound Substation	Underground (medium to low voltage) Overhead (medium to low voltage)	DATE 20/04/2022	SCALE 1:70000	DWG NO UWF-129	REV D	VER 2
Pre-construction Minor Works	Energy Storage Facility		DRAWN BY B KRONENBERG	CHECKED BY M FLOWER	SHEET 1 OF 1	JOB NO 110247	SIZE A3

Figure 4.1: Development Consent Road Upgrades

UWF-02-PLN-TMP-20220630-003

Uungula Wind Farm Project Traffic Management Plan

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5. Road Maintenance / Dilapidation Reports

Condition Number	Condition
B31	Road Maintenance
	The Applicant must:
	(a) undertake an independent dilapidation survey to assess the:
	 existing condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), prior to construction, upgrading or decommissioning works; and
	 condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29): within 1 month of the completion of any construction, upgrading or decommissioning works;
	 on an annual basis during construction works; rehabilitate and/or make good any development-related damage.
	(b) repair Twelve Mile Road, on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), if dilapidation surveys identify that the road has been damaged during construction, upgrading or decommissioning works;
	in consultation with the relevant roads authority, to the satisfaction of the Planning Secretary.

5.1 Dilapidation Reporting

5.1.1 Pre and post-construction - dilapidation reporting

The construction contractor shall engage a suitably qualified person to prepare a preconstruction dilapidation report prior to the commencement of construction and a postconstruction dilapidation report at the completion of construction works. The dilapidation survey will be carried out in accordance with the guidelines and standards established by Austroads and in accordance with Development Consent *Condition B31*.

The methodology will include:

- Stage 1: Pre-construction inspection, which records the existing condition of the relevant road pavements and forms the basis for future comparison.
- Stage 2: Annual contractor inspections throughout the construction works period to identify any project-related damage that may require repair.
- Stage 3: Post-construction inspection to record any observable change in the road pavement condition.
- Stage 4: Ongoing monitoring during warranty and defects periods for repair work.

The extent of the dilapidation surveys for regular construction traffic is proposed along Twelve Mile Road on the transport route and the sections of Uungula Rd, Wuuluman Rd and Ilgingery Rd.

The dilapidation report is required to be provided to TfNSW and Dubbo Regional Council for consultation and approved by the Planning Secretary prior to construction-related transport occurring on public roads, especially the local road network.

The inspection method implemented to determine the condition of the local roads proposed to be used for transport and the survey methodology is detailed as follows:

- Pavement condition a survey will be carried out using a video drive through. Each travel lane will be surveyed. A desktop inspection will be carried out of the video to locate any existing defects.
- Bridge and culvert condition structural inspection and reporting.
- Structural condition of footpaths, buildings and other utilities in the vicinity of the Project – identification of existing defects.
- Signs surveyed using the video from the pavement survey. This will identify any faded, damaged or out of specification minor signs.

Reporting will include street location, identifying features, photos and condition information for existing defects. This information will be collated and provided to Council prior to the use of the local road network for transport activities.

The following information will be provided to TfNSW and Council(s) during consultation :

- Videos of public roads.
- Dilapidation reports.
- Details of any defects or damage identified during the site inspection to be recorded in a register and presented in a spreadsheet format.

The reporting will document the review record / comment form from relevant road authorities. Once prepared and reviewed by the relevant road authorities, the dilapidation reports are to be submitted for the approval of the DPE Secretary.

On an annual basis during construction and within one month of the completion of all construction activities, a report will be prepared to assess any damage to the road that may have resulted from the construction of the Project. The same methodology outlined in preconstruction will be implemented to undertake the survey.

Any damage resulting from construction traffic, except that resulting from normal wear and tear, would be repaired to pre-existing conditions. The proponent would outline the proposed works, design criteria, location and scheduling of the work for approval by the relevant road authorities. Alternatively, a monetary contribution amount would be negotiated. In the event of a dispute between the proponent and Council or TfNSW on repair techniques, designs and the like, the matter would be referred to the DPE Secretary for resolution.

5.1.2 Decommissioning – dilapidation reporting

Decommissioning of the wind farm would occur after approximately 30 years of operation. Dilapidation surveys will be undertaken prior to the commencement of decommissioning activities and within one month after the completion of decommissioning activities.

In accordance with Condition C2 of the Development Consent, the TMP will be updated to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning on the site. At this time, the TMP will be updated to detail the extent and scope of the pre and-post decommissioning phase dilapidation surveys, which will be developed to suit the local and regional traffic and road conditions/ requirements at the time. The decommissioning phase dilapidation survey requirements will be developed in consultation with the relevant road authorities.

5.2 Road Maintenance

Any damage caused by the Project works will be raised to the relevant Council representative to seek work permit approvals to allow for remediation works. Repairs and damage resulting from construction traffic will be undertaken as soon as practicable after the damage is identified and within a response time deemed (in conjunction with Council and/or the relevant roads authority) as reasonable. Urgent repairs, which threaten the safety of road users would be undertaken immediately in consultation with TfNSW and Council.

Repair work undertaken before the post construction dilapidation report would be in accordance with restoration requirements found in Road Opening Permit/s. Photos will be taken and placed on record after repairs are undertaken. The Council and TfNSW representative/s would be invited to inspect works and provide sign-off.

Any repairs identified during the annual and post construction dilapidation survey will be undertaken in consultation with the relevant roads authority and to the satisfaction of the Planning Secretary.

6. Traffic Management Measures

Condition Number	Condition
B32	Unformed Crown Roads The Applicant must ensure any unformed Crown road reserves affected by the development
	are maintained for future use, unless otherwise agreed with the DPIE Crown Lands.
B33	Traffic Management Plan
	Prior to commencing road upgrades, the Applicant must prepare a Traffic Management Plan for the development in consultation with TfNSW and Council, and to the satisfaction of the Planning Secretary. This plan must include:
	(a) details of the transport route to be used for all development-related traffic;
	(b) details of the road upgrade works required by condition B30 of Schedule 2 of this consent;
	 (c) details of the measures that would be implemented to: minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including:
	 details of the dilapidation surveys required by Condition B31; temporary traffic controls, including detours and signage; notifying the local community about development-related traffic impacts; procedures for receiving and addressing complaints from the community about development-related traffic; minimising potential cumulative traffic impacts with other State significant development projects in the area; minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queuing on the public road network; implementing measures to minimise development-related traffic on the public road network outside of standard construction hours; minimising dirt tracked onto the public road network from development-related traffic; details of the employee shuttle bus service (if proposed), including pick-up and dropoff points and associated parking arrangements for construction workers, and measures to encourage employee use of this service; encouraging car-pooling or ride sharing by employees; scheduling of haulage vehicle movements to minimise convoy length or platoons; responding to local climate conditions that may affect road safety such as fog, dust, wet weather and flooding; ensuring loaded vehicles entering or leaving the site have their loads covered or contained; responding to any emergency repair or maintenance requirements; a traffic management. comply with the traffic conditions in this consent;
	 (d) include a drivers code of conduct that addresses: travelling speeds;
	 procedures to ensure that drivers to and from the development adhere to the designated over-dimensional and heavy vehicle routes; procedures to ensure that drivers to and from the development implement safe driving practices; and include a detailed program to monitor and report on the effectiveness of these measures and the code of conduct.
	Following the Planning Secretary's approval, the Applicant must implement the Traffic Management Plan.

6.1 Crown Road Reserves

The project has been designed and will be constructed to ensure that the future use of any unformed Crown Road Reserve will not be compromised by the development.

6.2 Temporary Traffic Controls

Detailed TGSs and vehicle movement plans (VMPs) will be prepared by the construction contractor in accordance with the TCWS manual and *AS* 1742.3.³ Plans would be prepared for the use of traffic control personnel, including spotters and/or signage and devices, traffic controllers, fencing, lighting and safety barriers on public roads.

Information and advance warning signage will be installed at the work sites and the surrounding road network and will include signage for:

- protection of workers;
- provision of adequate warning of changes in road surface condition and the presence of personnel or plant engaged in work on the road; and
- adequate instruction of road users and their safe guidance through, around or past work site(s).

The potential traffic control measures to be used during construction work will include:

- single-lane alternate (stop / slow) operations which may result in short-term delays;
- transport haulage operations and OSOM vehicle movements, which may impact other vehicles in the vicinity of haulage operations; and
- short-term lane closures with reduced speed limits, which may result in short-term delays.

Notifications would be prepared for the local community as outlined is *Section 6.3 of this TMP*.

6.2.1 Traffic Guidance Schemes (TGSs)

Detailed TGSs will be prepared by the construction contractor with works that are anticipated to require a TGS summarised as follows:

- Intersection upgrade of Goolma Road / Twelve Mile Road (refer to details in *Table 4.1* above).
- Intersection treatment works at the primary site access point off Twelve Mile Road as well as at the secondary site access intersections / cross-overs along Uungula Road and Ilgingery Road (refer to details in *Table 4.1* above).
- Modifications works for OSOM deliveries, especially along the local road network (refer to details in *Table 4.1* above).
- Traffic control for OSOM deliveries (where large vehicles need to execute problematic manoeuvres on public roads).

³ TfNSW "Traffic Control at Work Sites, Technical Manual – Issue 6.0" (TCWS) and Standards Australia "AS 1742.3 – 2009: Manual of uniform traffic control devices, Part 3: Traffic control for works on roads", 2009

6.2.2 Traffic Control Devices and Measures

On completion of short-term traffic control (one shift or less), all temporary traffic control signage and devices associated with the works / shift will be removed or covered. Any long-term traffic control devices and measures would remain in place until no longer required and then would also be removed.

Flashing arrow signs (vehicle or trailer mounted units) may also be used to protect the workforce and provide driver guidance during the installation, or removal of lane closures or during the initial implementation of traffic route alterations.

Portable variable message signs (VMS) may be deployed during the works to inform motorists of any significant changes to the road network.

Consideration will be given to installing truck mounted attenuators (TMAs) on vehicles to be used:

- to effect lane closures on multi-lane section of roads; and
- as shadow vehicles on mobile works as a device for traffic management and to protect workers.

Temporary speed zones will be implemented during road works to assist in controlling the speed of traffic through roadwork sites. Any reduced road speed zones would be implemented during works on public roads as per the TCWS manual and following approval from TfNSW. All non-applicable or redundant speed limit signs will be securely covered or removed (not turned around) during any period for which roadwork speed limits apply. Appropriate records will be kept (for seven years) of the locations, dates and times that road work speed limits are in operation.

6.2.3 Construction Inspections and Monitoring

During construction, the site will be monitored by the site supervisor. Signage, delineation and pavement markings that impact on public road users will be monitored daily during site operating hours (as per the TCWS manual guidelines).

Typically, the following monitoring will occur during construction:

- Inspection and maintenance monitoring for the local road access network to ensure road conditions are maintained in a safe state.
- Monitoring of internal access tracks to ensure safe access.
- Additional traffic monitoring may be undertaken in response to complaints or incidents regarding traffic.
- Inspection of traffic control in accordance with the TCWS manual including:
 - Daily pre-start and pre-close down inspections of short-term traffic control;
 - Weekly inspections of long-term traffic control;
 - Night inspections of long-term traffic control; and
 - Pre-opening inspections of traffic switches.

Records including TGSs and Road Occupancy Licences (ROL) implemented for pedestrian management, lane closures, etc., will be maintained on site. Any changes required to the traffic control set up will be authorised by a holder of an TfNSW "*Prepare a Work Zone Traffic Management Plan*" or equivalent.

6.3 Local Community Notification

Community consultation in relation to traffic and access will include on-going consultation with relevant stakeholders including, local landholders, emergency services, business owners, other major projects in the area and school bus companies.

A Community Consultative Committee (CCC) is to be established in accordance with *Condition A20* of the Development Consent. The CCC is to be comprised of community members and stakeholders. The CCC will be regularly advised of transport-related construction details including traffic delays, detours and other traffic impacts.

Liaison activities may include:

- notifications, prior to commencement of any significant works, to local residents, local newspapers, and on the project website;
- notifications on a case-by-case basis as construction progresses, including via the project website, shop front, local councils, local residents, newsletters and the Community Consultative Committee; and
- a dedicated telephone contacts list to enable any issues or concerns to be rapidly identified and addressed.

The following measures would be undertaken where the works impact on the travelling public.

- Motoring public will be forewarned of any changes, including road closures, road changes and long-term lane closures well in advance using appropriate traffic control signage,
- VMS would be used in advance of road closures, major detours and any expected traffic delays.
- For long-term vehicle detours, VMS would be used for advance warning and these may be replaced with static signs throughout the detour period.
- Pedestrians and cyclists will be provided with advance warning traffic control signs and static signage for long-term detours.
- Warning signs will be placed near each of the primary and secondary site access points to inform road users that construction traffic may be exiting and entering the site and ensure that the requirements of the TCWS manual are met.

Uungula Wind Farm Pty Ltd will be responsible for the dissemination of information to the community including affected residents, Dubbo Regional and Warrumbungle Shire Councils, drivers, businesses and the public.

Table 6.1 following provides the proposed communications to be implemented for this TMP.

Notification	Communication
Community notice	Major Project milestones Expected period of OSOM deliveries, (eg. between January 2023 and September 2023), to affected business owners, residents at significantly affected intersections, etc. Major traffic disruptions including detours, notice of expected traffic delays and the like
E-mail	General Project information Direct contact with individuals that require regular updates, eg. sensitive noise, traffic affected
Community information centre	General Project information Major Project milestones Construction access locations and designated OSOM and heavy vehicle transport routes
Internet	Major Project milestones Construction access locations and approved transport routes Expected period of OSOM deliveries, eg. between January 2023 and September 2023 Projected component deliveries Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc.
On site briefings	As required
Press Release	Major Project milestones Long-term road closures
Community Consultative Committee	Major Project milestones Expected period of OSOM deliveries, eg. between January 2023 and September 2023 Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc.
Variable message signs	Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc. As required by other approvals, eg. road occupancy licence
Advanced warning signage	Construction access locations

Table 6.1: Communication Notifications

Any enquiries, complaints and/or compliments will be directed to the Project information line, via e-mail or to the project office.

6.4 Receiving and Addressing Complaints

All community enquiries and complaints including those that are transport related, will be

recorded and responded to within 48 hours. A 24-hour telephone number will be established during the construction and operations period and postal / e-mail addresses will be established to receive complaints.

The complaints register will typically record the following:

- Date and time of complainant / enquiry.
- Type of communication (telephone, mail, meeting, e-mail, etc.).
- Name, address, contact telephone number of complainant / enquirer (if possible).
- Nature of the complaint and enquiry.
- Actions taken in response including timeframes for implementing the action.
- If no action was taken, the reason no action was taken.
- When and how the complainant was notified of the outcome.

If a complaint is traffic / transport related, then the following management measures will be considered including:

- Additional traffic controls (eg. signage, safety barriers, lighting).
- Additional on-site traffic management (eg. staffed traffic controllers).
- Alternate access route (where permitted in accordance with the development consent or otherwise seeking agreement from the Planning Secretary).
- Variation to construction hours (where permitted in accordance with the development consent or otherwise seeking agreement from the Planning Secretary).
- Failure to comply with the Driver's Code of Conduct (Section 6.26) may result in dismissal of specific operator(s) from the Project.
- If the complaint is related to road damage, the alleged road damage will be investigated and if it is found to be project-related, action will be implemented to rectify / repair the road damages.

6.5 Police and Emergency Services

The Police and Emergency Services including the NSW Rural Bushfire Service will be informed in a timely manner of relevant construction activities. Regular updates will be provided to emergency services through emails and face to face discussions. The updates may include such information as changes to traffic control (eg. short-term lane closures, stop / slow traffic control, etc.), changes to road conditions and worksite access locations.

If the New South Wales Police Service, Emergency Services, TfNSW and TMC are controlling an incident, the project team:

- Will comply with any instruction or direction by the New South Wales Police Service, Emergency Services, TfNSW and TMC in relation to any proposed full or partial road closure(s).
- Will not restrict, close, interfere with or obstruct the free flow of traffic on the existing highway or a local road contrary to the instructions of the New South Wales Police Service, Emergency Services, TfNSW and TMC.

 Shall act in accordance with any instructions issued by the New South Wales Police Service, Emergency Services, TfNSW and TMC including to suspend any of the construction contractor's work and to re-open the full or partial road closure(s).

Traffic will be maintained along existing public roads under traffic control throughout construction of the site accesses.

The arrangements during operation will result in no change to access public roads for emergency vehicles.

6.6 Cumulative Traffic Impacts

At present, there are a number of known nearby major developments or projects that may result in cumulative impacts in conjunction with the subject Uungula Wind Farm Project. These include the following projects:

- Liverpool Range Wind Farm (currently in pre-construction phase).
- Barneys Reef Wind Farm (currently in pre-approval stage).
- Tallawang Solar Farm (currently in pre-approval stage).
- Wellington Solar Farm (currently under construction).
- Wellington North Solar Farm (pre-construction phase).
- Maryvale Solar Farm (pre-construction phase).
- Mumbil Solar Farm (project development stage).

Mitigation measures to reduce the impact of shared OSOM and heavy vehicle transport routes includes, but is not limited to:

- Notifying other wind farm contractors of the projected Uungula Wind Farm Project OSOM deliveries to minimise any conflict between road transport movements along the common Golden Highway, Saxa Road and Goolma Road routes.
- Notifying other wind farm contractors of any changes to traffic control (eg. short-term lane closures, stop / slow traffic control, etc.), changes to road conditions and worksite access locations as a result of the Uungula Wind Farm Project.
- Regular meetings during concurrent construction activities between staff from all the wind farm / solar farm projects and their respective construction / transport contractors to discuss load deliveries and plans to minimise potential traffic congestion and conflicts.
- Independent scheduling of construction activities and deliveries for each project so that they do not overlap in order to minimise road transport movements.
- Region-wide traffic management.
- Shared road infrastructure upgrade works.
- Targeted dilapidation and reinstatement programs.
- Collective community consultation programs.

There are no known / planned road or other work sites adjacent or within the immediate area that would likely impact on the current traffic and transport network.

6.7 **Potential Conflict Management**

6.7.1 Public Transport / Rail Services

There are no regular public bus services in the vicinity of the Project site or the general Wellington / Wuuluman / Uungula region.

The nearest train station is located at Wellington, almost 20 km to the west. Rail services and the road network servicing this train station would be unaffected by the Project works because they are located away from the designated transport routes and/or roadwork sites associated with the Project.

6.7.2 Stock Movements

The designated OSOM and heavy vehicle transport route passes Traveling Stock Reserves (TSRs) on Saxa Road and Twelve Mile Road. The grazing industry uses TSRs for grazing stock. Local Land Services is responsible for the care, control and management of TSR land.

The movement of stock on a TSR or along a public road requires a permit. The permit allows stock to be moved over TSRs between sunrise and sunset and must be applied for at least two working days in advance. Approved stock warning signs must be displayed when stock is moving or grazing near or on a public road.

It is anticipated that the majority of OSOM movements will generally occur overnight and outside of the stock permit hours and therefore, minimise potential conflicts with stock movements.

Heavy vehicles movements will generally occur during standard construction hours and so there is potential for some overlap with stock movements at TSRs. To manage this, information on the location of TSRs would be provided to drivers within the Driver's Code of Conduct – refer to Section 6.16 Driver's Code of Conduct.

Light vehicle traffic may also travel on the roads during standard construction hours and may also encounter stock movements at TSRs.

To manage unavoidable conflicts with TSRs and travelling stock, drivers will be made aware of the potential to encounter livestock and requirement to adhere to safe driving practises at all times. The Driver's Code of Conduct(Section 6.16) includes a requirement for drivers to reduce their speed when encountering a stock warning sign.

6.7.3 School Buses

While there are no schools or school speed zones along the designated OSOM and heavy vehicle transport route, there are a number of school bus routes that run along Saxa Road, Goolma Road and Twelve Mile Road that could be impacted. These bus routes are operated by Ogden's Coaches.

Ogden's coaches were contacted to provide information about this TMP, to discuss some of the measures that would be implemented under the TMP to minimise potential conflict with school bus movements. A copy of the TMP was provided to Ogden's for review and comment. No feedback or response was provided by Ogden's.

The Ogden's Coaches website provides timetables for school bus routes in the area. All school bus routes which operate along Saxa Road, Goolma Road and Twelve Mile Road

were reviewed. In order to minimise interruption to the school bus routes, it is planned that OSOM deliveries would occur outside school hours as follows:

- No OSOM vehicles will travel along Saxa Road / Goolma Road / Twelve Mile Road between the hours of 7:30 am and 8:30 am on a school day.
- No OSOM loads will leave the site entrance between the hours of 2:30 pm and 4:30 pm.
- No OSOM loads will travel along Saxa Road / Goolma Road / Twelve Mile Road between the hours of 3:30 pm and 4:30 pm.

Assorted lay-by areas / rest stops along the designated OSOM and heavy vehicle transport route (Golden Highway) will be utilised to ensure OSOM vehicles do not restrict traffic flow during bus operation periods.

School bus operators will be notified of any planned works along school bus routes as detailed in *Section 6.3* above. Traffic management that restricts traffic flow along Saxa Road / Goolma Road / Twelve Mile Road would be avoided during the period that the school buses are operating along those roads.

Movements by heavy vehicles during the school drop-off and pick-up times (8:00 am to 9:30 am and 2:30 pm to 4:00 pm) on school days would be avoided where possible to prevent conflicts with school traffic and school buses. The Contractor will ensure appropriate notifications are provided in driver and sub-contractor inductions and the Driver's Code of Conduct.

6.7.4 Pedestrians and Cyclists

Some of the project construction works for the road upgrades and accesses would include the closure of some road shoulder areas. Even though cyclist and pedestrian travel is anticipated to be very low to negligible in the affected project area, safe cyclist and pedestrian access would be maintained at all times through or around worksites during construction works. Pedestrians and cyclists will be provided with advance warning traffic control signs and static signage for long-term roadworks.

Local bicycle and walking groups would be updated as part of ongoing consultation on traffic controls / conditions throughout the works.

6.7.5 Commercial and Residential Property Access

There are no impacts on existing commercial or residential properties access as these will be retained.

6.7.6 Special Events

Special events, such as the Wellington Show (May), Dunedoo Show (February) and Gulgong Show (February), are the most major special events and are generally held annually. However, the shows and other similar events are located in the urban centres and generally away from the main through transport routes. Therefore, they are unlikely to be impacted by the Project works.

6.8 Traffic Management Outside Standard Construction Hours

In general, construction will be limited to the following hours:
- Monday to Friday, 7:00 am to 6:00 pm.
- Saturday, 8:00 am to 1:00 pm.

Construction works required to be undertaken outside of the standard construction hours may be undertaken in the following circumstances:

- Activities that are inaudible at non-associated residences.
- The delivery of materials requested by the NSW Police Force or other authorities for safety reasons including the delivery of components by OSOM vehicles from the Port Newcastle.
- Emergency work to avoid the loss of life, property and/or material harm to the environment;
- Or otherwise approved by the DPE.

Heavy vehicle deliveries / movements will generally take place during standard construction hours.

It is anticipated that, subject to NHVR permit conditions, the majority of the OSOM transport will occur outside of standard construction hours at night. If deliveries are scheduled to arrive to site later than 7am, then the provision regarding school bus routes (Section 6.7.3) would prevail.

The final scheduling of OSOM night transport is subject to review and approval by the NHVR and TfNSW as part of the OSOM transport permit approval process. Detailed operational procedures for night transport (such as managing oncoming traffic, overtaking and end-ofqueue management) will be produced as part of the NHVR Permit approval process in consultation with TfNSW.

Road safety during night transport would be ensured by a combination of vehicle illumination, pilot / escort vehicles and detailed operational procedures produced as part of the NHVR permit approval process.

6.9 Soil Tracking / Covered Load Management

The operators of all vehicles associated with the Project will maintain a high level of vehicle maintenance. The following requirements will be exercised at all times:

- ensure their vehicle complies with relevant State legislation in relation to roadworthiness and modifications;
- undergo regular vehicle checks and maintenance;
- ensure that all loads are appropriately covered to restrict debris onto the public road network; and
- ensure their vehicles have correctly fitted mufflers to minimise noise disturbance.

In order to minimise the potential for on-site soil and other debris being tracked onto the public road network at site accesses, soil shaker grids will be installed at all site access points. Regular inspection and cleaning will be undertaken during the construction and commissioning works to inspect for soil tracking onto public roads.

6.10 Construction Parking

Parking of staff vehicles and queuing of heavy vehicles on public roads during construction would be avoided as sufficient on-site parking and manoeuvring areas will be available. Designated areas for the standing / manoeuvring of trucks and parking would be provided within the project site during construction.

Staff car parking for the wind farm project site during construction and operation will be located within the site and shall be designed.

in accordance with AS2890.1. Parking shall be on formed laydown and hardstand areas.

6.11 Car-Pooling / Ride-Sharing / Employee Shuttle Bus

The workforce for the site will be encouraged to arrive by site using car-pooling and ridesharing from nearby centres to minimise construction and operational staff trips. There would be information provided at induction on the benefits of car-pooling / ride-sharing.

There is the potential to transport construction staff to site by shuttle buses from off-site hubs, which if utilised, could reduce the peak staff traffic generation.

At this stage it is not possible to provide detailed plans / strategies for the operation of shuttle buses or car-pooling activities. These types of services would be investigated by the EPC Contractor together with their sub-contractors. Car-pooling or ride-sharing will be encouraged.

If the EPC Contractor elects to implement a shuttle bus, the bus drop-off and pick-up locations and parking arrangements would be determined in consultation with council. The locations would likely depend on:

- The location of employee accommodation
- Staff roster arrangements
- Subcontractor requirements

The locations of pick-up / drop-off points would be determined with consideration to dispersed car parking at multiple locations away from facilities, businesses and the Wellington CBD to reduce impacts to local residents and businesses.

If a shuttle bus service is established, the TMP will be updated to include details of the services.

6.12 Haulage Vehicle Scheduling

Timing of haulage vehicle movements will be scheduled to minimise disruption to local traffic or result in safety risks. The timing of the deliveries must meet with the requirements of the NHVR permit, any out-of-hours (OOH) permits (where work to unload or load occurs immediately prior to or after the delivery), and ROL (where a licence applies to the delivery).

Fleet management measures include the following items.

- Schedule local deliveries to site during standard work hours and where practicable outside of peak travel periods, to mitigate safety problems on local roads and reduce disturbance for residences including minimising convoy length or platoons.
- Limiting the number of trips per day by consolidating transport, where practicable.
- All vehicles would enter and exit the site to/from the public road network in a forward direction only.
- All vehicles generated by construction staff would be accommodated within on-site parking areas.
- Notifying and consulting with other wind farm contractors of the projected Uungula Wind Farm Project OSOM deliveries to minimise any conflict between road transport movements along the common Golden Highway, Saxa Road and Goolma Road routes.
- Scheduling of OSOM transport deliveries to avoid school bus routes along Saxa Road, Goolma Road and Twelve Mile Road, ensuring that OSOM vehicles do not use these roads between 7.30 am and 8.30 am and 3:30 pm to 4:30 pm, unless in case of an emergency.
- OSOM transport that passes through any school zones along the designated OSOM and heavy vehicle transport route would be avoided during school drop-off and pickup times (8:00 am to 9:30 am and 2:30 pm to 4:00 pm) on school days to prevent conflicts with school traffic and buses.
- Scheduling of OSOM transport deliveries to minimise platoons and convoys of vehicles along public roads, unless required by a NHVR permit.
- Managing transport operations including provision of warning and guidance signage, traffic control devices, temporary construction speed zones and other temporary traffic control measures.
- Undertaking community consultation before and during OSOM and night transport activities.
- Community information in regard to OSOM and heavy vehicle movements to include contact details to ensure community concerns are logged and addressed.

6.13 Local Climatic Conditions

As part of the Driver's Code of Conduct, vehicle operators would be required to drive appropriately to local climatic conditions that may affect road safety such as fog, dust, wet weather and flooding.

Site toolbox talks will be carried out for site personnel and vehicle drivers to update them on adverse road conditions and any site access issues.

6.14 Traffic Management of OSOM Vehicles

A NHVR permit is required to be obtained for road access for OSOM vehicles along the public road network from areas of component import or manufacture. Any permits under the Heavy Vehicle National Law (NSW) for the use of OSOM vehicles on the road network will

also be obtained prior to the commencement of OSOM vehicle transport tasks.

Pilot vehicles, transport restrictions and appropriate traffic management would be adopted to ensure safe passage from the public road network onto the site by OSOM vehicles to be used for WTG component delivery.

OSOM vehicles, generally vehicles that are greater than 25 m length or 3.5 m width, will have a pilot(s) as per the road authority requirements. Extremely long or wide vehicles may require a police escort. Other requirements outlined in the TfNSW publication 'Additional Access Conditions: Oversize and overmass heavy vehicles and loads' would be followed.

Transport Companies would be responsible for obtaining all required approvals and permits from NHVR, TfNSW and local Councils and for complying with conditions specified in the approvals.

The designated OSOM transport routes will be inspected and any road infrastructure modification works and/or bridge strengthening works (in addition to the works already identified by the specific route assessments undertaken) would be identified and acted on.

Traffic management for OSOM vehicles will be done at the time of passing through the intersection / road section as per the road authority permit conditions.

Rest Stop Areas

A number of suitable rest stop areas have been identified along the designated OSOM transport route including at Whittingham, Mount Thorley, Warkworth, Sandy Hollow, Gungal, Merriwa and Cassillis (Golden Highway).

Use of these rest areas may be shared with OSOM deliveries for nearby wind farm developments and coordination with the transport contractors for those projects, as well as with TfNSW, will be required to ensure sufficient parking space is available for OSOM vehicles from all projects. Typically pilot or escort vehicles will scout ahead of the load and ensure a proposed rest area is cleared of vehicles and ready for use by the approaching OSOM vehicles.

Night Transport

It is anticipated that the majority of OSOM transport would typically occur through the night when background traffic volumes are low. This would minimise disruption to other road users. The final scheduling is subject to review and approval by NHVR and TfNSW as part of the OSOM transport permit approval process.

During night travel, all OSOM transport vehicles and escort vehicles will be equipped with flashing lights and illumination of the load. Detailed operational procedures for night transport such as managing oncoming traffic, overtaking and end-of-queue management will be produced as part of the NHVR permit approval process in consultation with TfNSW.

6.15 Fatigue Management

Fatigue management is a very important component of the transport haulage task, in particular OSOM transport. The National Heavy Vehicle Regulator (NHVR) has set out guidelines for managing driver fatigue. Due to the nature of the OSOM transport, the appointed transport contractor will develop a fatigue management system as described by the NHVR. The fatigue management system will typically cover the following items.

- Scheduling and rostering scheduling of trips and rostering of drivers must incorporate fatigue management measures.
- *Readiness for duty* drivers are in a fit state to safely perform required duties.
- Fatigue knowledge and awareness all personnel involved in the management, operation, administration, participation and verification of the Fatigue Management System can demonstrate competency in fatigue knowledge relevant to their position on the causes, effects and management of fatigue and the operator's fatigue management system.
- Responsibilities the authorisations, responsibilities and duties of all positions involved in the management, operation, administration, participation and verification of their operations under the Fatigue Management System are current, clearly defined and documented and carried out accordingly.
- Internal review an internal review system is implemented to identify noncompliances and verify that the activities comply with the Fatigue Management System Standards and the operator's fatigue management system.
- Records and documentation the operator will implement, authorise, maintain and review documented policies and procedures that ensure the effective management, performance and verification of the Fatigue Management System in accordance with the standards. Records that demonstrated the compliant operation of the Fatigue Management System are collected, stored and maintained to verify compliance.
- Health drivers are to participate in a health management system to identify and manage fatigue risks.
- Workplace conditions workplace environments and conditions must assist in the prevention of fatigue.
- Management practices management practices are to minimise the risks relating to driver fatigue.
- Operating limits operating limits will provide drivers and operators with the flexibility to effectively manage fatigue.

For drivers not covered by an approved Fatigue Management System, the following fatigue minimisation strategies should be adopted for journeys over two hours in duration:

- Schedule journeys carefully to avoid night driving and those times of day when falling asleep is most likely (2 am to 6 am).
- Ensure that the driver is well rested prior to commencing their journey.
- Plan when and where to take rests of at least ten minutes every two hours.
- Take into account road hazards and weather conditions.
- Adhere to the legal restrictions on driving times, distances, drug and alcohol consumption.
- Allow for unexpected delays.
- Know what to do in case of an emergency.
- Notify supervisor upon arrival at the final destination.

6.16 Driver's Code of Conduct

6.16.1 Travel Speeds

All personnel will adhere to site and public road vehicle speed limits. Along external routes, speed limits will be observed as signposted unless driving conditions or restrictions imposed on the personnel or vehicle to drive at a lower speed.

In situations where driver's visibility and traffic safety on public roads is affected by weather related conditions such as heavy rainfall or fog, construction vehicles should reduce their speed limit until visibility and traffic safety has improved.

Sections of Saxa Road, Goolma Road, and Twelve Mile Road have adjacent Travelling Stock Reserves (TSRs). When being used, the TSRs must be appropriately signposted. Driver's must reduce their speeds when encountering any stock warning signage.

Internal traffic movements will be restricted to a maximum of 40 km/h on site and 10 km/h around personnel or as otherwise signposted. The speed limit within the construction compound will be 10 km/h. There would be a reduced speed limit of 15 km/h on approach to the primary and secondary site access intersections along Twelve Mile Road, Uungula Road and Ilgingery Road.

6.16.2 Adherence With Designated Transport Routes

All large vehicles, including OSOM vehicles, associated with the Project will follow the approved, designated transport routes and main roads near the project area to minimise impact to the local road network and road users. A map of the approved transport routes highlighting critical locations is attached to the Code.

Drivers are to ensure that they use the appropriate transport route for their vehicle type in accordance with the Project's Development Consent and Road Authority permits. The OSOM routes may be further restricted and the routes approved on the permit for the particular load / time and day from the road authority would prevail.

6.16.3 Safe Driving Practices

All personnel will attend a site induction and show competence in the safety, quality and environmental requirements of the Project. The induction will include the Driver's Code of Conduct and the requirements set out in this TMP covering vehicle maintenance requirements, covering of loads, travelling stock reserves, and site-specific conditions relating to school bus routes / school zones.

Operators and drivers will be required to have general construction industry induction cards and will be required to attend ongoing general project and site-specific inductions.

All operators will be comprehensively trained with regard to community expectations and impacts from haulage operations. The induction will have a particular focus on operator behaviour. Operator competency and standards of behaviour will be continually assessed, and discipline procedures will be put in place to maintain compliance.

Site toolbox talks will be carried out for site personnel and vehicle drivers to update on road conditions and any access issues. Vehicle operators will be advised of designated access routes and roadways during inductions.

Details of the traffic and access training and induction will focus on:

- objectives of the TMP;
- performance goals;
- mitigation measures required to be implemented;
- traffic and access monitoring and reporting requirements; and
- incident investigation and response.

Training is to be provided prior to start-up of any traffic and access related management tasks and updated if task, equipment or procedures are expected to, or have changed.

Heavy vehicles to be used on the Project will be compliant with NSW legislation and standards including the Heavy Vehicle National Legislation.

Drivers of vehicles shall be responsible for driving safely and in accordance with the road rules, exercising care and working in accordance with VMPs.

The following requirements would always be exercised:

- obey all the laws and regulations;
- not drive whilst under the influence of alcohol, drugs, nor any medication which may affect their ability to drive;
- be medically fit to drive at all times and must inform site co-ordinators if they have any medical condition that may affect their ability to drive;
- drive in a considerate manner at all times and respect the rights of others to use and share the road space;
- report all vehicle defects to their employer serious defects must be corrected immediately, or an alternative vehicle supplied;
- any vehicle accident resulting in injury and/or damage to property must be reported to the Police;
- report any near misses;
- only drive during designated construction hours when conducting project works (unless permission to conduct project works has been provided at other times and only in accordance with permits for travel from the relevant road authority);
- securely fasten and cover loads as appropriate; and
- keep their vehicle clean and in good mechanical condition to reduce any environmental impact.

The transport contractor is to develop and implement:

- safety initiatives for transport through residential areas and/or school zones (incorporating the requirements in the TMP and Code); and
- a maintenance program for the heavy transport vehicles that is consistent with these safety requirements.

6.16.4 Monitoring and Reporting

All traffic related complaints will be managed in accordance with the project complaints handling procedures described in the Environmental Management Strategy.

Complaints will be investigated and a report prepared on the circumstances of the complaints, risks arising and any non-compliance with project procedures.

Failure to comply with any procedures for safe transport may result in dismissal of specific operator(s) from the Project.

In the event of a transport-related incident, the following management measures would typically be implemented:

- The construction contractor would coordinate with TfNSW Transport Management Centre's (TMC's) Traffic Operations Manager in event of incidents or undue congestion to minimise delays and improve public safety.
- In the event of a traffic accident occurring within the construction work sites or at other locations affected by the works, the project team is required to record the facts and photograph the approach to the accident site including the location of all safety devices and signs as soon as possible after the accident. A report with this information must be forwarded to the TfNSW TMC and WorkCover.
- A written incident notification is to be submitted within seven days after the Applicant becomes aware of an incident. Within 30 days of the incident occurring (or as otherwise agreed to by the Planning Secretary), the Applicant must provide a detailed report covering the following:
 - Summary of the incident.
 - Details of the outcomes of the incident investigation including causation.
 - Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence.
 - Details of communication with other stakeholders regarding the incident.
- The construction contractor will assign labour, plant and material to repair, make safe and/or cordon areas where an incident has occurred. For example:
 - In the event of vehicle breakdown, arrange for load to be retrieved and vehicle towed (without load).
 - In the event of pavement damage that affects road safety, repair damage as soon as possible.
 - In the event of materials on roadway arrange crane to retrieve materials.
- Traffic control by qualified traffic controllers would be provided for emergencies associated with the Project within or adjacent to the work sites, roadways and footpaths.
- Planned works that will interfere with the incident or create additional delays to those road users already affected by incident would be re-scheduled until the incident has been resolved.
- TGSs and this TMP document would be reviewed and updated, in response to an incident, if deemed necessary.
- In the event of flooding or bushfire in the area, the construction contractor will allow for emergency or evacuation access for local properties via the worksite and/or internal road under instruction of emergency services and in accordance with emergency evacuation plans.

6.16.5 General

The following general rules / principles would always generally apply to the Driver's Code of Conduct:

- Obey all laws and regulations.
- Ensure that drivers have a copy of Road Authority permits.
- Drive with head lights on during daylight hours for increased visibility.
- Drive appropriately to local climatic conditions that may affect road safety such as fog, dust, wet weather and flooding.
- Always cover or tie down loads.
- Always give way to pedestrians and cyclists at designated crossings or where they have right of way.
- Do not queue across intersections.
- Wear seatbelts at all times.
- Obey the sign posted speed limits.
- Minimise tracking soil from construction vehicles onto the public road network from the Project site.
- Avoid compression braking near sensitive receivers and in built up areas.
- Avoid the use of sounding of horns and reversing alarms to minimise traffic generated noise.
- Take extra precaution during school periods.
- Obey school speed zones.
- Take extra precaution and reduce speeds whenever stock warning signs or livestock are encountered on the road.
- Do not queue or idle on public roads or adjacent to sensitive receivers.
- Never drive between machines when they are being unloaded.
- Stick to the identified access tracks onsite.
- Follow all on-site signage (directional and speed).
- Undertake appropriate induction training where required as part of your task.

7. Incident and non-conformance notification and reporting

7.1 Incident notification & reporting

In accordance with the Development Consent, an Incident is defined as:

An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

If the Applicant becomes aware of an Incident, the Department would be notified of the Incident in writing via the Major Projects portal as soon as practicable. The immediate notification would identify the development (SSD-6687; Uungula Wind Farm) and would identify the location and nature of the Incident.

A subsequent written notification would be given to the Planning Secretary within 7 days after the Applicant becomes aware of an Incident. This written notification would be provided via the Major Projects portal and would:

- a) identify the development and application number (Uungula Wind Farm; SSD-6687);
- b) provide details of the Incident (date, time, location, a brief description of what occurred and why it is classified as an Incident);
- c) identify how the incident was detected;
- d) identify when the applicant became aware of the Incident;
- e) identify any actual or potential Non-compliance with conditions of consent;
- f) describe what immediate steps were taken in relation to the Incident;
- g) identify further action(s) that will be taken in relation to the Incident; and
- h) identify a project contact for further communication regarding the Incident

Within 30 days of the date on which the Incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the Incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must include:

a) a summary of the Incident;

- b) outcomes of an Incident investigation, including identification of the cause of the Incident;
- c) details of the corrective and preventative actions that have been, or will be, implemented to address the Incident and prevent recurrence; and
- d) details of any communication with other stakeholders regarding the Incident.

7.2 Non-compliance notification & reporting

In accordance with the Development Consent, a Non-compliance is defined as:

An occurrence, set of circumstances or development that is a breach of this consent.

If the Applicant becomes aware of a Non-compliance, the Planning Secretary will be notified in writing via the Major Projects website within seven days of becoming aware of the Noncompliance. The written notification would identify the development and the application number (Uungula Wind Farm; SSD-6687). It would set out the condition of consent that the development is non-compliance with, the way in which it does not comply and the reasons for the Non-compliance (if known) and what actions have been taken, or will be, undertaken to address the Non-compliance.

It is noted that a Non-compliance which has already been notified as an Incident does not need to also be notified as a Non-compliance.

8. Other

8.1 Stakeholders Consulted

A number of stakeholders were consulted during the development and preparation of this TMP. Details of the consultation are summarised in *Table 7.1* following.

Stakeholder	Date	Consultation	Response
Dubbo Regional Council (DRC)	3 December 2021	Draft TMP emailed to DRC for review and comment.	DRC provided their comments on 22 March 2022.

Table 7.1: Stakeholder Consultation

Stakeholder	Date	Consultation	Response
	5 April 2022	A meeting was held between DRC and CWPR, to discuss the comments that DRC had provided on 22 March 2022.	Agreement was reached between DRC and CWP - all comments resolved. The Draft TMP was amended accordingly.
	6 April 2022	Email sent to DRC containing a summary of the meeting outcomes. A table identifying all DRC comments and CWPR responses was included.	No further response received from DRC.
Transport for NSW (TfNSW)	December 2021	Draft TMP emailed to TfNSW for review and comment.	TfNSW provided their comments on 31 January 2022.
			The Draft TMP was amended to address the TfNSW comments.
	21 April 2022	A table identifying all TfNSW comments and CWPR responses was emailed to TfNSW.	No further response received from TfNSW.
School bus operator – Ogden's Coaches	9 February 2022	Phone call to discuss the Project and the TMP. Email to provide a copy of the TMP.	Nil

8.2 Review and Improvement

This TMP and its implementation will be reviewed at least every three months from commencement of construction. The review will consider the following:

- Client, site personnel and relevant agency comments.
- Environmental monitoring records.
- Complaints.
- Incident reports.
- Non-compliance reports.
- Changes in organisational structure.
- Changes in construction methodology.
- Changes in legislation and standards.

The effectiveness of the TGSs and site implementation will be assessed against relevant

criteria. This will be reported monthly by the construction contractor to the Principal and during inspections, audit, incident management and compliance tracking. As appropriate, and in accordance with the EMS, reviews and updates may be made to the project risk register, objectives and targets of the TMP.

The Environmental Management Strategy details the requirements for Management Plan review and revision consistent with Condition C2 of the Development Consent.

8.3 References

The following references, guides and documents were used in the development of this TMP:

- Austroads "Guide to Road Design Part 3: Geometric Design (Edition 3.3)", April 2020
- Austroads "Guide to Road Design Part 4: Intersections and Crossings General", 2017
- Austroads "Guide to Road Design Part 4A: Unsignalised and Signalised Intersections", October 2017
- Austroads "Rural Road Design: A Guide to the Geometric Design of Rural Roads", 2003
- CWP Renewables "Uungula Wind Farm: Environmental Management Strategy", 2021
- CWP Renewables "Uungula Wind Farm Amendment Report", November 2020
- CWP Renewables "Uungula Wind Farm Submissions Report", November 2020
- CWP Renewables "Uungula Wind Farm (SSD-6687): Response to Request for Additional Information", 22 January 2021
- NSW Centre for Road Safety "NSW Speed Zoning Guidelines (Version 4.0)", 2011
- NSW Department of Planning, Industry and Environment "Development Consent for Application number SSD 6687", 7 May 2021
- Relevant Austroads guides and TfNSW / RMS supplements
- Rex J Andrews "Route Study Uungula Wind Farm Ex Port of Newcastle", May 2020.
- RTA "Delineation Guidelines: Parts 1 to 19 & Appendices A & B", assorted dates
- Samsa Consulting "Uungula Wind Farm Project: Transport Assessment", April 2020
- Standards Australia "AS 1742.1 2003: Manual of uniform traffic control devices, Part 1: General introduction and index of signs", 2003
- Standards Australia "AS 1742.3 2009: Manual of uniform traffic control devices, Part 3: Traffic control for works on roads", 2009
- Standards Australia "AS 2890.1 2004: Parking Facilities, Part 1: Off-street car parking", 2004
- Transport Management Centre "Road Occupancy Manual", 14 May 2015
- Transport for NSW "Additional Access Conditions: Oversize and overmass heavy vehicles and loads", October 2020
- Transport for NSW "Traffic Control at Work Sites, Technical Manual Issue 6.0", 14 September 2020

Appendix A Approved Wind Farm Layout

Uungula Wind Farm Project Traffic Management Plan

UWF-02-PLN-TMP-20220630-003



EGEND	Residences: Involved Non-involved Existing Unsealed Road	Wind Turbine Generator (WTG) Site Compound Substation Energy Storage Facility		A WIND FARM	PTY LTD	P	
	Existing Sealed Road Development Corridor Project Site Access tracks	 Existing Powerlines: 132kV 330kV Proposed powerlines:	TITLE	Projec	ct Layout		
▼ ▼ ⊕	Primary Project Site entry Secondary intersections Waterway Crossing	 Overhead (high voltage) Overhead (medium to low voltage) Underground (medium to low voltage)	DATE 20/04/2022	SCALE 1:48000	DWG NO UWF-146	REV C	VER 1
CALE BAR 0		 5 km	DRAWN BY B KRONENBERG	CHECKED BY M FLOWER	SHEET 1 OF 1	JOB NO 110247	SIZE A3

Appendix B

Designated OSOM Transport Route



LEGEND			COMPANY				
Existing Roads: Existing Unsealed Road Existing Sealed Road Proposed Transport Route:	 Primary Project Site entry Secondary intersections Residences Project Site Wind Turbine Generator 	Existing powerlines: 132kV 330kV Proposed powerlines: Overhead (high voltage)	TITLE	A WIND FARM		rer	EWP aswables
Indicative OSOM Route Project Access Route	Site Compound Substation	U/G (med to low voltage) O/H (med to low voltage)					
— Wind Farm Access tracks	Energy Storage Facility		DATE 20/04/2022	SCALE 1:200000	DWG NO UWF-132	REV C	VER 1
SCALE BAR 0 E	10) km	DRAWN BY B KRONENBERG	CHECKED BY M FLOWER	SHEET 1 OF 1	JOB NO 110247	SIZE A3

Appendix C

Additional Compliance Requirements

Condition	Condition Wording	Commitment to Compliance
EVIDENCE	OF CONSULTATION	
A9	Where conditions of this consent require consultation with an identified party, the Applicant must:	Details of consultation completed with an identified party are
	 a. consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and 	included in this Management Strategy/Plan/Program.
	 provide details of the consultation undertaken including: 	
	 the outcome of that consultation, matters resolved and unresolved; and 	
	ii. details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	
COMPLIAN	CE	
A13	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Employees, contractors, and sub-contractors will be made aware of, and will be instructed to comply with the conditions of the consent, including the requirements of Management Plans and Strategies that are relevant to the works they carry out. This will be achieved through Project inductions, toolbox talks, and other training and awareness requirements detailed within the Environmental Management Strategy.
COMMUNIT	Y CONSULTATIVE COMMITTEE	
A20	The Applicant must operate a Community Consultative Committee (CCC) for the development in accordance with the Department's Community Consultative Committee Guidelines: State Significant Projects (2016), or its latest version.	A Community Consultative Committee (CCC) has been established for the Uungula Wind Farm in accordance with the Department's Guideline.
		Minutes of the CCC meetings will be made publicly available via the Project Website, at:
		http://cwprenewables.com/our- projects/uungula-wind-farm

Condition	Condition Wording	Commitment to Compliance	
	F STRATEGIES, PLANS AND PROGRAMS		
C2	 The Applicant must: a)update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and b)review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 3 month of the: submission of an incident report under condition C10 of Schedule 2; submission of an audit report under condition C15 of Schedule 2; or any modification to the conditions of this consent. 	The Proponent will ensure that Management Strategies, Plans, and Programs will be reviewed and updated in accordance with the requirements of this Condition. If a Strategy, Plan or Program is updated, then the Proponent will comply with the requirements of Condition C3 regarding approval.	
STAGING, C	OMBINING AND UPDATING STRATEGIES, PLANS OR PI	ROGRAMS	
C3	 With the approval of the Planning Secretary, the Applicant may: a. prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and c. update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development). 	 The Project will be developed in two stages: Stage 1: Wind Farm and associated infrastructure with the exception of the 'Battery Storage Facility'. Stage 2: Battery Storage Facility. The Planning Secretary has agreed that the Fire Hazard Analysis (condition B38) and Fire Safety Study (condition B39) are only required for Stage 2. All other Strategies, Plans and Programs will be prepared and submitted for Stage 1, and then updated for Stage 2 where required. Updated Strategies, Plans and Programs will be submitted to the Planning Secretary for approval in accordance with Condition C3(c). 	
C4	If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent	The Proponent will stage or update Strategies, Plans or Programs in consultation with the relevant identified party, unless the Secretary has agreed that the consultation is not required.	

Condition	Condition Wording	Commitment to Compliance
C5	If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.	Updated Strategies, Plans and Programs will supersede the previous versions of them and will be implemented in accordance with the relevant condition. Also, the plan will be updated on the project website in accordance with Condition C16.
C6	If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.	 The Project will be developed in two stages: Stage 1: Wind Farm and associated infrastructure with the exception of the 'Battery Storage Facility'. Stage 2: Battery Storage Facility. The Planning Secretary has agreed that the Fire Hazard Analysis (condition B38) and Fire Safety Study (condition B39) are only required for Stage 2. All other Strategies, Plans and Programs will be prepared and submitted for Stage 1, and then updated for Stage 2 where required.
NOTIFICATI	ON OF DEPARTMENT	
C7	Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant must notify the Department in writing via the Major Projects website portal of the date of commencement, or cessation, of the relevant phase. If any of these phases of the development are to be staged, then the Applicant must notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.	Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant will notify the Department in writing via the Major Projects website portal of the date of commencement, or cessation, of the relevant phase. If any of these phases of the development are to be staged, then the Applicant will notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.

Condition	Condition Wording	Commitment to Compliance
FINAL LAY	OUT PLANS	
C8	 Prior to commencing construction, the Applicant must submit detailed plans of the final layout of the development to the Department via the Major Projects website, including: a. details on siting of wind turbines, including micrositing of any wind turbines and/or ancillary infrastructure (including wind monitoring masts); b. the GPS coordinates of the wind turbines; and c. showing comparison to the approved layout. The Applicant must ensure that the development is constructed in accordance with the Final Layout Plans. 	Detailed plans of the final layout of the development will be submitted to the Department via the Major Projects website, prior to the commencement of construction, in accordance with this Condition.
WORK AS E	EXECUTED PLANS	
C9	Prior to commencing operations or following the upgrades of any wind turbines or ancillary infrastructure, the Applicant must submit work as executed plans of the development and showing comparison to the final layout plans to the Planning Secretary, via the Major Projects website.	Work As Executed Plans will be submitted to the Planning Secretary prior to commencing operations or following the upgrades of any wind turbines or ancillary infrastructure. Note: The Work as Executed Plans can only be produced upon completion of construction of the development.
		I
C10	The Department must be notified via the Major Projects website portal immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 9.	If the Applicant becomes aware of an Incident, the Department will be notified in writing via the Major Projects portal as soon as practicable. The requirements of Appendix 9 'Incident Notification and Reporting Requirements' are listed at the bottom of this Table. An Incident is defined as: An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

Condition	Condition Wording	Commitment to Compliance
NON-COMP	LIANCE NOTIFICATION	
C11	The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.	The Proponent will submit a written notification to the Department via the Major Projects website, within seven days of becoming aware of any non-compliance. A non-compliance is defined as: <i>An occurrence, set of</i> <i>circumstances or development</i> <i>that is a breach of this consent.</i>
C12	A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Any non-compliance notification submitted to the Department under Condition C11 will address the requirements of Condition C12.
C13	A non-compliance which has been notified as an incident does not need to also be notified as a noncompliance	The Proponent notes that a non- compliance does not need to be notified to the Department if it has already been notified as an Incident.
INDEPENDE	ENT ENVIRONMENTAL AUDIT	
C15	Independent Audits of the development must be conducted and carried out at the frequency described and in accordance with the Independent Audit Post Approval Requirements (2020), unless otherwise agreed or directed by the Planning Secretary.	Unless otherwise agreed or directed by the Planning Secretary, an Independent Environmental Audit will be conducted in accordance with the timeframes nominated in the PAR (2020), being:
		 within the 12 weeks of the commencement of construction; during construction, at intervals no greater than 6 months from the date of the initial audit; within 6 months of commencement of operations; and at intervals no greater than 3 years from the initial operational audit.

Condition	Condition Wording	Commitment to Compliance
ACCESS TO	INFORMATION	
C16	The Applicant must: a) make the following information publicly available on its website as relevant to the stage of the development: i) the EIS; ii) the final layout plans for the development; iii) current statutory approvals for the development; iv)approved strategies, plans or programs required under the conditions of this consent; v) the proposed staging plans for the development if the construction, operation and/or decommissioning of the development is to be staged; vi) a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; vii) a complaints register, which is to be updated on a monthly basis; viii) minutes of CCC meetings; ix) the annual Statement of Compliance with the EPL; x) any independent environmental audit, and the Applicant's response to the recommendations in any audit; and xi) any other matter required by the Planning Secretary; and xii) keep this information up to date	The Proponent will make this information available on the website, including Management Strategies, Plans and Programs per item (iv).

Condition	Condition Wording	Commitment to Compliance
INCIDENT N	OTIFICATION AND REPORTING REQUIREMENTS	
APPENDIX 9	 A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition C10 of Schedule 2 or, having given such notification, subsequently forms the view that an incident has not occurred. Written notification of an incident must: 	This information will be included in any written Incident Notification that is submitted to the Department in accordance with Condition C10.
	 b. identify the development and application number; c. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); d. identify how the incident was detected; e. identify when the applicant became aware of the incident; f. identify any actual or potential non-compliance with conditions of consent; g. describe what immediate steps were taken in relation to the incident; h. identify further action(s) that will be taken in relation to the incident; and i. identify a project contact for further communication regarding the incident 	
	 Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested. The Incident Report must include: a summary of the incident; outcomes of an incident investigation, including identification of the cause of the incident; 	
	 details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and m. details of any communication with other stakeholders regarding the incident. 	