Client
Woolsthorpe Asset Pty Ltd ATF
Woolsthorpe Asset Trust

Date
24 October 2024

Traffic Management Plan

Woolsthorpe Wind Farm

Planning
Transport
Urban Design
Waste Management

ratio:

ratio.com.au

Project
Woolsthorpe Wind Farm

Prepared for
Woolsthorpe Asset Pty Ltd ATF Woolsthorpe Asset Trust

Our reference
20848T-REP01-F05

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Version	Date	Issue	Prepared by	Checked by
D01	25/03/2024	Initial Draft	J. Grant B. Thomson	A. Walley
D02	26/03/2024	Revised Draft – Amended Traffic Generation	J. Grant B. Thomson	A. Walley
D03	03/04/2024	Preliminary Draft for Authority Review	J. Grant B. Thomson	A. Walley
F01	08/04/2024	Preliminary Final	B. Thomson	A. Walley
F02	21/05/2024	Revised Final – MSC Comments	B. Thomson	A. Walley
F03	17/07/2024	Revised Final – MSC Comments	B. Thomson	A. Walley
F04	04/09/2024	Revised Final – Early Contractor Involvement	B. Thomson	A. Walley
F05	24/09/2024	Revised Final – MRC Comments	B. Thomson	A. Walley
F06	24/10/2024	Revised Final – DTP Comments	B. Thomson	A. Walley

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Abbreviations

Abbreviation	Definition
AADT	Average Annual Daily Traffic
DTP	Department of Transport and Planning
DEECA	Department of Energy, Environment and Climate Action
HML	Higher Mass Limits
HV	Heavy Vehicle (i.e. truck)
LOS	Level of Service
LV	Light Vehicle (i.e. car)
km	Kilometre
km/h	Kilometres per hour
MSC	Moyne Shire Council
NHVAS	National Heavy Vehicle Accreditation Scheme
NHVR	National Heavy Vehicle Regulator
NVP	Native Vegetation Plan
OSOM	Oversize Overmass
RRV	Regional Roads Victoria
SISD	Safe Intersection Sight Distance
TMP	Traffic Management Plan
WTGs	Wind Turbine Generators
WAPL	Woolsthorpe Asset Pty Ltd
WWP	Woolsthorpe Wind Farm

Glossary of Terms

Term	Definition
AADT	This measurement provides the total volume of vehicle traffic of a road for a year divided by 365 days.
Average Delay	This is the average amount of time it takes a vehicle to negotiate an intersection, including the time to negotiate corners and the time stopped in queues or waiting for a green signal.
Mid-block	A location between two intersections.
Other Injury	Injury sustained in a road crash for which a person did not require hospitalisation.
Permit holder	The permit holder for this project would be Woolsthorpe Asset Pty Ltd
Ratio	Ratio Consultants Pty Ltd
Road Quality Auditor (RQA) / Pavement Engineer	Independent Road Quality Auditor and the Road Pavement Engineer are used interchangeably as part of the planning conditions and within this TMP.
Regional Roads Victoria	Regional Roads Victoria is now referred to as Department of Transport and Planning (DTP). RRV is however still referred to in older planning permits.
Serious Injury	Injury sustained in a road crash for which the person was admitted to hospital.
VicRoads	VicRoads is now referred to as Department of Transport and Planning (DTP). VicRoads is however still referred to in older planning permits.

References

The following reports and / or parties have been referenced or consulted in the preparation of this report:

- Victoria Government Gazette – *Road Management Act 2004*, Code of Practice, Worksite Safety, Traffic Management 2023.
- Austroads Guide to Temporary Traffic Management.
- Road Management Act 2004.
- Department of Transport (VicRoads/DTP) – General Guidance.
- Department of Transport (VicRoads/DTP) Heavy Vehicle Network Maps in Victoria.
- Department of Transport (VicRoads/DTP) Road Management Plan.
- National Heavy Vehicle Regulator (NHVR) website / journey planner.
- Victorian Planning Provisions, clause 52.32 – Wind Energy Facility.
- Best Practice Guidelines for Implementation of Wind Energy Projects in Australia, Clean Energy Council, June 2018.
- Representatives from DTP and MSC.

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
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Sheet 9 of 110

Signed: for
MINISTER FOR PLANNING
Date: 18/12/2024

1. Introduction

Ratio Consultants (Ratio) have been commissioned by Woolsthorpe Asset Pty Ltd ATF Woolsthorpe Asset Trust (WAPL) (the Proponent) to develop a Traffic Management Plan (TMP) for the proposed Woolsthorpe Wind Farm (WWF) (the project).

The report has been prepared in response to the proposed amendments to the approved Project (Planning Permit 2006/0220/C) that seek to address conditions 9 to 12 of the WWF permit.

This report relies on and supersedes the submitted Woolsthorpe Wind Farm Traffic Management Plan prepared by Ratio Consultants (Dated 7/08/2022).

1.1. Project Background

The proposed WWF is located south of Woolsthorpe-Heywood Road, in close proximity to the Hawkesdale Wind Farm (northern side of Woolsthorpe-Heywood Road) and west of the Woolsthorpe township.

In April 2008, the Minister for Planning issued Planning Permit 2006/0220 for the use and development of a wind energy facility. This permit was subsequently amended in May 2017 to increase the permitted WTG height and the blade length, amongst other changes.

Further amendments to the Project were sought in July 2022 to reduce the number of WTG sites to 13 and further increase the permitted WTG height. On 15 September 2023, the amended Permit was issued subject to various permit conditions.

The current works program will see construction commence in Q4-2024 with the first turbines installed in late 2025 and energisation occurring in late-2026.

1.2. TMP Objectives

The objectives of this TMP are as follows:

— Provide a safe environment for all persons working on site and traffic travelling along roads in the vicinity of the WWF project.

— Minimise impact of the works required for the WWF development on the road network and adjacent landowners / occupiers.

— Minimise delays to public bus services, give priority where practicable and minimise interference with people's ability to access buses.

— Avoid interaction of Project generated heavy vehicles with school buses.

— Cater for the needs of all road users.

— Communicate the arrangements for, and impacts of, any activities affecting traffic.

— Satisfy conditions 9 to 12 of the WWF projects planning permit (Permit No. 2006/0220/C)

This TMP aims to set out the requirements and methods required to achieve these objectives, through appropriate traffic management methods.

1.3. Legislation, Policy and Guidelines

A review of relevant legislation, policy and guidelines to be considered in the completion of this TMP has been conducted and is provided in Appendix A.

1.4. Planning Permit Conditions

The planning permit (no. 2006/0220/D) conditions relating to traffic matters are outlined in Table 1.1 along with where in this TMP report they are addressed.

A copy of the planning permit can be made available upon request.

Table 1.1: Planning permit condition requirements addressed in this TMP

Condition Requirements		TMP Reference	Comment
Number	Details		
9	Before the development starts and once construction methods and transportation routes are revealed, a detailed Traffic Management Plan must be prepared to the satisfaction of the Head, Transport for Victoria and the Minister for Planning. When approved, the Traffic Management Plan will be endorsed by the Minister for Planning and the Head, Transport for Victoria. The Traffic Management Plan must be complied with, unless varied by the written consent of Moyne Shire Council and the Head, Transport for Victoria. The Traffic Management Plan must include:		
9 a)	The scope of the expertise, duties and role of the nominated Road Quality Auditor engaged under the below, including inspection frequency and reporting requirements.	Refer Section 7	
9 b)	The number and type of anticipated vehicle movements and the time of day when local roads will be used.	Section 2.2.2, Section 3.1, Section 5 and Section 6.11	
9 c)	The nominated routes for traffic accessing and departing the wind energy facility site.	Refer Section 3.3 & 3.4	
9 d)	The identification of any areas of indigenous roadside vegetation that may require removal or pruning, and the pruning practices to be followed. Note: this does not obviate the need for a permit for native vegetation removal where one is required.	Section 6.3 and Appendix E	TMP refers to swept path assessment, with assessment undertaken by native vegetation consultant
9 e)	The identification and timetabling of any required pre-construction works.	Refer Section 2.2, Section 6	
9 f)	Details of any large over dimension vehicles to be used (such as those used for the transport of the nacelles, blades and tower sections) and details of the transport route to be taken, the proposed escort arrangements and requirements for over dimensional permits from VicRoads.	Refer Section 3.3	
9 g)	An existing conditions survey (including testing of road base) of public roads that may be used in connection with the wind energy facility (for access, pre-construction or construction purposes), including	Refer Section 7.2	Section 7.2.3 specifically outlines the pre-construction inspection.

Condition Requirements		TMP Reference	Comment
Number	Details		
	details of the suitability, design, condition and construction standard of the relevant public roads.		
9 h)	The designation of all vehicle access points to the wind energy facility site from surrounding roads. Vehicle access points must be designed and located to ensure safe sight distances, turning movements, and avoid potential through traffic conflicts.	Refer Section 2.2 and Section 3	Appendix G outlines the DTP requirements for Site Access Design.
9 i)	The designation of appropriate pre-construction, construction, and transport vehicle routes to and from the wind energy facility site, including designation of transport vehicle routes being used to establish any on-site quarries.	Section 3.3 and 3.4	Section 4.1 outlines the existing conditions of the roads identified on the routes.
9 j)	Intersection upgrades in Warrnambool-Caramut Road and Woolsthorpe-Heywood Road designed to avoid or minimise disturbance or removal of native vegetation if the intersection is used by traffic associated with the wind energy facility.	Section 6.3.6 and Section 6.13	WTG componentry not to be delivered via Woolsthorpe township.
9 k)	Engineering plans demonstrating whether, and if so how, truck movements to and from the wind energy facility site can be accommodated on sealed roadways.	Section 3, Appendix E & G	
9 l)	Measures to be undertaken to record traffic volumes on the nominated road network during the construction of the wind energy facility.	Section 7.2, 8.2 and 8.3	
9 m)	Recommendations regarding the need for road and intersection upgrades to accommodate any additional traffic or site access requirements whether temporary or on-going). Where upgrades are required, the Traffic Management Plan must include:	Refer below	Section 9 summarises the key traffic management activities outlined in the TMP
9 m) i.	Detailed engineering plans showing the required works, including cross sections which show their formation, depth, drainage, and surface levels to the satisfaction of the Minister for Planning and the Head, Transport for Victoria; and the timing of when the works are to be undertaken.	Refer to Appendix E & G	Concept plans of temporary works only are included within this TMP. Detailed engineering drawings will be resolved with the relevant Road Authority by the Project proponent prior to implementation.
9 m) ii.	Proposed measures to ensure workers enter and exit the wind energy facility site from the designated site entrances.	Section 6.4 and 6.6	
9 m) iii.	Proposed measures to ensure construction vehicles are easily identifiable.	Section 6.7	
9 m) iv.	The designation of mitigation measures, including operating hours and speed limits for trucks on routes accessing the wind energy facility site which: a) Provide for appropriate safety measures around school bus routes and school bus times where relevant; and b) Provide for resident safety	Section 6.8 and 6.12	
9 m) v.	Proposed measures to manage traffic impacts associated with the ongoing operation of the wind	Refer Section 2.2 -	

Condition Requirements		TMP Reference	Comment
Number	Details		
	energy facility on the traffic volumes and flows on surrounding roads; and	Operational Stage	
9 m) vi.	A program to rehabilitate existing public roads within agreed timeframes to the condition identified in the surveys carried out or to the condition to which the roads have been upgraded, whichever is relevant.	Refer Section 3 and Appendix F	
9A	Where there is: a) A significant increase in vehicle numbers, determined by the Road Quality Auditor, above the anticipated vehicle movements identified in the endorsed Traffic Management Plan; or b) Any change to an endorsed vehicle route identified in the Traffic Management Plan, the Traffic Management Plan must be updated to the satisfaction of Moyne Shire Council and the Head, Transport for Victoria within 28 days of the event described in this condition or the above condition.	Section 7.2 and Appendix F	
9B	Prior to endorsement of the Traffic Management Plan, the developer of the wind energy facility must submit to Moyne Shire Council and the Head Transport for Victoria for approval the identify of a suitably qualified engineer, independent of the proponent's traffic adviser who will undertake the duties of the Road Quality Auditor identified in the traffic management plan. Once approved, the developer of the wind energy facility must engage, at its cost, the approved Road Quality Auditor to fulfil the requirements of the Road Quality Auditor as defined in the Traffic Management Plan.	Section 7.2	
9C	Council or the Head, Transport for Victoria may require at any time the appointment of an alternate proposed Road Quality Auditor within 21 days of making a written request to the wind energy facility developer, if the appointed Road Quality Auditor is unable to maintain independence or is unable to meet project timelines to Council's or the Head, Transport for Victoria's satisfaction. The alternate auditor must, if approved, be appointed by the wind energy facility developer to undertake the duties identified under the Traffic Management Plan.	Section 7.2	
9D	Prior to endorsement of the Traffic Management Plan, the terms of reference for the Road Quality Auditor must be endorsed by Moyne Shire Council and the Head, Transport for Victoria, including but not limited to: a) A program of regular inspections to be carried out during the construction of the wind energy facility to identify maintenance works necessary because of construction traffic. b) Frequency of inspections. c) Frequency of reporting to the wind energy facility developer, Moyne Shire Council and the Head, Transport for Victoria. d) Standards to which all agreed local roads are constructed. e) Ongoing maintenance and repair regime during construction of the wind turbine generators.	Section 7	

Condition Requirements		TMP Reference	Comment
Number	Details		
	f) Procedures for corrective works results from non-compliance; and g) Penalties for non-compliance.		
9E	Prior to the commencement of development of the wind energy facility, engineering plans for all road works required by the Traffic Management Plan must be submitted to Moyne Shire Council and the Head, Transport for Victoria for approval. The engineering plans must be designed to Australian Standard and in accordance with VicRoads guidelines and include: a) The location and detailed design of the connection between the internal access tracks and the public roads. b) A demonstration that safe sight distances, turning movements, and the avoidance of traffic conflicts at the intersection of internal roads and public roads will be achieved to the satisfaction of Moyne Shire Council and the Head, Transport for Victoria.	Section 6.3	Civil Engineering plans to be provided separate to the TMP, in line with the identified locations
9F	Prior to the commencement of construction of wind turbine footings, crane hardstand, internal access roads, the substation or transmission towers, road construction works as shown on the plan(s) endorsed under this permit, must be undertaken, completed, and assessed and approved by the Independent Road Quality Auditor to the satisfaction of Moyne Shire Council and the Head, Transport for Victoria. These works may be staged as construction of individual turbine groupings are commenced.	Section 7.2.3 and Section 9	
10	The traffic management and road upgrade and maintenance works identified in the endorsed Traffic Management Plan must be carried out to the satisfaction of the Moyne Shire Council and the Head, Transport for Victoria.	Section 7.3 & 7.4	
10A	Prior to any works commencing within any arterial road reserve, the applicant must enter into a works agreement with the Head, Transport for Victoria, confirming design plans and works approvals processes, including the determination of fees and the level of the Head, Transport for Victoria service obligations. Contact: southwestworks@roads.vic.gov.au		To be undertaken by the Civil Contractor
11	Alterations to the crossovers and driveways are to be constructed generally in accordance with VicRoads SD2065 at a minimum, taking into consideration the necessity for access by over-dimensional vehicles, to the satisfaction of, and at no cost to, the Department of Transport and Planning prior to the commencement of the use hereby approved.	Section 6.3.1 & Appendices F and G	
12	At least 21 working days prior to commencing work within the declared road, the developer must contact southwestworks@roads.vic.gov.au, to discuss construction methods and traffic management issues.		To be undertaken by the appointed contractor.

1.5. Stakeholder Consultation

Stakeholder consultation on the development of the TMP for the WWF project has occurred over a period of time, the background consultation pre-2024 will be provided to give background to how certain WWF project proposals have developed.

Given the time-lapse and stakeholders' renewed thinking on TMP requirements the stakeholder consultation on the TMP has been undertaken anew. Ratio has liaised with DTP (formerly DoT – RRV) and MSC during the preparation of this TMP, a summary of their respective comments is provided below in the relative subsections. Appendix B will contain evidence of this consultation.

Department of Transport and Planning

23 OCTOBER 2024

DTP requested additional information to support the endorsement of Conditions 9 b) and 9 d), with clarification of Section 1 of this TMP for rollout of the conditions of permit.

31 MAY 2024

DTP confirmed they had no further comments and consent to the TMP, subject to conditions.

DTP further provided requirements for formalising the Secondary Consent process to utilise the Woolsthorpe-Heywood Road secondary route for one-way blade haulage. This has been included in Section 6.3.4 of this report.

3 MAY 2024

Refer to the joint meeting with Moyne Shire's comments below.

27 MARCH 2024

Preliminary presentation of the Draft TMP to Council and DTP in regards to strategic development of site management and identifying current improvements for TMPs moving forward.

Opportunity to identify gaps in background information with DTP and Council for assisting with asset management.

21 MARCH 2024

Meeting with the Council and DTP regarding Blade Delivery to the subject site, noting issues with Princes Highway – Penhurst-Port Fairy Road intersection.

Expectations of Blade delivery to the site via Woolsthorpe-Heyward Road and baseline for road maintenance/monitoring noting the current challenges with the route.

Moyne Shire Council

5 JUNE 2024

MSC provided additional commentary on the TMP to assist with school / school bus interface expectations and additional clarifications of minor items within the TMP for compliance.

10 MAY 2024

MSC provided requirements for the use of Slatterys Road by Project traffic (light vehicles) expectations, should the Project seek to utilise this road for staff egress and emergency access post Week 9 of the WWF programme.

3 MAY 2024

Preliminary review of the draft TMP issued to MSC and DTP. Key themes MSC and DTP sought to capture included:

— Clarification of language used to describe mitigation measures;

— Materials haulage routes from nominated quarries to align with approved routes on each quarry's respective permits;

— Amend the haulage route from quarries north of Mortlake to follow DTP roads to the site;

— Include reference to a Driver Code of Conduct;

— Explicitly state DTP expectations for the temporary removal and replacement of roadside signage (for OSOM haulage activity);

Potential use of Slatterys Road was raised with MSC. MSC agreed to review this request further post-meeting and advise further for the infrastructure requirements to support this request (see 10 May response above).

27 MARCH 2024

As noted above for the joint meeting with DTP in March 2024.

21 MARCH 2024

As noted above for the joint meeting with DTP in March 2024.

1 FEBRUARY 2024

Preliminary project meeting for expectations of the TMP for Woolsthorpe delivery in alignment with current wind farm delivery in the proximity of the subject site.

Clarification of Council expectations for alignment with Hawkesdale windfarm TMP strategy.

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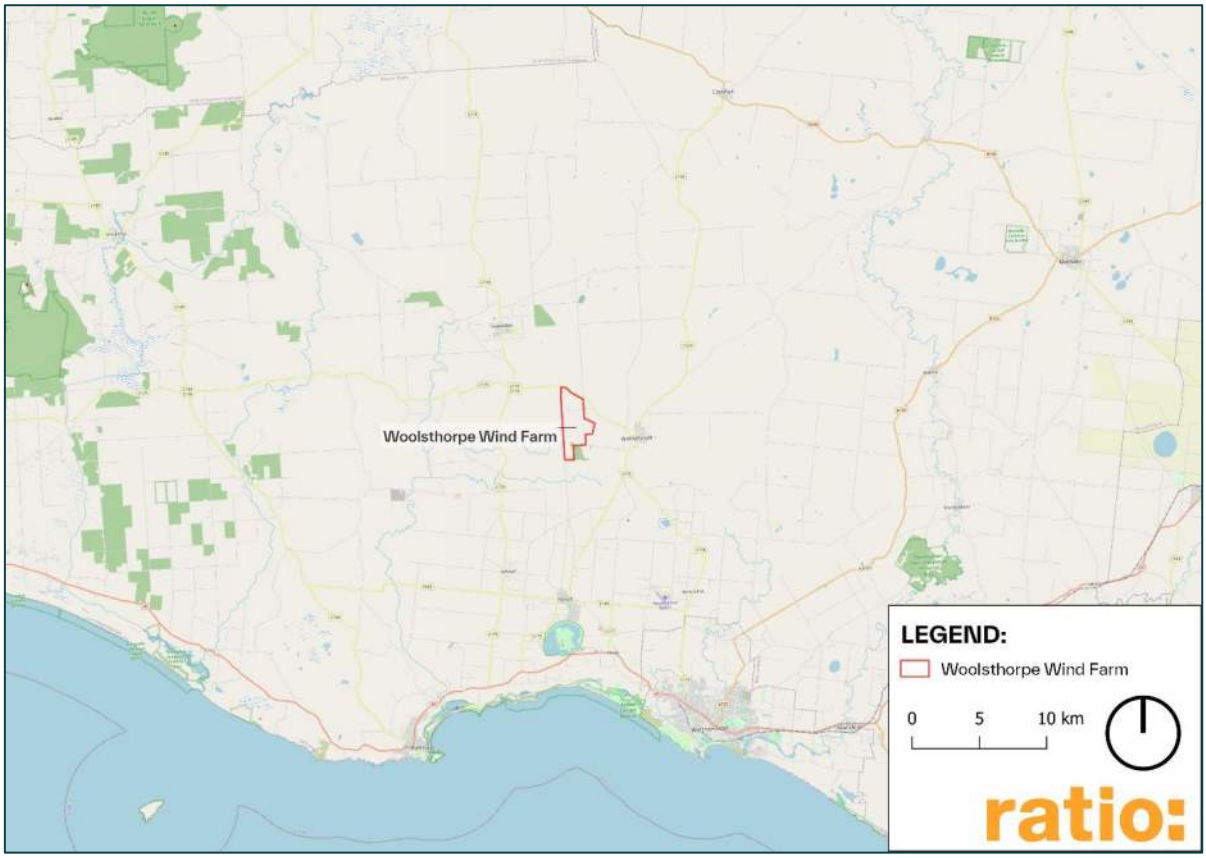
2. Project Description

2.1. Subject Site and Locality

The WWF development is located approximately 26 kilometres north-west of Warrnambool, 4 kilometres west of Woolsthorpe and 10 kilometres south-east of Hawkesdale situated in south-west Victoria. The site is on the southern side of Woolsthorpe-Heywood Road.

The site is approximately 784 hectares of flat, cleared agricultural land, used for farming. The location of the site in the context of the broader region is shown in Figure 2.1.

Figure 2.1: Subject Site Location



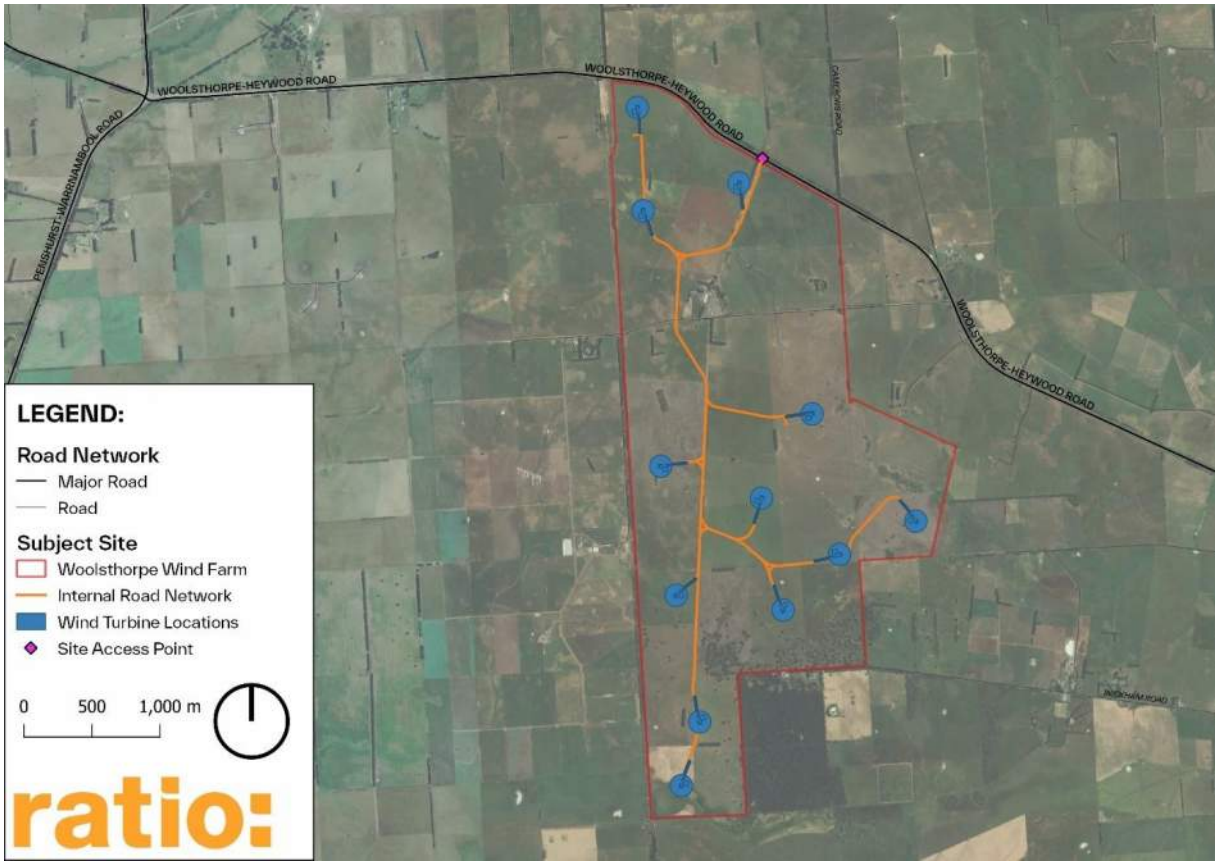
2.2. Project Overview

The WWF project consists of 12 WTGs which include the following key features:

- Internal access tracks and construction of the access point to/from Woolsthorpe-Heywood Road.
- Two (2) wind mast sites;
- A central operating/maintenance compound; and
- A central substation.

The WWF site layout is shown in Figure 2.2.

Figure 2.2: Site Layout



2.2.1 Project Area Access

One access point is approved for WWF and is located on the southern side of Woolsthorpe-Heywood Road forming a priority access intersection (see Figure 2.2).

This access point was identified based on appropriate sight lines, safe stopping distances, road geometry (vertical and horizontal), width of road reservation and roadside vegetation.

All Project vehicles will rely on this access.

2.2.2 Construction Program

TIMING AND ACTIVITIES

The construction program for this site is to be a total of approximately 24 months with a breakdown by work task provided in Figure 2.3. It should be noted that the commencement date of this program may change following project approval.

The proposed work hours for WWF are below:

— Monday to Friday: 7am to 6pm.

— Saturday: 7am to 4pm (noting 1pm to 4pm is outside of normal working hours as defined by EPA Publication 1834, referred to as the EPA guidelines).

— Sunday: 7am to 4pm for WTG installation only when weather permits (noting 7am to 4pm is outside of normal working hours as defined by the EPA guidelines).

Works occurring outside of normal working hours will be restricted to manage impact works or low noise impact works as defined in the EPA guidelines. These will generally be restricted to:

— Civil works (Saturdays 1pm to 4pm).

— 3-month period for installation of WTGs (Saturdays 1pm to 4pm and Sundays 7am to 4pm).

It is expected that the majority of the civil works will be undertaken during the summer daylight saving months. To make the most of favourable weather conditions and longer daylight hours, it is proposed to extend construction hours on weekdays until 10pm on certain occasions to expedite the project and minimise overall construction time. These civil works after 6pm will be required to adhere to outside of normal working hours restrictions as defined in the EPA guidelines.

Outside of normal working hours will also be required for unavoidable works as defined by the EPA guidelines, for a six-month period and limited to up to six days a week for concrete pouring.

CONSTRUCTION OPERATIONS AND MATERIAL SOURCES

At this stage, the known construction material sources and operational requirements are as follows:

— **Equipment and workers:** Plant, equipment and workers are to be transported by road to the WWF project site. Temporary site offices along with associated car parking for private vehicles will be provided within the Project site and access via the main site access point to Woolsthorpe-Heywood Road. Carpooling or mini-bus transfer is to be encouraged for staff movement.

— **Aggregate:** The Tarrone Quarry located on Tarrone Lane to the south-west of the Project area is the preferred source of aggregate for the Project. Salt Creek Quarry and the Cairnlea and Mt Shadwell quarries to the north of Mortlake have been identified as potential alternate sources if required. Access routes between the Project and quarries will rely on declared main roads and approved Council managed roads only. If any additional aggregate sources are required, then an addendum or updated TMP will be submitted to relevant stakeholders.

— **Concrete:** A concrete batching plant is proposed on-site to produce concrete for use in constructing the WTG foundations. Raw materials, in addition to aggregate will be transported to the site by road. The general materials and their source locations are outlined in Section 5 of this TMP.

— **Water supply:** Water for dust suppression, road construction and potable water for concrete production will be imported from Penhurst and Koroit via trucks.

— **WTG components:** Components will be delivered from Port of Portland.

— **On-site loading zones:** it is proposed to provide on-site loading zones / areas near each WTG for delivery of WWF project materials.

2.2.3 Operational Stage

It is expected that WWF is to operate for approximately 30 years. During the operational phase of WWF, it is anticipated to generate up to five (5) staff vehicles per day who will commute to/from the site each day to perform general maintenance. These maintenance vehicles are to consist of light to medium-sized vehicles. This low traffic generation will have minimal impact on the existing surrounding road network. As such, no mitigation measures are deemed necessary. Accordingly, no mitigation measures are specified within this TMP.

There could be exceptions to general maintenance in the event of components requiring replacement including:

— Wind turbine blade replacement, which requires transport and installation activities similar to that of the construction stage of the WWF project.

— On-site substation maintenance or replacement.

— Generator or gearbox replacement.

In the event of one of the above, larger vehicles will require access to WWF, which may include over-sized / over-mass (OSOM) vehicles. OSOM deliveries are to be coordinated to occur during off-peak times where possible with the presence of convoys. In such an event, access approvals (e.g. NHVR) will need to be sought along with mitigation measures to facilitate access of OSOM vehicles in a safe manner. A TMP will be required to be completed by the designated transport contractor, in consultation with Moyne Shire Council and DTP.

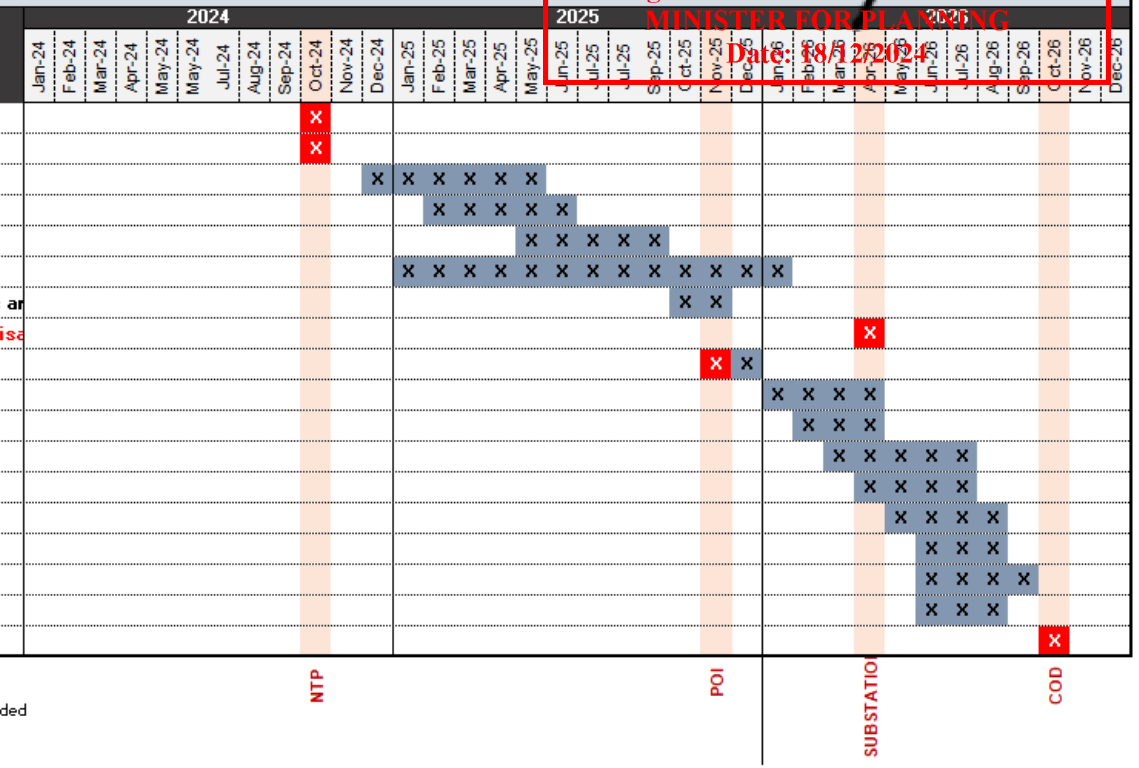
2.2.4 De-commissioning Stage

As required by Condition 34 of the planning permit, as part of decommissioning WWF, a decommissioning traffic management plan must be submitted to the responsible authority. When approved by the responsible authority, a decommissioning traffic management plan will be implemented.

Figure 2.3: Woolsthorpe Wind Farm Construction Program

WOOLSTHORPE WIND FARM

Key Dates	From	To	Weeks	Contractor	Activity
	31-Oct-24	31-Oct-24	0.0	TSA	NTP
	31-Oct-24	31-Oct-24	0.0	BOP	NTP
	1-Dec-24	18-May-25	24.0	BOP	Roads and Hardstands
	1-Feb-25	21-Jun-25	20.0	BOP	WTG Foundations*
	12-May-25	29-Sep-25	20.0	BOP	MV Grid
	1-Jan-25	14-Jan-26	54.0	BOP	Substation Construction
	27-Oct-25	30-Nov-25	4.9	BOP	**WTG Foundation Handover (inc. access ar**
	18-Apr-26	18-Apr-26	0.0	BOP	**Substation and Collector Circuits Energisa**
	17-Nov-25	8-Dec-25	3.0	TSA	**Components Arrival at Port**
	8-Jan-26	5-Apr-26	12.4	TSA	Delivery of Components to Site
	11-Feb-26	2-Apr-26	7.1	TSA	Pre-pop Works
	19-Mar-26	10-Jul-26	16.1	TSA	WTG Installation - Main Crane
	13-Apr-26	17-Jul-26	13.6	TSA	**Mechanical Completion**
	22-May-26	1-Aug-26	10.1	TSA	Pre-commissioning
	6-Jun-26	8-Aug-26	9.0	TSA	Commissioning
	13-Jun-26	30-Sep-26	15.6	TSA	Hold Point Testing (3 Hold Points)
	21-Jun-26	23-Aug-26	9.0	TSA	Reliability Testing
	31-Oct-26	31-Oct-26	0.0	BOP-TSA	**Commercial Operations Date (COD)**



* Subject to revision if some deep foundations are needed

From	To	Months	Contractor
NTP	COD	24	TSA
POI	COD	11	TSA
MC	COD	3	TSA
NTP	COD	24	BOP
Energisation	COD	6	BOP

3. Project Access Strategy

3.1. Project Vehicles Classifications

The construction vehicle types have been consolidated into groupings for the purposes of aiding with the vehicle route strategy and access assessments by their anticipated size, see Table 3.1.

Table 3.1: Project Vehicle Classifications

Vehicle Type	Sub-Vehicle Type	Vehicle Classification	Vehicle Length (based upon classification [m])	Transport Vehicle Gross Vehicle Mass [t]
Light Vehicles	Private Car	99th percentile passenger vehicle	5.2	-
	Utes			-
Truck	General Purpose Vehicle	Small Rigid Vehicle (SRV) 2-5 Tonne	6.4	-
	EPV (Elevated Platform Vehicle)	Medium Rigid Vehicle (MRV) 10 Tonne	8.8	-
	Rubbish Truck			-
	Concrete Truck	Heavy Rigid Vehicle (HRV)	8.8 to 12.5	22.4
	Rigid Truck			13.5
	Small Crane			TBC
	Semi-trailers	Articulated Vehicle	25.0	16.5
	Truck and Dog			30.5
	Low Loader			TBC
OSOM	Heavy Vehicles	Oversized/Overmass – WTG Blades	91.9	84.5
		Oversized/Overmass – Tower Sections	~55.0	126.5 (worst case)
		Oversized/Overmass – Nacelles	~55.0	212.5

	Oversized/Overmass – Hubs	~26.0	54.5
	Oversized/Overmass – Main Transformer	TBC	TBC

3.2. Construction Transport Routes

The Port of Portland is the nominated Port for the delivery of WTG componentry. Delivery to the site from the port will include the transportation for the larger sections of the WTGs – namely the tower sections, blades and nacelles.

Aggregate will be sourced from local quarries, with the Tarrone Quarry as the preferred source location and other quarries to the north of Mortlake as alternate source locations if required.

Other raw materials to construct the foundation works for the towers will be sourced from local suppliers. These will be predominantly from Warrnambool. Where materials cannot be sourced locally, it is anticipated they will come from either Melbourne/Geelong or Adelaide.

Heavy vehicle movements from these locations outside of the local area will rely on arterial roads only to travel between locations.

Workers will reside primarily in the surrounding regional centres.

3.3. WTG Component Transport

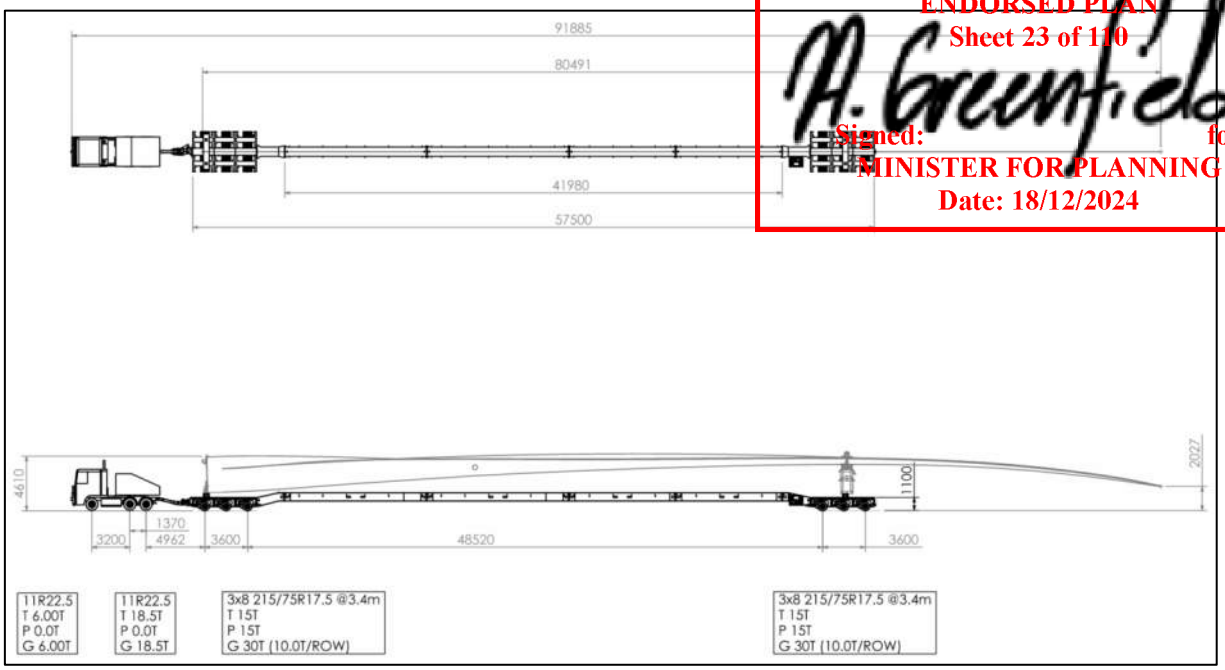
OSOM vehicles will be required to transport certain components to the wind farm, particularly the delivery of tower sections and rotor blades. The delivery of these large components are the critical transport movements, as these determine the necessary height clearances, road widths and swept paths required for safe manoeuvrability.

The critical vehicle dimensions (blade transport) are summarised in Table 3.2 and shown in Figure 3.1.

Table 3.2: Critical measurement for transport requirement

Turbine Component	Dimension
Rotor Diameter	164 m
Blade Length	80.4 m
Indicative Transportation Requirement	
OSOM Vehicle Length	91.9 m
Minimum Height Clearance Required	6.1 m
Minimum Width Required (trafficable)	5.0 m
Minimum Road Width Required (total)	5.5 m

Figure 3.1: OSOM (Blade) Vehicle Profile



We note that the final transportation configuration can vary depending on the blade transport configuration, the transportation subcontractor and their trailer configurations.

We also note that final assessments of OSOM swept paths and delivery of WTG components to the WWF project site will be the responsibility of the nominated transport contractor.

3.3.1 OSOM Routes

Through discussion with DTP and MSC regarding preferred and/or previously approved OSOM haulage routes from Port of Portland, two preferred OSOM haulage route options have been identified.

PRIMARY OSOM ROUTE

The preferred route to the site follows an approved route on the OSOM network along the Princes Highway through Prot Fairy before heading north up Penshurst-Port Fairy Road. Once the load carrying vehicle arrives on the Henty Highway, the transport route will follow:

— North along Henty Highway

— Right-turn onto Princes Highway (A1)

— Eastbound on Princes Highway (A1) for 73 km

— Left-turn onto Penshurst Port Fairy Road (C173)

— Left-turn onto Penshurst-Warrnambool Road (C178)

— Right-turn onto Woolsthorpe-Heywood Road (C176)

— Right-turn into the main wind farm site entrance

Existing utility locations, vegetation on private land and the road reserve area restrict the transport of WTG blades through the intersection of Princes Highway with Port Fairy-Penshurst Road.

As such a secondary OSOM route has been identified for inbound WTG blade haulage only.

SECONDARY OSOM ROUTE (BLADES ONLY)

As above, due to intersection geometry constraints along the primary route, the delivery of the wind turbine blades is proposed to be delivered via an alternate route to the site. This route is only required for the 36 one-way delivery trips of the blades from the Port of Portland to the subject site.

The alternate route to the site also follows an approved route on the OSOM network. It follows the Princes Highway towards Port Fairy before turning off the highway early at Tyrendarra-Ettrick Road. The route after entering the Henty Highway is outlined below:

— North along Henty Highway

— Right-turn onto Princes Highway (A1)

— Eastbound on Princes Highway (A1) for 20 km

— Left-turn onto Tyrendarra-Ettrick Road (C191)

— Right-turn onto Woolsthorpe-Heywood Road (C176)

— Eastbound on Woolsthorpe-Heywood Road (C176) for 57 km

— Right-turn into the main wind farm site entrance.

3.4. Materials Haulage

WAPL has advised that the Tarrone quarry (LIC1128) located on Tarrone Lane, approximately 21.5 kilometres from the site is the most likely to be used to source material. The Salt Creek Quarry located in Woorndoo, approximately 82.5 kilometres from the site is the preferred secondary option in the case of quarry supply difficulties from Tarrone quarry.

There are two further quarries located on the Salt Creek haulage route which have been advised as further alternate aggregate sourced if required.. These are:

— The Cairnlea Quarry, located approximately 57.6 kilometres from the site; and

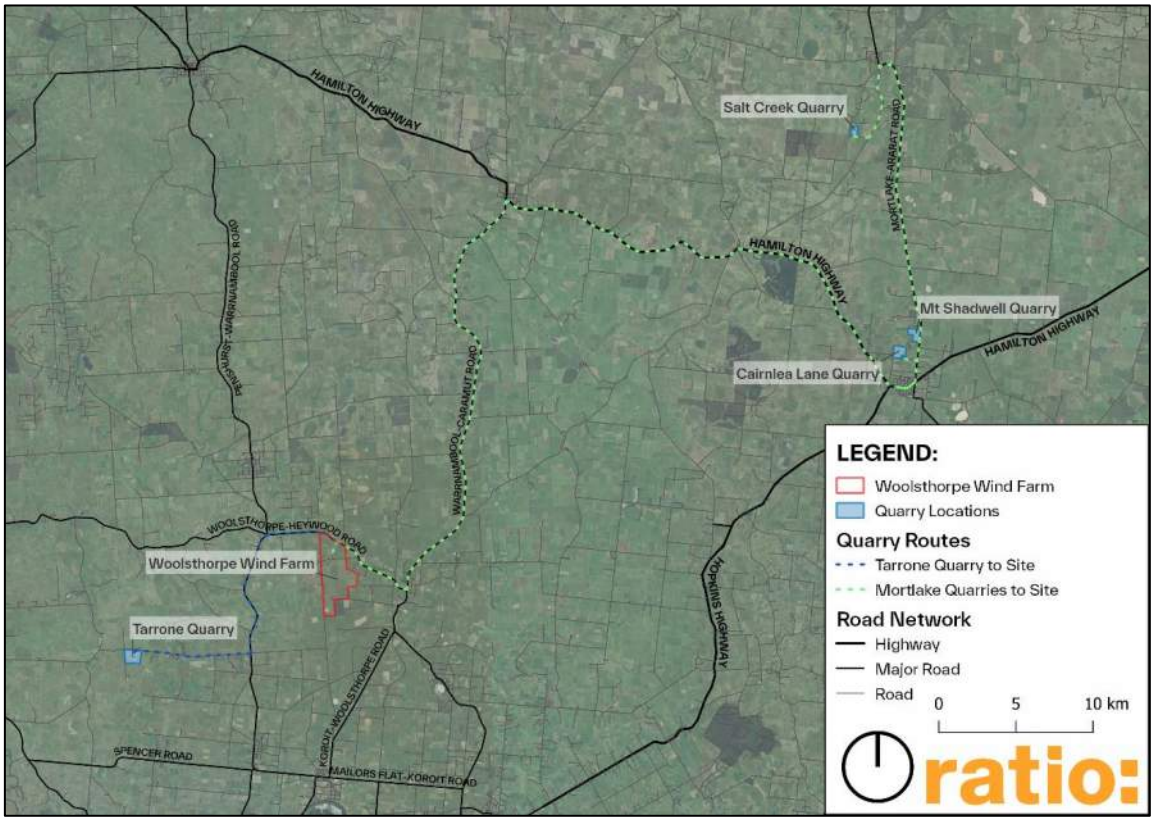
— The Mount Shadwell Quarry, located approximately 58 kilometres from the site.

Both these quarries rely on the same route to the site as Salt Creek and have been captured accordingly. Local roads used to access these quarries, will be limited to permitted access roads under the respective quarry permits.

The access routes to/from these quarries are shown Figure 3.3.

Figure 3.2: OSOM Vehicle Transportation Route from Port of Portland to WWF

Figure 3.3: Quarry Locations and Proposed transportation route to/from site access point



3.5. General Traffic / Construction Personnel

Construction and personnel vehicles will be originating from different locations and will be able to access the site from all approaches to the site access point.

Staff are likely to have accommodation in Hamilton, Winslow, Port Fairy and Warrnambool. Subcontractors/suppliers will likely stay in Warrnambool and its surrounds.

These vehicles will be general road users and have as-of-right access to the road network. There will be numerous construction deliveries from vehicles that may only attend the site once, and hence it is difficult to identify each and every vehicle. Typically, vehicles would arrive via the following routes:

- Vehicles arriving from the south on Penshurst-Warrnambool Road will turn right at the Woolsthorpe-Heywood Road / Penshurst-Warrnambool Road intersection and head eastbound along Woolsthorpe-Heywood Road and turn into the site access on Woolsthorpe-Heywood Road.
- Vehicles arriving from the north on Penshurst-Warrnambool Road will continue through the township of Hawkesdale and turn left at the Woolsthorpe-Heywood Road / Penshurst-Warrnambool Road intersection and head eastbound along Woolsthorpe-Heywood Road and turn into the site access on Woolsthorpe-Heywood Road.
- Vehicles arriving from the west are to head eastbound along Woolsthorpe-Heywood Road, pass through the Penshurst-Warrnambool Road intersection and turn into the site access on Woolsthorpe-Heywood Road.
- Vehicles arriving from the east are to head westbound along Woolsthorpe-Heywood Road and turn the site access on Woolsthorpe-Heywood Road.

Vehicles travelling to/from the east of the site via the Woolsthorpe township will not be permitted to use Reeves Road and Wickhams Road.

Slatterys Road is proposed to be available for emergency vehicle access only ..

In terms of local access roads MSC have requested signage on Reeves Road, Wickham Road and Tarrone Lane (west of Holcim Quarry for quarry tucks) to ban the movement of project related vehicles using these roads, this is further detailed in Section 6.6 of this TMP.

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4. Existing Conditions

4.1. Local Road Network

The site location in the context of the local road network was shown in Figure 2.1. Table 4.1 provides a summary of the key transport elements of the existing road network conditions.

Table 4.1: Existing Road Conditions near WWF

Road	Speed Limit (km/h)	Class	Managed by	Approx. Road Width (m)	Road Surface	Total No. of Lanes	Traffic Control	Heavy Vehicle Classification
Henty Highway	100 / 80	Highway	DTP	7.0	Sealed	Two	Priority	
Princes Highway	100	Highway	DTP	7.0	Sealed	Two	Priority	
Penshurst-Port Fairy Road	100	Arterial	DTP	7.3	Sealed	Two	Priority	
Penshurst-Warrnambool Road	100	Arterial	DTP	7.0	Sealed	Two	Priority	
Woolsthorpe-Heywood Road (between Woolsthorpe TC and P-W Road)	100 / 80	Arterial	DTP	6.2	Sealed	Two	Priority	Approved route for B-Double and Higher Mass Limit vehicles
Woolsthorpe-Heywood Road (between P-W Road and T-E Road)	100 / 80	Arterial	DTP	4.0 - 6.2	Sealed / single seal with unsealed shoulders	Two / One	Priority	
Tarrone Lane	100	Sub-Arterial	MSC	6.4	Sealed	Two	Priority	
Warrnambool - Caramut Road	100 / 70	Arterial	DTP	7.0	Sealed	Two	Priority	
Hamilton Highway	100 / 60	Highway	DTP	7.0	Sealed	Two	Priority	
Mortlake-Ararat Road	100 / 60	Arterial	DTP	8.0	Sealed	Two	Priority	

Tyrendarra-Ettrick Road	100	Arterial	DTP	8.0	Sealed	Two	Priority
Hexham-Woorndoo Road	100	Sub-Arterial/ Local Road	MSC	7.5	Sealed	Two	Priority/ Standard
Slatterys Road	100	Local	MSC	5.5	Unsealed	Two	Priority M/C

4.2. Traffic Conditions

Table 4.2 provides 2020 estimated average annual daily traffic (AADT) traffic volumes for the key local roads (arterial and highways), as well as their respective estimated AM and PM peak hour traffic volumes (assumed peak hour volumes are the same for robustness of review).

As shown given a typical one-way road capacity is 900 vehicles per hour (Two-way 1,800 vehicles per hour) there is spare network capacity to facilitate construction and operational traffic demands associated with WWF.

Table 4.2: Existing 2020 Average Annual Daily Traffic Volumes and Peak Hour (one hour) Volumes

Road	2020 Estimated AADT Volumes		2020 Estimated Peak Hour Volumes		Commercial Vehicle Proportion (%)
	Two-way	One-way	Two-way	One-way	
Henty Highway	8900	4450	890	445	15
Princes Highway	8400	4200	840	420	11
Penshurst-Port Fairy Road	740	370	74	37	7
Penshurst-Warrnambool Road	2100	1050	210	105	13
Woolsthorpe-Heywood Road (between Woolsthorpe TC and P-W Road)	810	405	81	41	16
Woolsthorpe-Heywood Road (between P-W Road and T-E Road)	430	215	43	21	22
Tarrone Lane	344	172	34	17	34
Warrnambool-Caramut Road	350	175	35	18	11
Woolsthorpe-Hexham Road	907	454	91	45	9
Hamilton Highway	930	465	93	47	19
Mortlake-Ararat Road	740	370	74	37	26

Tyrendarra-Ettrick Road	300	150	30	15	7
Hexham-Woorndoo Road*	126	63	--		33
Slatterys Road**	37	18	---		23

**Hexham-Woorndoo Road volumes are from 2024 Council surveys.*
***Slatterys Road volumes are from 2022 Council surveys.*

4.3. Sustainable Transport

4.3.1 Pedestrians and Cyclists

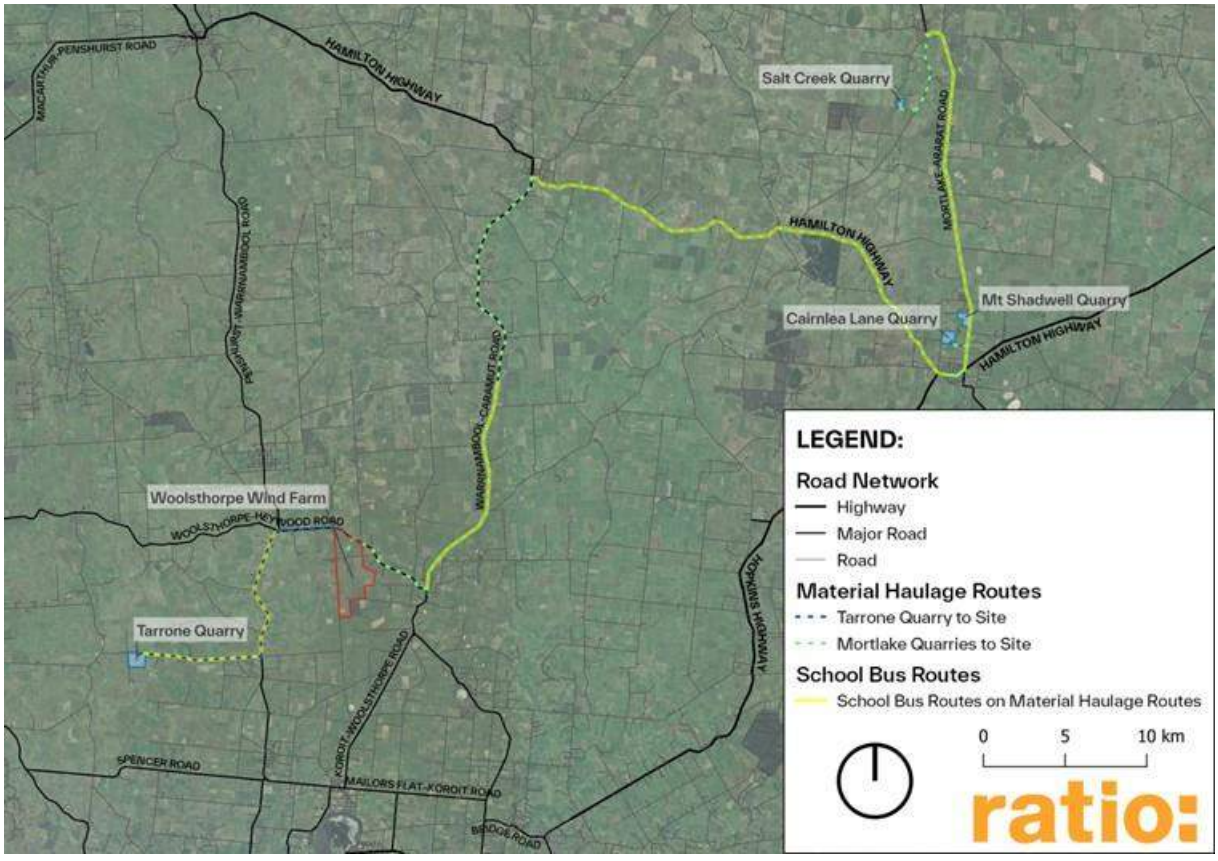
Given the rural area, there is no dedicated pedestrian or bicycle infrastructure provided near the WWF.

4.3.2 Public Transport and School Bus Routes

Several school bus routes operate across the regional area and rely on the core arterial roads between schools and the school catchment areas. A summary of these routes is included in Appendix C, with preliminary information presented below in Figure 4.1 and Figure 4.2.

Of key note at the time of preparing this report, no school bus route runs on Woolsthorpe-Heywood Road between Woolsthorpe township and Penhurst-Warrnambool Road, where the site access is located.

Figure 4.1: Local Bus Routes – Heavy Vehicle Routes



Source: Public Transport Services – Department of Transport and Planning 2024.

Figure 4.2: Local Bus Routes – OSOM Routes

Source: Public Transport Services – Department of Transport and Planning 2024.

4.4. Crash History

4.4.1 OSOM Routes

A review of the "Victoria Road Crash Data" for the last five years of crash data (1/7/2018-31/6/2023) for the key routes from the Port of Portland to the end of the WWF project boundary at Woolsthorpe-Heywood Road, via Port Fairy Road, and immediate local routes to the site has been completed. The full details are provided in Appendix D and separated into the following sub-sections:

— Primary OSOM Route;

— Secondary OSOM Route (Blade Delivery Only); and

— Local Routes.

PRIMARY OSOM ROUTE

A summary of the recorded crashes is provided in Figure 4.3, and the following has been found:

— A total of 59 crashes were recorded, with 28 'other injury', 28 'serious' and 3 'fatal' crashes.

— The 3 fatal crashes are as follows:

- On 3/5/2023 at dusk in wet conditions a fatal crash occurred between a heavy vehicle and a passenger vehicle and was classified as a non-overtaking head-on crash.

- On 20/1/2019 during night-time a fatal crash occurred between a motorcycle and a passenger vehicle and was classified as a non-overtaking head-on crash.
- On 23/2/2019 during the daytime a fatal crash occurred between a cyclist and a heavy vehicle and was classified as a cross traffic collision at an intersection.

— Of the 28 serious crashes the following was noted:

- 7 reported accidents (25%) occurred at night/dusk however none of these accidents involved a heavy vehicle.
- 4 serious accidents occurred at the intersection of Henty Highway/New Street where all accidents involved 2 light vehicles. No other specific re-occurring crash locations were identified.
- 8 reported accidents (29%) occurred under wet weather conditions.
- Most common crash types were:
  - 8x Off left/right bend into object/parked vehicle (29%)
  - 6x Cross traffic at intersection (21%)
  - 5x Right off carriageway into object/parked vehicle (18%)

SECONDARY OSOM ROUTE (WIND TURBINE BLADE DELIVERY ONLY)

A summary of the recorded crashes will be provided in Figure 4.3 and the following has been found:

— A total of 36 crashes were record, with 18 'other injury', 16 'serious' and 2 'fatal' crashes.

— The 2 fatal crashes are as follows:

- On 20/1/2019 during night-time a fatal crash occurred between a motorcycle and a passenger vehicle and was classified as a non-overtaking head-on crash.
- On 23/2/2019 during the daytime a fatal crash occurred between a cyclist and a heavy vehicle and was classified as a cross traffic collision at an intersection.

— Of the 16 serious crashes the following was noted:

- 4 reported accidents (25%) occurred at night/dusk however none of these accidents involved a heavy vehicle.
- 4 serious accidents occurred at the intersection of Henty Highway/New Street where all accidents involved 2 light vehicles. No other specific re-occurring crash locations were identified.
- 7 reported accidents (44%) occurred under wet weather conditions.
- Most common crash types were:
  - 5x Cross traffic at intersection (31%)
  - 3x Off left/right bend into object/parked vehicle (19%)
  - 2x Right off carriageway into object/parked vehicle (13%)
  - 2x Head on (not overtaking) (13%)

4.4.2 Haulage Routes

A summary of the recorded crashes is provided in Figure 4.4 and the crash analysis has shown that:

— A total of 4 crashes were recorded on roads located within the vicinity of WWF with all four 'serious' crashes.

— A total of 13 crashes were recorded along the quarry haulage routes, with one (1) 'fatal', 7 'serious' and 5 'other injury' accidents.

— The single fatal crash was as follows:

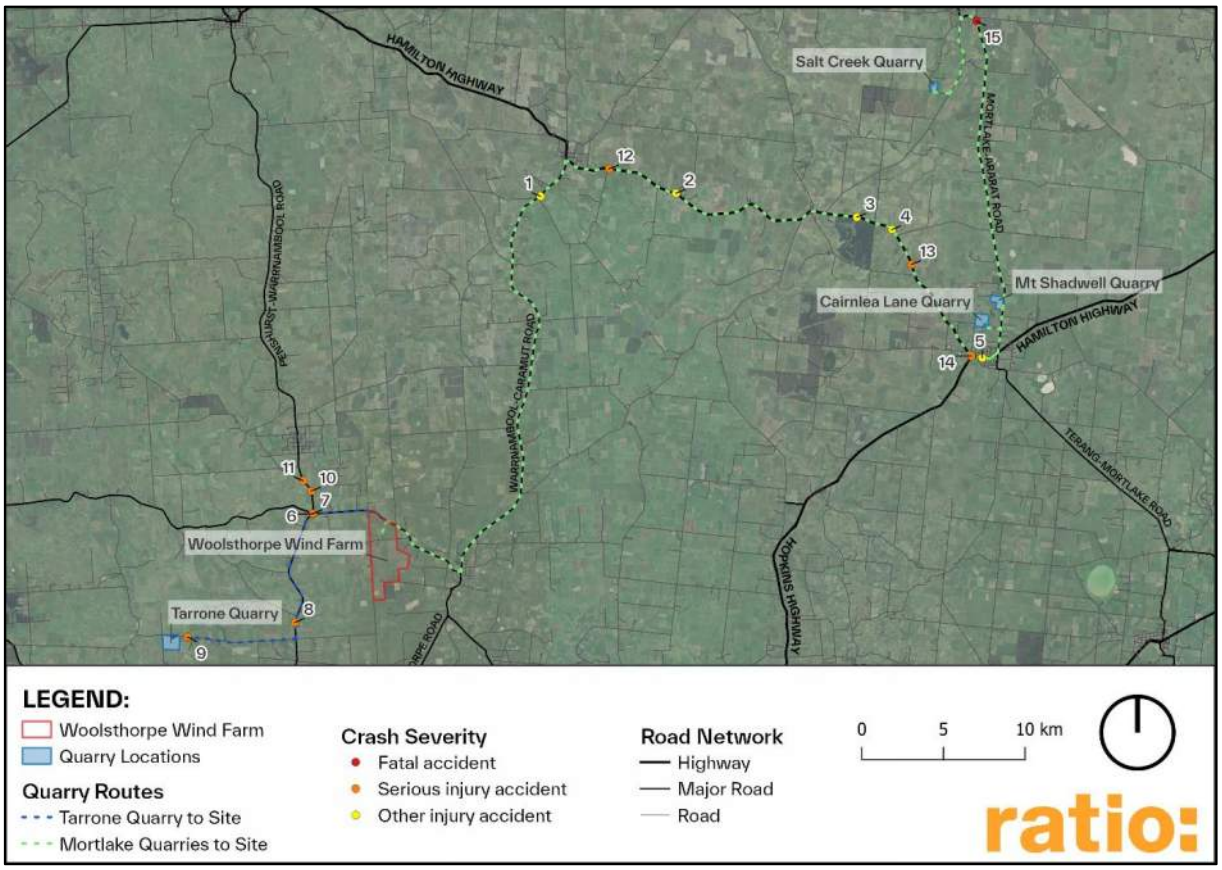
- On 30/1/2020 at night in dry conditions a fatal crash occurred involving a single light vehicle and was classified as a crash off the carriageway on right bend.

— Of the total of 9 serious crashes the following was noted:

- 2 reported accidents (22%) occurred at night/dusk however none of these accidents involved a heavy vehicle.
- No specific re-occurring crash locations were identified.
- 1 reported accident (11%) occurred under wet weather conditions.
- Most common crash types were:
  - 4x Off left/right bend into object/parked vehicle (44%)
  - 2x Left/Right off carriageway into object/parked vehicle (22%)

Figure 4.3: Crash Locations – Primary & Secondary OSOM Traffic Routes

Figure 4.4: Crash Locations – Local Haulage Routes



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5. Traffic Generation and Road Capacity Analysis

5.1. Construction Traffic Generation

The construction program and traffic generation estimates have been provided by the major contractors for the WWF project.

The construction program is likely to occur over approximately 24 months, commencing in Q4 2024 (subject to relevant planning approvals), with six-day working weeks and seven-day working weeks for limited periods of time for the civil and WTG installation works respectively. Full details of the proposed working hours are provided in Section 2.2 of this TMP.

Project vehicle movements in Table 5.1 are calculated as total two-way vehicle movements for each component / element. Daily vehicle movements are presented as the total number of movements divided by the number of days for each associated activity. For the purposes of this assessment, a six-day working week has been applied for the concentration of traffic movements.

We acknowledge that, practically, any single trip will result in at least two vehicle movements per day (arrival and departure). However, we note that some activities will not generate any traffic on some days, with this effectively captured within the aggregate Project daily vehicle movements presented in Figure 5.1.

Key Assumptions

Traffic generated by WWF site during construction will primarily be heavy vehicles delivering materials and worker vehicles. This will generally comprise:

- Light vehicle traffic generated by staff travelling to/from the site (i.e. utes, vans and private cars);
- OSOM vehicles used for the delivery of large WTG components; and
- Heavy vehicles (HV) which are used for the delivery of the smaller WTG components and importing construction materials such as aggregate and cement for the concrete.

VEHICLE CAPACITY

The following assumptions have been made for the capacity of HV vehicles that will deliver the majority of bulk materials for construction:

— Water Tanker:	27.0 cubic metres per HV
— Aggregate (Rock/Sand)	13.0 cubic metres per HV
— Cement	40 tonnes per HV
— Reinforcement:	23 tonnes per HV

ACCESS ROADS AND HARDSTANDS

Access roads and hardstand area works will comprise:

— Internal Access Roads typically 5.5 metres wide by 0.2 metres deep;

— WTG hardstands 60 metres by 40 metres with a depth of 0. 2 metres;

— A 100 metre by 100 metre temporary construction compound hardstand area with a depth of 0.2 metres;

— A 100 metre by 80 metre temporary batchplant hardstand area with a depth of 0.2 metres;

— A 100 metre by 100 metre substation hardstand area with pavement depth of 0.3 metres.

Allowances have been made to compensate for additional traffic associated with additional aggregate requirements. This is accommodated in Table 5.1

WTG FOOTINGS

Concrete for WTG footings will be produced internally within the on-site concrete batching plant from externally sourced materials. Each footing will require approximately 660 cubic metres of concrete and include 80 tonnes of reinforcing steel.

Aggregate for the concrete will be sourced from the identified quarries within this TMP.

OTHER DELIVERIES

Other materials for construction have been outlined in Table 5.1 for reference. This includes items such as:

— Electrical cabling and other materials/equipment for the internal distribution network;

— Construction equipment and plant; and

— Plant fuel and other miscellaneous items.

CONSTRUCTION STAFF TRAFFIC VOLUMES

Staffing demands will vary throughout the program identified in Figure 2.3. In line with the respective construction activities, an adopted staff movement conservatively assumed for the project is that all staff will access the Wind Farm site by private vehicle, with an average occupancy of 1.8 persons per vehicle.

Staff movements to and from the Wind Farm site would be substantially reduced should communal transport be provided.

Daily work estimates are captured in Figure 5.1

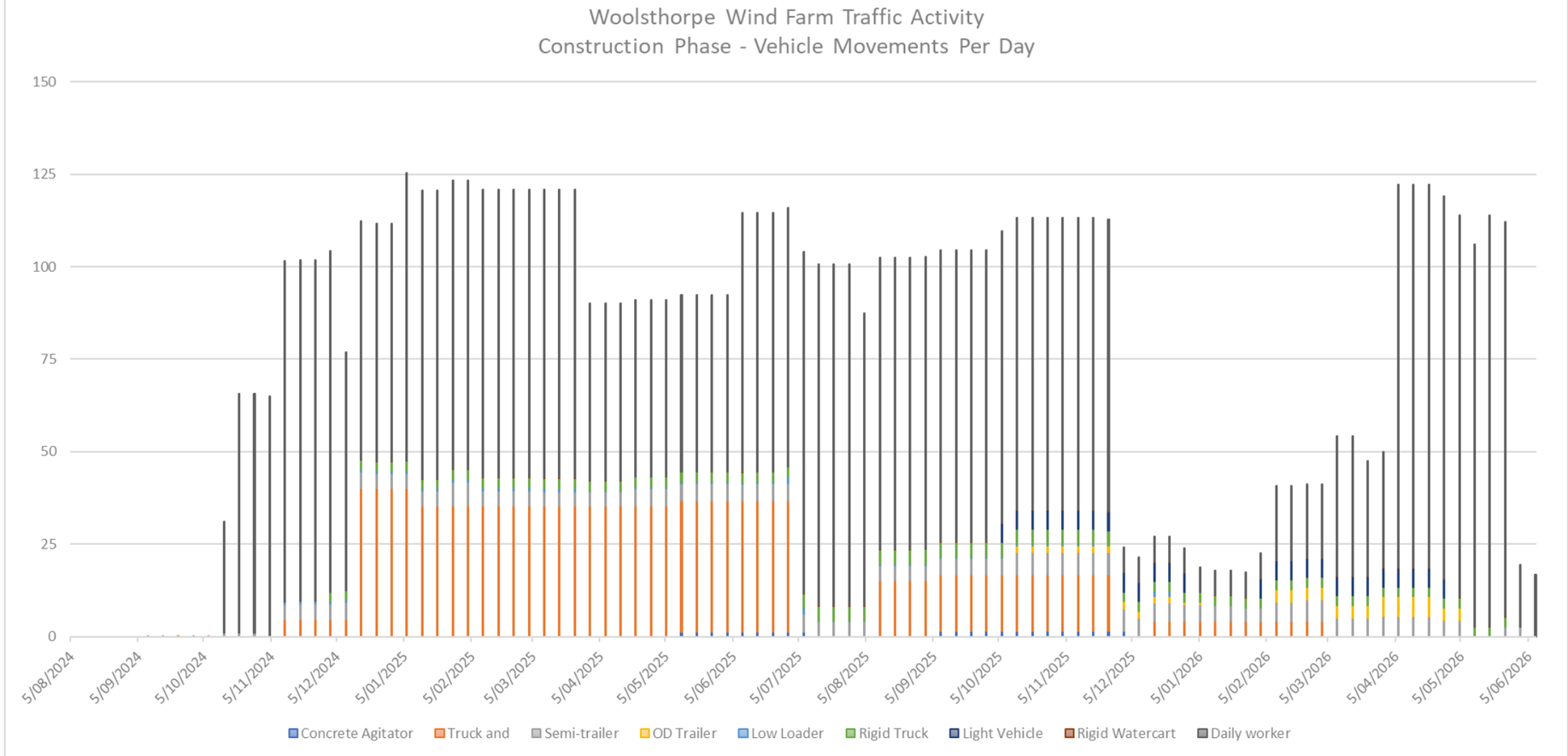
Table 5.1: WWF Construction Traffic Generation

Material	Quantity (tonnes/item/kl)	Vehicle Type	Origin	Projected Start Date	Projected Finish Date	Duration (weeks)	Total Vehicle Movements
Wind Turbine Structure and Access							
Sand	4,486m^3	Truck and Trailer	Ararat Quarry	Aug-25	Nov-25	16	690
Aggregate	3,759 m^3	Truck and Trailer	Local Quarries (Tarrone OR Mortlake Quarries)	Aug-25	Nov-25	16	578
Cement	3,738 m^3	Semi-trailer	Geelong	Aug-25	Nov-25	16	187
Foundation Steel	960t	Semi-trailer	Adelaide	Jul-25	Nov-25	18	83
Potable Water for Concrete	1,763KL	Rigid Truck	Volcanic Aquifer in Penhurst	Oct-25	Nov-25	8	131
Tower Sections (5 per Turbine)	60	OSOM Trailer	Portland / Port of Portland	Feb-26	Apr-26	13	120
Hubs	12	OSOM Trailer	Port of Portland	Feb-26	Apr-26	13	24
Blades	36	OSOM Trailer	Port of Portland	Feb-26	Apr-26	13	72
WTG Ancillary Containers	12	Semi-trailer	Port of Melbourne	Feb-26	Apr-26	13	24
Drive Trains	12	OSOM Trailer	Port of Portland	Feb-26	Apr-26	13	24
Nose Cones (Fibres)	12	OSOM Trailer	Port of Portland	Feb-26	Apr-26	13	24
Foundation HD bolts	48	Semi-trailer	Melbourne	Jul-25	Nov-25	18	32
Switchgear, Oil, Coolant, Lifts, Tower Bolts, Cable & other misc. items	120	Semi-trailer	Port of Melbourne	Feb-26	Apr-26	13	60
Civil Construction Plant (drop off)	40	Low Loader	Melbourne	Nov-24	Mar-25	20	80
Civil Construction Plant (pick up)	40	Low Loader	Site to Melbourne	Feb-25	Nov-25	40	80
Main Crane & Components	24	OSOM Trailer	Melbourne	Mar-26	Apr-26	4	48
Ancillary cranes and components	12	Semi-trailer	Geelong / Local	Mar-26	Apr-26	4	24
Access Track and WTG Hardstand, Temp Compound, Batch plant Pad and Substation and Gravel	40,000	Truck and Trailer	Local Quarries (Tarrone OR Mortlake Quarries)	Dec-24	Jun-25	29	6,154
Drainage and Fencing Materials	12	Semi-trailer	Melbourne	Dec-24	May-25	26	24
Water for Dust Suppression, Internal Works	22,500KL	Semi-trailer	Volcanic Aquifer in Penhurst	Nov-24	Apr-26	76	1,666
External Road / Intersection Upgrades							
Gravel	200t	Truck and Trailer	Local Quarries (Tarrone OR Mortlake Quarries)	Nov-24	Dec-24	6	120

Material	Quantity (tonnes/item/kl)	Vehicle Type	Origin	Projected Start Date	Projected Finish Date	Duration (weeks)	Vehicle Movements
Asphalt	150t	Truck and Trailer	Warrnambool	Sep-24	Feb-25	24	20
Spray Seal	50t	Truck and Trailer	Melbourne	Nov-24	Dec-24	6	40
Water for Dust Suppression	200KL	Semi Trailer	Volcanic Aquifer in Penhurst	Nov-24	Dec-24	6	14
Electrical Network							
Trenching Equipment (drop off)	12	Semi-trailer	Melbourne	Dec-25	Jan-26	4	24
Trenching Equipment (pick up)	12	Semi-trailer	Site to Melbourne	Feb-25	Feb -26	4	24
Sand for Cable Bedding	1980m3	Truck and Trailer	Ararat	Nov-25	Dec25	6	305
Cable Drums	27 items	Semi-trailer	Port of Melbourne	May-25	Jul-25	12	18
Substation Foundation Concrete (agg/sand/cement total)	50	Concrete Agitator	Warrnambool	Apr-25	Jun-25	12	100
Substation Foundation Steelwork	3 loads	Semi-trailer	Melbourne	Oct-2	Oct-24	2	6
Construction Toolage and Equipment (drop off)	4	Semi-trailer	Melbourne	Feb-26	Mar-26	2	8
Construction Toolage and Equipment (pick up)	4	Semi-trailer	Adelaide	Jun-25	Jan-26	26	8
Substation HV Equipment, Aux Tx, Backup Generator	15	Semi-trailer	Port of Melbourne	Sep-25	Oct-25	8	30
Substation HV Steelwork	3 loads	Semi-trailer	Melbourne	Dec-25	Dec-25	1	6
Power Transformer	2 loads	OSOM Trailer	Port of Melbourne	Dec-25	Mar-26	4	4
O&M Building							
Foundation concrete (Mixed)	30	Concrete Agitator	Warrnambool	Sep-25	Nov-25	7	60
Foundation Steel	5	Semi-trailer	Warrnambool	Sep-25	Nov-25	7	10
Building Materials	20	Rigid Truck	Warrnambool	Sep-25	Jan-26	28	40
Compound and General Construction							
Potable Site Water	50KL/Month	Rigid Watercart	Koroit	Jan-25	May-26	76	71
Rubbish Removal General & Recycling	16m3/fortnight	Rigid Truck	Warrnambool	Dec-25	May-26	76	608
Fuel	1/Month	Rigid Truck	Warrnambool	Jan-25	May-26	76	38
General deliveries	5/fortnight	Rigid Truck	All Areas	Dec-24	May-26	80	400
Septic	1/week	Rigid Truck	Warrnambool	Jan-25	May-26	76	152
Pilot Vehicles	All OS/OM deliveries	Light Vehicle	All Areas	With OSOM deliveries	With OSOM deliveries	13	400

Batching Plant (drop off)	8 Items	Low-Loader	Warrnambool	Jun-25	Nov-25	4	16
Batching Plant (pick up)	8 Items	Low-Loader	Warrnambool	Dec-25	Dec-25	2	16
Material	**Quantity (tonnes/item/kl)**	**Vehicle Type**	**Origin**	**Projected Start Date**	**Projected Finish Date**	**Duration (weeks)**	**Vehicle Movements**
Site Construction Huts (drop off)	16 Units	Semi-Trailer	Warrnambool/Melbourne	Jan-25	Jan-25	2	32
Site Construction Huts (pick up)	16 Units	Semi-Trailer	Warrnambool/Melbourne	May-26	May-26	2	32
General and CFA Water Tanks (drop off)	3 units	Semi-Trailer	Warrnambool	Dec-24	Dec-24	2	6

Figure 5.1: Project Construction Phase Traffic Generation



5.1.1 Network Traffic Impacts

From Figure 5.1, Project generated traffic at the time of peak construction activity has been applied to the existing road network.

Aggregate haulage traffic has been applied to roads between each quarry and the Project area in full. That is:

- It is conservatively assumed that all material will be sourced from one quarry site only (not split across both quarries); and
- Total traffic volumes on haulage routes from each quarry site represent the maximum future traffic expected.

Table 5.2: WWF Construction – Peak Road Traffic Volumes (AADT)

Road	Existing	WFF Traffic[1]	Total	% Change
Henty Highway	8900	40	8940	0.5%
Princes Highway	8400	40	8440	0.8%
Penshurst-Port Fairy Road	740	40	780	5.4%
Penshurst-Warrnambool Road	2100	200	2300	9.5%
Woolsthorpe-Heywood Road (West of W-P Road)	810	6[2]	816	0.7%
Woolsthorpe-Heywood Road (West of Access)	810	200[3]	1010	24.7%
Woolsthorpe-Heywood Road (East of Access)	810	76[4]	886	9.4%
Tarrone Lane	344	36	380	10.5%
Warrnambool-Caramut Road	350	76	426	21.7%
Hamilton Highway	930	76	1006	8.2%
Mortlake-Ararat Road	740	36	776	4.9%
Tyrendarra-Ettrick Road	300	6[2]	306	2%
Hexham-Woorndoo Road	126	36	162	28.6%

[1] Peak daily project generated traffic volume during construction period
[2] Blade Haulage only
[3] Assumes all aggregate sourced from Tarrone
[4] Assumes all aggregate sourced from Salt Creek/Cairnlea/Mt Shadwell

6. Traffic Management

6.1. General

The design drawings relating to the mitigation measure recommendations in this chapter can be found In Appendix E. The following is a list of assumptions associated with developing the mitigation measures and associated conceptual drawings:

- The design of upgrades to all intersections, road sections and access point was based on available high-resolution aerial imagery.
- The largest OSOM vehicle have been modelled as a blade delivery vehicle with an independent rear dolly. Vehicle dimensions and specifications are as advised by the proposed WTG supplier.
- The conceptual drawings are not to be used as an 'issue for construction' document.
- Detailed design drawings will be submitted to the relevant road authority if required for review and approval prior to construction.

The mitigation measures are to be staged in their implementation, with site access works commencing before OSOM deliveries are required as part of the WWF construction process. The necessary wider road network mitigation measures will be required before any OSOM deliveries can take place.

The mitigation measures are identified as pre-construction works to be undertaken prior to the use of identified roads for construction purposes. Measures relating to the access point aim to ensure safe line-of-sight distances and turning movements and aim to avoid potential through traffic conflicts.

6.2. Roles and Responsibilities

The various roles for the WWF project will be clarified before works commence and a nominated contractor is hired.

Contact names and details of responsibilities would be formalised prior to works commencing and those of relevance provided to relevant stakeholders.

6.3. External Works

6.3.1 Site Access Intersections

All site traffic (heavy vehicles, all staff and contractors etc.) will enter the site through the access on Woolsthorpe-Heywood Road.

6.3.2 Intersections along the primary OSOM route

The turning movements of the OSOM vehicles have also been analysed at critical intersections along the previously agreed primary OSOM route to the site.

Five intersections are identified that will require temporary works to support OSOM vehicle movements:

1. Penhurst-Warrnambool Road and Woolsthorpe-Heywood Road intersection.
2. Penhurst-Warrnambool Road and Penhurst-Port Fairy Road priority intersection.
3. Princes Highway and Penhurst-Port Fairy Road priority intersection.
4. Princes Highway and Henty Highway priority intersection.
5. Henty Highway and New Street priority intersection.

6.3.3 Intersections along the secondary OSOM (Turbine blade delivery) route

The turning movements of the OSOM vehicles have also been analysed at critical intersections along the previously agreed secondary OSOM route to be used only for delivery of the wind turbine blades.

Four additional intersections are identified that will require temporary works to support OSOM vehicle movements:

1. Princess Highway and Tyrendarra-Ettrick Road priority intersection.
2. Tyrendarra-Ettrick Road and Woolsthorpe-Heywood Road priority intersection.
3. Woolsthorpe-Heywood Road and Hamilton-Port Fairy Road priority intersection.
4. Penhurst-Warrnambool Road and Woolsthorpe-Heywood Road priority intersection.

6.3.4 Woolsthorpe-Heywood Road

Where Woolsthorpe-Heywood Road is relied upon for the one-way delivery of the WTG blades, between Tyrendarra-Ettrick Road and Penhurst-Warrnambool Road, there are several sections where the road narrows to a single-width sealed carriageway with unsealed shoulders.

The Department of Transport and Planning has outlined that the single-width sections of the road will be:

— Inspected prior to commencing haulage of WTG blades to the site for status of the road as a base case;

— 'Make good' the road shoulders' single-width sections suitable for the purposes of haulage of the WTG blades to the site.

- This could require localised filling and/or repair works to shoulders to facilitate a level surface for the period of Blade delivery to the site.

— Maintain shoulders on these sections of Woolsthorpe-Heywood Road until the completion of the haulage of blades to the site.

DTP have further advised that the use of this section of Woolsthorpe-Heywood Road must be formalised via the secondary consent process, under the following conditions:

a) "Details of the scope of the expertise, duties and role of the nominated Road Quality Auditor engaged, including inspection frequency and reporting requirements.

b) An existing conditions survey and road safety audit of the Heywood – Woolsthorpe Road must be undertaken. This report must specify recommendations regarding the suitability of the road to safely accommodate the use of over-dimension components (blades). Where upgrades are required, the report must include:

a. Detailed engineering plans showing the required works, including cross sections which show pavement formation, depth, drainage, and surface levels.

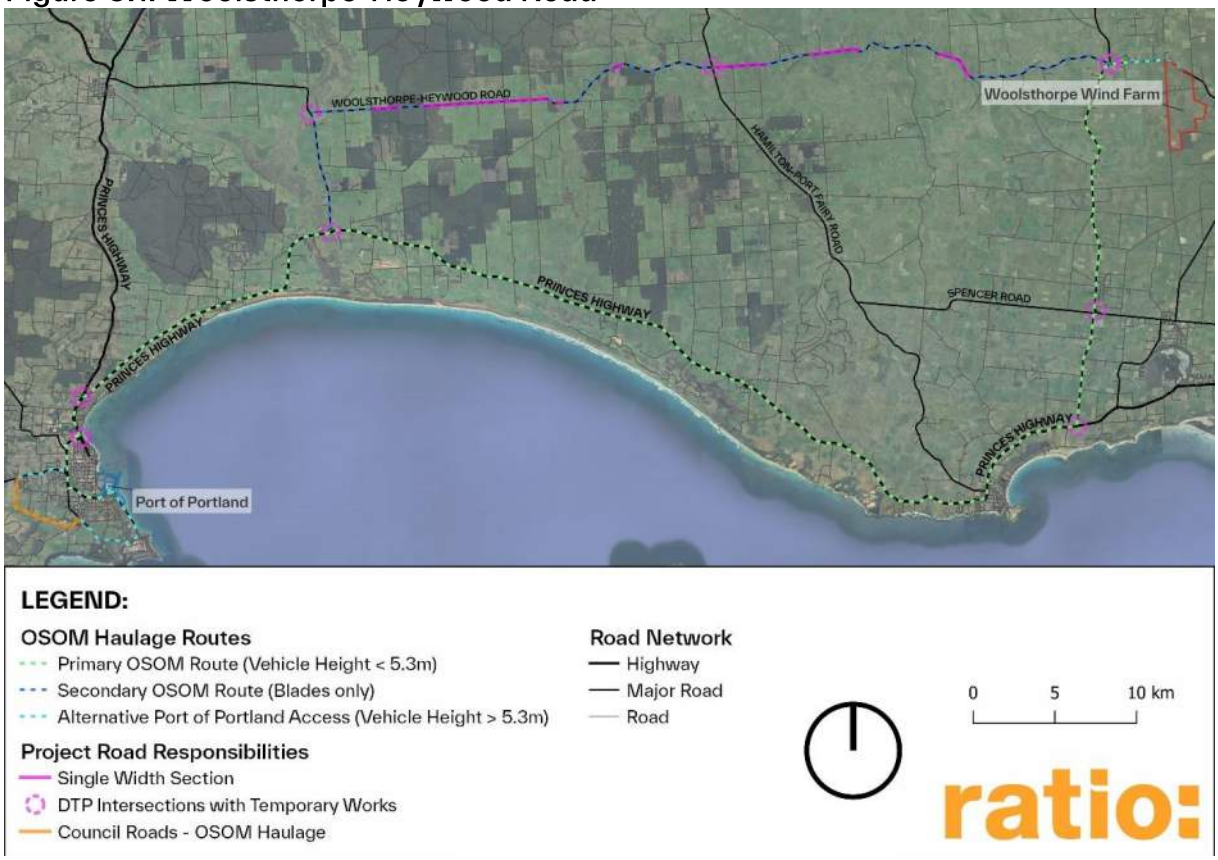
b. A program that describes the timing of when the works are to be undertaken.

c. *Provide for appropriate safety measures around school bus routes and school bus times.*

d. *A program to rehabilitate the road within agreed timeframes to the condition identified in the surveys carried out under the above condition or to the condition to which the roads have been upgraded, whichever is relevant."*

It is estimated there is a total of 18 kilometres of single-width section pavement across multiple locations on Woolsthorpe-Heywood Road. The location of these single-width sections is shown on Figure 6.1.

Figure 6.1: Woolsthorpe-Heywood Road



6.3.5 Slatterys Road Use

As outlined by Moyne Shire Council on the 10th May 2024, if Slatterys Road is to be utilised by the Project for vehicle movements other than emergency vehicles, the Project will be required to adhere to the following:

"Prior to commencement of the project the applicant must submit the following designs to Council for approval:

- *Upgrade of Slatterys Road from the Woolsthorpe Wind Farm track crossing to a point 50m west of the Woolsthorpe-Heywood Road to an unsealed 6.2m carriageway with 0.5m shoulder on each side plus all associated drainage works:*
  - *Dust suppressant (i.e. granitic sand) surfacing to be used in the vicinity of the crossing and the dwelling east of the Wind Farm Track Crossing*
- *Upgrade of Slatterys Road from a point 50m west of Woolsthorpe-Heywood Road to Woolsthorpe-Heywood Road to a sealed minimum 6.2m carriageway with 0.5m shoulders on each side, plus all associated drainage works.*
  - *Minimum return radius of 20m at the intersection.*

Pavement depth design needs to cater for dairy tanker (up to 26m B-Double/A-Double) first mile/last mile access to dairy at western end of Slatterys Road. Geotechnical investigation must be undertaken prior to commencement of design works.

Council records indicate Medium Roadside Conservation values and the presence of EVC classes present along the road. Any works would need the necessary planning approvals and vegetation offsets before commencing upgrade works.

Road upgrade cannot occur without prior design approval and Works Within Road Reserves Permit from Council, and the road must not be used (except for the road updated plant and materials) until the upgrade completion is formally approved by Council.

The upgraded section of road will be subject to RQA inspection, maintenance and rehabilitation response times as per the endorsed Woolsthorpe Wind Farm TMP for the duration of the construction and commissioning phase of the project. This includes any ongoing dust suppression works.

Upon final commissioning of the Wind Farm, the road upgrade will be reinstated to an as-new condition."

Moyne Shire Council will require a CCTV camera or traffic counter to be placed on the road to record traffic types and numbers for the duration that Slatterys Road is utilised.

6.3.6 Woolsthorpe-Heywood Road / Warrnambool-Caramut Road Intersection

The intersection in Woolsthorpe Township presents challenges for Oversized WTG componentry to be delivered from the east of the subject site. Therefore, all oversized componentry will arrive to the site from the west of the site access point.

6.4. Driver induction training

Prior to commencing construction activities, regular and returning drivers of semi-trailers, rigid vehicles and/or B-Double and OSOM vehicles who will access and egress the site for pick-up and delivery of material will be required to undertake a driver induction. The induction course will need to be developed early to ensure it is ready prior to construction activity (including any site preparation works) commencing. Irregular and one-off drivers of pick-ups and deliveries would be considered exempt to this induction requirement.

The induction course would generally cover the following information:

— A Driver Code of conduct.

— Designated site entrance point for entering and exiting the site.

— Suitable / approved routes to and from the site (including any road bans).

— Suitable times of travel (i.e. outside of school bus times, to be confirmed by relevant contractor).

— Applicable traffic management procedures that will need to be in place prior to approaching or departing the site (if required).

— Communications and notification procedures.

— Speed restrictions (on the road network and the site).

— Safety procedures (during transportation and in the event of an accident / emergency).

Where it is observed or reported that workers and contractors associated with the construction of WWF do not act in accordance with the approved actions within this TMP, the relevant Responsible Authority may issue a written notice of breach.

The Responsible Authority will issue the breach notice to the wind farm permit holder and it will be the permit holder's responsibility to pay the levy and / or pass on to the individual if they

wish. Potential non-compliant actions could be but not limited to, utilising non-approved roads or noncompliance with school bus curfew times.

6.5. Contractor Liaison

Liaison is required with appropriate contractor(s) responsible for delivery of materials to/from the site to ensure that they comply with this TMP including adherence to specified construction traffic routes.

Principal contractors will be responsible to ensure that all sub-contractors and suppliers are aware of the requirements, and comply with, this TMP.

6.6. Restricted Access

6.6.1 Heavy Vehicles

The following roads have been identified to have restricted WWF related construction vehicle access during the WWF project:

— Tarrone Lane (west of the Holcim Quarry, for quarry trucks);

— Reeves Road & Wickham Road (around Woolsthorpe);

— Hexham-Woorndoo Road (south of Salt Creek Quarry);

Slatterys Road is not proposed for any vehicle movements, except for Emergency Vehicle access.

Council reserves the right to add other roads to the aforementioned list.

Figure 6.2: Location of Restricted Access Signage

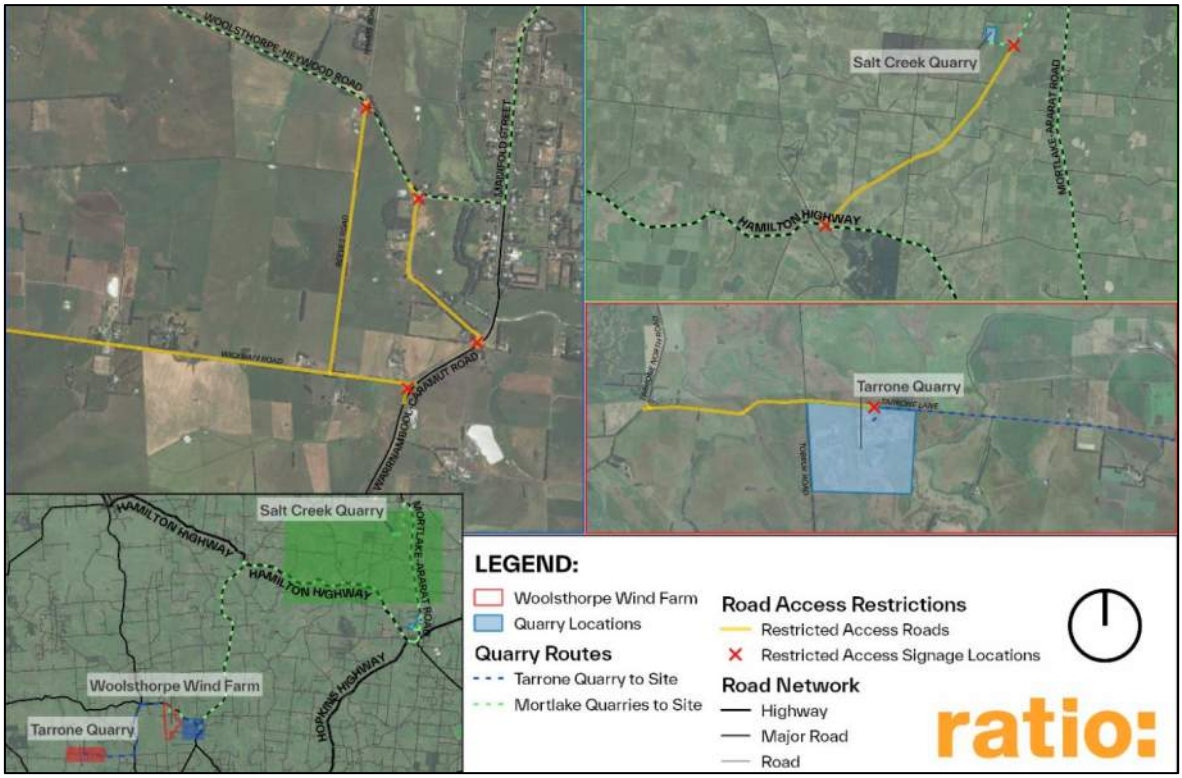


Figure 6.3: Example of Restricted Access Signage

6.6.2 Other Vehicles

Access for general construction light vehicles (i.e. those typically at or below a garbage truck in size) are permitted to use any local roads to travel to the site excepting the eastern end of Slatterys Road.

Signage as shown in Figure 6.1 will be installed at the entrance to Slatterys Road to enforce traffic movements and direct staff to the main access on Woolsthorpe-Heywood Road.

6.7. Construction Vehicle Identification

All construction traffic (including trucks and all light vehicles) will display a magnet or sticker identifying them as being associated with the WWF, subject to agreement between all parties and privacy waivers in the event of using privately owned vehicles.

As informed by MSC each vehicle is to display:

— Two stickers/magnets (minimum size 550mm x 250mm with lettering at 180mm high) and one small/magnet (minimum size 350mm x 180mm with lettering 130mm high).

— Each sticker/magnet is to display an identifying number to be of black.

— Writing on a fluoro-coloured background. This identification requirement will apply to both contractor and project vehicles. (An example of the sticker/magnet for the Woolsthorpe Wind Farm would be 'WWF12').

A final naming convention would be determined at project commencement if there are any efficiencies with neighbouring projects (e.g. Hawkesdale Wind Farm).

6.8. OSOM Vehicle Management

A preliminary route assessment has been undertaken as part of the TMP preparation. The preferred Transport Contractor will also be expected to prepare a route assessment as part of their haulage route assessment work. It will be the OSOM transport contractor's responsibility to obtain the necessary approvals from the relevant authorities for the transportation of materials from the Port of Portland to WWF site, including but not limited to, the NHVR and Department of Transport and Planning (DTP). The following sections outline the recommended considerations in the transportation of materials by OSOM vehicles to WWF.

6.8.1 Delivery of OSOM Equipment

The timing of delivery of OSOM equipment will depend on the conditions placed on the NHVR Permit. Based on previous experience, NHVR Permit is expected to require delivery of OSOM equipment to the site before sunrise.

Typically, OSOM equipment will be delivered to the site under escort and be parked up until Normal Working Hours to be unloaded on site. This can be done from Monday to Saturday, with no deliveries on Sunday.

Noise from early morning deliveries will be assessed as part of the Noise and Vibration Management Plan but it is not expected to be disruptive to the community or sensitive receivers.

Component deliveries depend on installation activities and are expected to occur over six months.

NATIONAL HEAVY VEHICLE REGULATOR

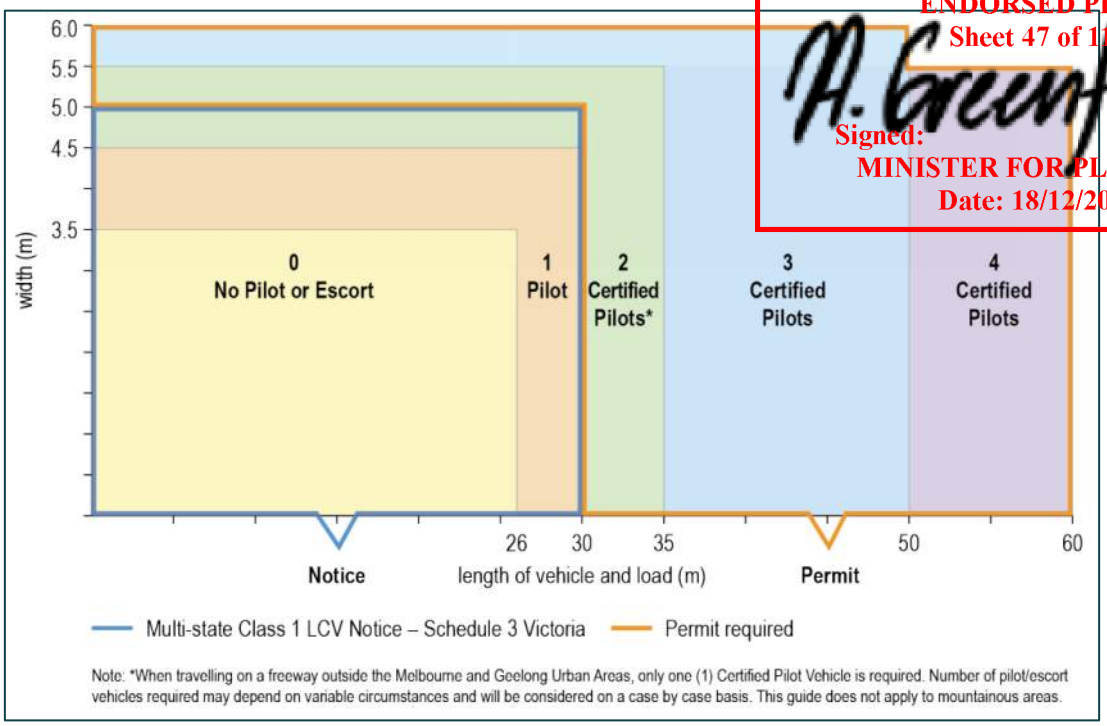
The NHVR issues permits for oversized vehicles. DTP, on behalf of NHVR, will require at least 28 days to assess any route.

Copies of issues NHVR permits will need to be supplied to DTP South West Region (southwestworks@roads.vic.gov.au) as well as Moyne Shire Council as the Responsible Authority.

ESCORT ARRANGEMENTS

The NHVR advise that it is the responsibility of the operator to organise pilots or escorts. NHVR provides a basic guide for determining pilot and escort arrangements, based on industry best practice (see Figure 6.4). The aim of this guide is to aid the safe and efficient movement of OSOM loads and to also streamline the permit application and escort booking process.

Figure 6.4: NHVR Guide for Pilot Requirements (Victoria)



Source: NHVR (Guide for pilot requirements in Victoria) January 2018

It should be noted, that this graph is only a guide and the requirements for the WWF transportation of materials may require consultation with Transport Safety Services (TTS) to determine the best and safest pilot and escort arrangements. TTS are a provider of services to the OSOM industry, which includes escorts for vehicles carrying large items and the inspection of vehicles and loads.

TEMPORARY SIGN REMOVAL

All signage removed for OSOM deliveries along the identified routes is to be replaced and correctly orientated immediately after each load passes.

In the instance a second load will follow in short succession to the first load, the relevant Traffic Guidance Schemes prepared by the pilot company are to address how signs will be managed between loads.

DEPARTMENT OF TRANSPORT AND PLANNING

DTP will need to give permission (provide necessary staff on site) for any such OSOM vehicles crossing or travelling across train tracks. A permit is required when an OSOM vehicle crossing the railway line is greater than 4.9 metres in height, 4.0 metres wide or 26.0 metres in length.

There are two potential railway crossing locations at the Port of Portland for OSOM vehicles. The confirmed crossing location will depend on which access road is used in departing the Port area, being either No. 2 Quay Road or Cliff Street.

A coordinated liaison with VicTrack and ARTC may also be required in this process.

6.8.2 Overhead Obstructions

Overhead cabling, particularly electricity, can pose a hazard in the delivery of wind turbine components both for safety reasons and in restricting vehicle movements. The clearance required for the largest OSOM deliveries is 6.1 metres from the ground surface. Temporary

raising of overhead cables may be required if they currently do not meet the minimum 6.1m clearance.

The transport contractor will need to ensure that the OSOM route has sufficient clearance.

Overheads that must have sufficient clearance include wires, structures and trees. This also applies to ground clearance at rail level crossings.

A request for raising overhead cables is to be made with the relevant asset owner who will perform these works for a fee should there be insufficient clearance for passage of the OSOM vehicles.

PRIMARY HAULAGE ROUTE

Locations identified where overhead cabling will need to be checked and may need raising include:

— Penshurst-Port Fairy Road:

- Overhead cable 5.7 kilometres north of Princes Highway.
- Overhead cable 6.1 kilometres north of Princes Highway.
- Overhead cable 6.5 kilometres north of Princes Highway.

— Penshurst-Warrnambool Road:

- Overhead cable 8.7 kilometres north of Princes Highway.
- Overhead cable 14.9 kilometres north of Princes Highway (high voltage).
- Overhead cable 15.1 kilometres north of Princes Highway.
- Overhead cable 17.4 kilometres north of Princes Highway (high voltage).
- Overhead cable 17.6 kilometres north of Princes Highway (high voltage).

— Woolsthorpe-Heywood Road:

- No overhead cabling of concern in the vicinity of WWF.

— Princes Highway (Portland to Penshurst-Port Fairy Road):

- This length of road is declared an OSOM route and all overheads have been assumed to provide the necessary height clearance.

SECONDARY HAULAGE ROUTE (BLADES ONLY).

Locations identified where overhead cabling will need to be checked and may need raising include:

— Tyrendarra-Ettrick Road:

- Overhead cable at the entrance to Tyrendarra-Ettrick Road/Prince Highway intersection.
- Overhead cables and sign 0.2km north of Princes Highway;
- Overhead cables 2.7km north of Princes Highway;

— Woolsthorpe-Heywood Road:

- Overhead cables 0.8km west of Penhurst-Warrnambool Road (high voltage);
- Overhead cables 7.2km west of Penhurst-Warrnambool Road;
- Overhead cables 8.4km west of Penhurst-Warrnambool Road;
- Overhead cables 8.8km west of Penhurst-Warrnambool Road;
- Overhead cables 11.5km west of Penhurst-Warrnambool Road;

- Overhead cables 12.5km west of Penhurst-Warrnambool Road;
- Overhead cables 13.1km west of Penhurst-Warrnambool Road;
- Overhead cables 14.9km west of Penhurst-Warrnambool Road;
- Overhead cables 15.1km west of Penhurst-Warrnambool Road (high voltage);
- Overhead cables 16.4km west of Penhurst-Warrnambool Road;
- Overhead cables 17.1km west of Penhurst-Warrnambool Road;
- Overhead cables 18 km west of Penhurst-Warrnambool Road;
- Overhead cables 20.3km west of Penhurst-Warrnambool Road;
- Overhead cables 22 km west of Penhurst-Warrnambool Road;
- Overhead cables 23.1km west of Penhurst-Warrnambool Road;
- Overhead cables 23.3km west of Penhurst-Warrnambool Road;
- Overhead cables 24.2km west of Penhurst-Warrnambool Road;
- Overhead cables 2.1km west of Hamilton-Port Fairy Road;
- Overhead cables 4.6km west of Hamilton-Port Fairy Road;
- Overhead cables 8km west of Hamilton-Port Fairy Road;
- Overhead cables 8.3km west of Hamilton-Port Fairy Road;
- Overhead cables 9.1km west of Hamilton-Port Fairy Road;
- Overhead cables 10.1km west of Hamilton-Port Fairy Road;
- Overhead cables 23.7km west of Hamilton-Port Fairy Road;
- Overhead cables 25km west of Hamilton-Port Fairy Road (high voltage);

— Woolsthorpe-Heywood Road – Hamilton- Port Fairy Road:

- Overhead cable on the southern side of the western leg of the cross-intersection.
- Overhead cable on the eastern leg of the cross-intersection

— Woolsthorpe-Heywood Road – Penhurst-Warrnambool Road:

- Overhead cable on the southern side of the western leg of the cross-intersection.

6.8.3 Temporary Road Closures

If temporary road closures are required, then DTP and MSC shall be contacted prior to OSOM transport movements. There may be a need for Worksite Traffic Management Plans (WTMPs) to be produced in this event.

6.9. Emergency Services

Emergency service vehicles will be permitted unrestricted access through the Project access gate to Woolsthorpe – Heywood Road.

From Week 9 in the construction programme, a supplementary access via Slatterys Road will be available to support emergency access into the project.

6.10. Construction Staging / Parking

During construction, sufficient car parking will be provided within the confines of the site and will therefore not encroach on the local road network. Sufficient space for construction deliveries and on-site manoeuvring would also be provided as part of the development.

The site manager will continually monitor parking provisions within the site boundary, as well as the staging of construction vehicles into and out of the WWF site, to ensure no impact on the local road network occurs. If required, the day-to-day vehicle parking demands can be reduced via the promotion and consideration of car sharing of workers to/from the WWF site and/or a mini-bus service transporting workers to/from the WWF site.

6.11. Construction Activity

6.11.1 Installation of WTG's

Under vehicle types and access timing considerations

Installation of wind turbine equipment will need to be installed when weather/wind conditions allow. This will necessitate works outside of normal work hours to take advantage of any favourable weather conditions. Installation of wind turbines is expected to occur over a six-month period and is expected to be restricted to daylight hours.

Noise from wind turbine installation will be assessed as part of the contractor's Environmental Management Plans but is not expected to be disruptive to the community or sensitive receivers.

In addition, certain circumstances, such as the delivery of turbine components and construction material, along with certain work activities that require completion that day (for example, large concrete pours and turbine erection) may be conducted outside the normal standard hours of operations. This may occur even when work is scheduled for completion during normal standard hours of operations, due to the continuous nature or requirements of the work, such as ongoing concrete delivery. Safety reasons may also dictate that the delivery of turbine components is required to travel outside of normal hours of operation to reduce road network impacts. In this situation, MSC will be notified as appropriate.

Nonetheless, the timings indicated will be adhered to wherever possible to minimise the impact on the local road network, users and local residents. Typical vehicle access times are provided in Table 6.1.

Table 6.1: Typical vehicle access times to/from WWF

Vehicle Type	Typical Travel Times	Vehicle Speeds	Comment
General worker's vehicles / Medium Rigid Vehicle's and below	7:00am-6:00pm Monday to Friday 7:00am-4:00pm Saturday	As posted on local road network	Access as outlined in Section 2.2
Heavy Rigid and Articulated Vehicles	TBC once material delivery routes are known and in consultation with school bus operators.	As posted on local road network. Speed on site will be dictated by nominated contractors HSMP.	Access as outlined in Section 2.2. Occur only outside of typical local road network peak operational times in order to minimise disruption.
OSOM Vehicles	TBC by NHVR permit approval (in consultation with DTP, Council and DEECA).	Usually undertaken with convoy at controlled speeds of 20 km/h and lower.	Access as outlined in Section 2.2. (subject to contractor review).

6.12. Public Interface Management

6.12.1 Pedestrians / Cyclists

There will be little or no impact to pedestrians or cyclists as a result of the WWF construction.

Site compounds should be secured to prevent unauthorised access and workers/construction vehicles should follow the road rules and specified signage on the road network to ensure the safety of pedestrians and cyclists is upheld.

6.12.2 Public Transport and School Buses

The construction of the WWF will not have any significant impact on local public transport. Project heavy vehicles on roads that are also school bus routes will stop operations during school bus operating times. A coordination plan in consultation with the local schools and bus operators will be put together before construction commences so that construction activity delays can be further reduced.

Woolsthorpe Primary School is the closest school site to the subject site in Woolsthorpe. Noting that a school zone applies to a portion of Warrnambool-Caramut Road during school hours, heavy vehicle movements will be avoided during these times, south of the Woolsthorpe-Heywood Road intersection.

School bus routes are to be checked with the Department of Transport and Planning at the beginning of each school term, to capture any variations in bus routes.

6.13. Mitigation Summary

Based on the vehicle access requirements and traffic impacts previously outlined in this report, the following upgrade works are required as part of the WWF development:

— Stage 1 – Early Works:

- Construct site access point via Woolsthorpe-Heywood Road.

— Stage 2A – Main Site Works (prior to delivery of materials for internal site works):

- Installation of signage to prevent project related vehicle access via:
  - Tarrone Lane (west of the Holcim Quarry)
  - Reeves Road & Wickham Road (around Woolsthorpe);
  - Hexham-Woorndoo Road (south of Salt Creek Quarry);
  - Slatterys Road (at the intersection with Woolsthorpe-Heywood Road).

— Post-construction / operational phase (subject to contractor and stakeholder review):

- Rehabilitate all local road sections relied on for construction materials haulage to the before condition as agreed with the relevant road authority manager, prior to the commencement of wind farm construction. Both pre and post construction road conditions will need to be signed off by the respective road authority manager.

— Stage 2B – OSOM Haulage and WTG Erection

- Ensure all upgrades have been completed to facilitate the safe movement of OSOM vehicles to/from the WWF site, subject to review by the relevant transport contractor, detailed design and sign-off from relevant stakeholders, at this time of TMP development these include:
  - Road section upgrades:

- Make good the shoulders along the single-width sections of Woolsthorpe-Heywood Road, prior to the one-way haulage of blades on the Secondary OSOM route.

- Intersection upgrades – Primary Route:
  - Upgrade the Penshurst-Warrnambool Road / Woolsthorpe-Heywood Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
  - Upgrade the Penshurst-Warrnambool Road / Penshurst-Port Fairy Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
  - Upgrade the Princes Highway / Penshurst-Port Fairy Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
- Intersection upgrades – Secondary Route:
  - Upgrade the Princes Highway / Tyrendarra-Ettrick Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
  - Upgrade the Tyrendarra-Ettrick Road / Woolsthorpe-Heywood Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
  - Upgrade the Woolsthorpe-Heywood Road / Hamilton-Port Fairy Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
  - Upgrade the Penshurst-Warrnambool Road / Woolsthorpe-Heywood Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
    - Note: this upgrade is different to the primary route, subject to the blade delivery route relied upon.

— Post-construction / operational phase (subject to contractor and stakeholder review):

- Rehabilitate all OSOM route intersections to the before condition prior to the commencement of wind farm construction, unless agreed otherwise by the relevant road authority manager.

7. Public Road Condition and Maintenance

7.1. Independent Road Quality Auditor

Planning Permit Conditions require the appointment of a qualified pavement engineer. MSC has specifically requested an independent Road Quality Auditor (RQA) be appointed, which has been accepted by WAPL. The terms Road Pavement Engineer and Road Quality Auditor may be used interchangeably.

The RQA shall be a suitably qualified independent consulting engineer. The appointment of the independent RQA shall be made in consultation and agreement with DTP and MSC, by written agreement.

The independent RQA will be engaged for the duration of the project by, and at the cost of WAPL, to inspect and provide reports on the condition of road infrastructure as set out in this TMP.

7.2. Road Condition Inspections and Reporting

7.2.1 RQA Scope of Works

The scope of work to be undertaken by the Road Quality Auditor shall be limited to:

— Inspection of the pavement and formation condition of roads and intersections used by Project generated traffic during Project construction:

- Immediately prior to the period that a nominated road/intersection will be used by Project traffic;
- At regular intervals for the duration of the period that a nominated road/ intersection will be used by Project traffic;
- Immediately post the period that a nominated road/ intersection will be used by Project traffic; and
- Post any rectification works deemed required to be undertaken by the Project following cessation of use of a nominated road/ intersection to assess the suitability of rectification works.

— Inspection of roadside areas roads used by Project generated traffic for the purposes of identifying and addressing:

- Hazards that would unreasonably impact the safe passage of Project generated traffic that should be addressed prior to the use of the road; and
- Damage to roadside areas (including drainage, signage, utilities, fencing etc) caused by Project traffic.

— Review to ensure the appropriate implementation and operation of temporary traffic management required for Project traffic as per the agreed traffic management controls to be implemented at a particular location; and

— Review and inspection of the reinstatement of any temporary works required to support traffic management.

Where matters related to the condition or standard of roads are identified that may not have been caused or exacerbated by Project generated traffic, such matters can be relayed to the relevant road authority as separate matters of concern.

Following cessation of use of a road by Project heavy vehicle traffic, the RQA will notify the relevant Road Authority in writing and, upon agreement with MSC (for local rods), no further monitoring by the Projectwill be required.

7.2.2 Roads to be Assessed

The independent RQA will undertake an audit of road infrastructure, including the condition of the pavement, drains and structures on the roads used by Project construction traffic.

The audits will only be required during the duration of the Project where heavy vehicles utilise a route and/or intersection to the site, as identified in Figure 7.1 and Figure 7.2. This includes:

— Council identified local roads;

— DTP identified roads (for quarry traffic);

— Temporary intersections on DTP identified roads; and

— The single width section of Woolsthorpe-Heywood Road for the Secondary OSOM haulage route, if required.

A summary of the routes for the material haulage, as shown in Figure 7.1, includes:

— Tarrone Lane (MSC local road to quarry), from the quarry entrance to the intersection of Penshurst-Warrnambool Road (C178), approximately 7.5 kilometres.

— Penshurst-Warrnambool Road (C178), over approximately 8.5 kilometres.

— Woolsthorpe-Heywood Road (C176), over approximately 10.5 kilometres.

— Warrnambool-Caramut Road (C174), over approximately 29 kilometres.

— Hamilton Highway (B140), over approximately 33 kilometres.

— Mortlake-Ararat Road (C148), over approximately 22 kilometres.

— Hexham-Woorndoo Road (MSC local road to quarry), over approximately 5.0 kilometres.

— Cairnlea Lane (MSC local road to quarry), over approximately 1.0kilometres.

Should the secondary route be utilised, prior to and during the haulage of wind turbine blades to the subject site, the following scope of haulage roads will also be surveyed:

— Woolsthorpe-Heywood Road (C176), for an additional 18 kilometres.

Audits will not be required on the identified routes and/or intersections when no heavy vehicle traffic associated with the Project is using them.

The use of additional roads and/or intersections by the Project construction traffic, other than those nominated above and in Figure 7.1 and Figure 7.2, are subject to agreement with MSC / DTP and would require an addendum to the TMP. The RQA will also be required to monitor these additional roads and/or intersections.

Figure 7.1: Project Road Responsibilities – Heavy Vehicle Routes

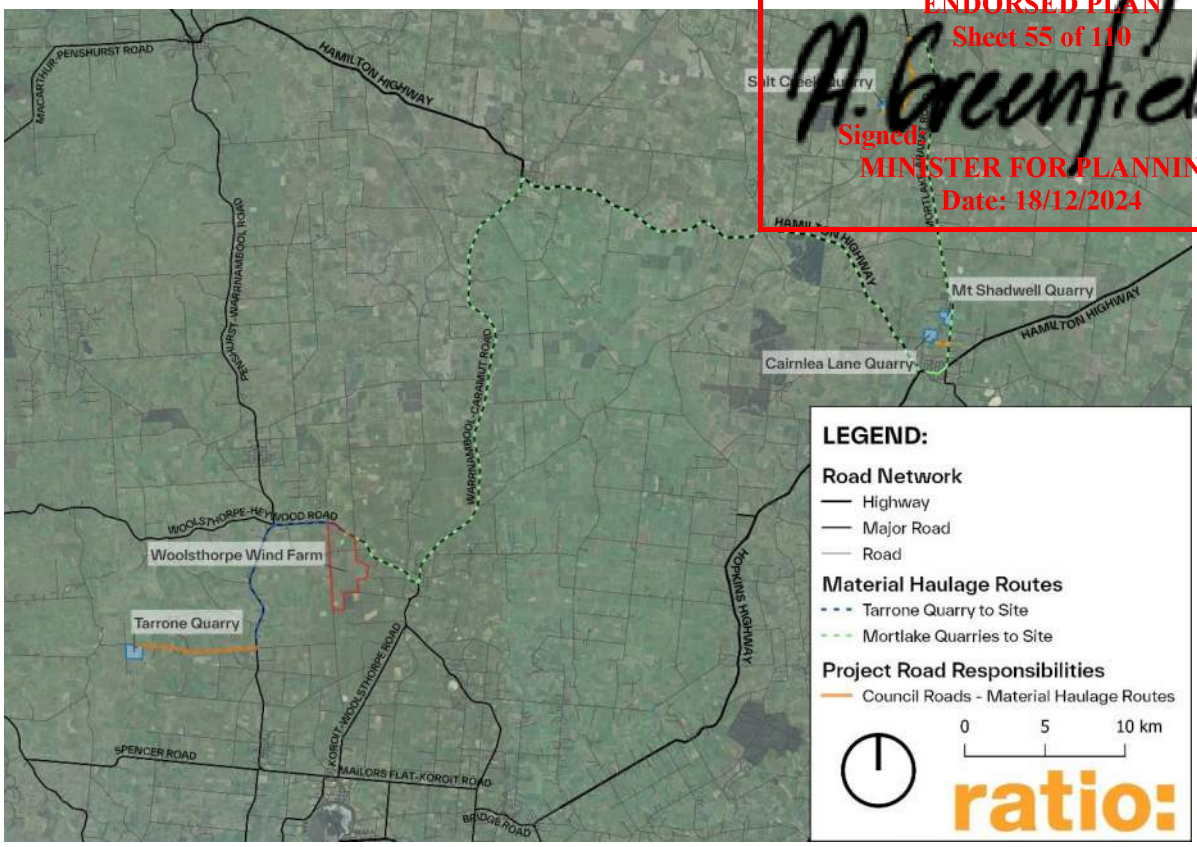
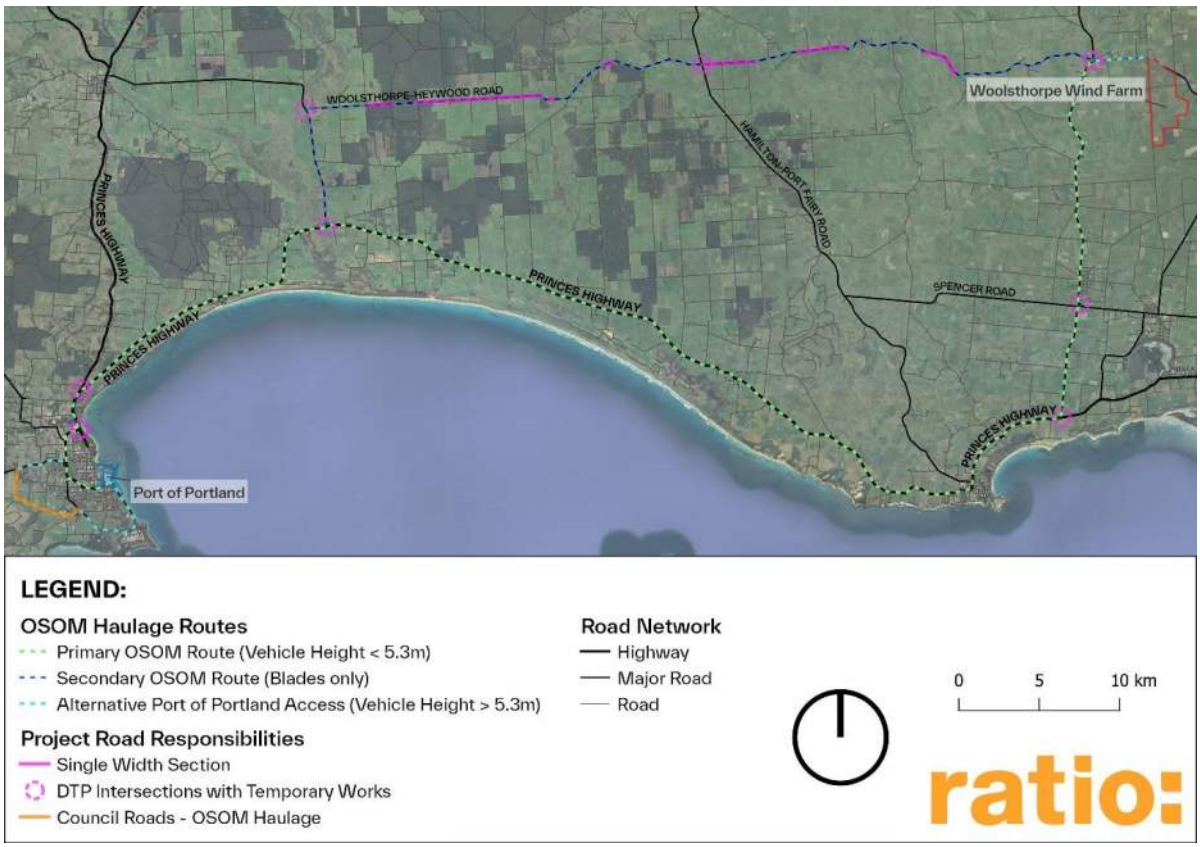


Figure 7.2: Project Road Responsibilities – OSOM Vehicle Routes



7.2.3 Pre-construction Inspection

The RQA shall undertake a pre-construction condition road infrastructure survey of nominated roads which will be trafficked by WWF construction traffic to provide a fair and accurate baseline representation of the pavement condition, including details of the suitability, design and construction standard of the roads to satisfy Condition 9 g) of the Planning Permit.

The baseline survey report can be used to determine the location and magnitude (or percentage, where applicable) of pre-existing distresses. To accurately capture distresses caused by the development of WWF, the baseline survey will be commissioned one month prior to the commencement of construction.

The baseline investigation will be used to inform the requirements of routine road maintenance during the construction period and to inform the comparison between pre-construction and post-construction conditions.

MSC has advised the following with regard to the existing condition surveys:

— MSC recommends that video is used for the dilapidation surveys, with the speed of the vehicle to not exceed 40km/h to accurately capture road conditions.

— A chainage reading given at the start and end of the survey so that the location of any major defects, bridges or intersections can be recorded.

— File format or videos should be viewable through common software packages (if uncommon the specific software should be supplied to MSC and DTP free of charge).

Data resulting from the video survey should be made available to MSC and DTP via Dropbox or similar. The existing condition surveys will be carried out as outlined above.

7.2.4 Construction Period Inspections

The RQA shall undertake regular inspections during the period of construction related use for each of the roads identified in Section 7.2.1 (or as amended) at a frequency agreed with MSC and/or DTP (as the relevant Road Authority).

In the case of specific complaints or weather events, MSC and/or DTP may request the Contractor to arrange additional inspections of the agreed affected road network.

The inspections are to be conducted from commencement of construction related road use up until all deliveries have been completed. Once the bulk of earthworks and footings are completed the maximum daily number of trucks travelling along these roads can be reviewed along with the inspection timeframes (either to monthly or bi-monthly inspection's), this would need to be agreed in consultation with DTP and MSC.

Following each survey, the RQA shall submit the results of the surveys to WAPL, MSC and DTP for review.

Should proposed traffic routes change, an Addendum to the TMP shall be submitted for MSC and DTP review and acceptance in accordance with Section 8. Any additional sources of supply will be subject to the same inspection, monitoring and maintenance requirements.

7.3. Maintenance and Rehabilitation

On receipt of each RQA report, all identified defects must be addressed in accordance with timeframes agreed with the relevant Road Authority (MSC or DTP). Standard timeframes (as per relevant Road Management Plans) are included at Appendix F.

If this is not possible, due to weather or the nature of the defect, a written submission to MSC must be received within 5 working days regarding why a particular defect is not able to be completed. It is expected that this would be an exception and not the norm. Delays and non-conformance for routine maintenance items will be enforced in accordance with levies as detailed in Section 8.

7.3.1 Timing for repairs

The timing for repairs are to be aligned with the rehabilitation requirements agreed with the relevant Road Authority (MSC or DTP). Standard timeframes (as per relevant Road Management Plans) are included at Appendix F.

7.3.2 Maintenance levies

If rehabilitation work is not completed within agreed timelines and/or repeated defects are not addressed in two subsequent audits, then DTP and MSC (as the responsible authority for the relevant section of the road) reserve the right to issue a written notice of breach and levies for each category of defect. All levies must be paid within 14 days of issue.

7.4. Post-Construction

At the cessation of use of a nominated road and/or intersection by Project construction traffic, unless agreed otherwise with the relevant Road Authority, any intersection temporary works shall be reinstated and, for roads required to be maintained by the Project, these will be returned to a standard at least as good as the conditions which will be documented in the pre-construction survey(s) or to the condition the roads have been upgraded, whichever is relevant.

The final condition audit would be undertaken by the RQA once a section of road is no longer required or construction has ceased.

Following review of the report, and all outstanding defects having been addressed, MSC and DTP, within 10 working days of receipt of the report shall confirm that all outstanding defects have been addressed, or alternatively advise any defects that require attention before accepting the report. Following this, certification would be provided that all requirements above have been met on their respective road networks. An alternative arrangement to repairing the roads to pre-development conditions is to agree on a financial contribution in the form of a levy to the managing road authority.

8. TMP Auditing and Review

8.1. Construction Program Changes

As acknowledged in the introduction to this TMP, information provided for or assumed in this TMP may change as contractors are engaged for the construction of WWF and construction planning progresses.

Consequently, an addendum TMP will be created by the nominated contractor to inform both DTP and MSC of any new information which may impact on the findings or requirements of the TMP, as and when known. This includes the use of any alternate locations for the sourcing of construction materials other than those identified in Section 3 and / or in Table 5.1.

An addendum to the TMP will also be prepared and submitted to the MSC and DTP, to the satisfaction for the Minister for Planning within:

- 28 days prior to a 20% or greater increase in construction vehicle numbers above the anticipated construction volumes documented in the endorsed TMP; or
- Prior to any change to an endorsed heavy vehicle routes (notably OSOM and quarry material related) identified in the endorsed TMP.

8.2. TMP Monitoring and Inspection

In order to ensure the effectiveness of the TMP, the plan must be monitored, and traffic management works inspected regularly.

The aim of the plan is to reduce the impact of the construction traffic on the surrounding road network. Hence it is important to monitor that this is being achieved to reflect any physical or operational changes to the road network.

For example, road network changes may have occurred, such as public transport routes or timetabling or intersection alterations may affect the operation of intersections and how traffic management is implemented.

As such, it is recommended that WAPL review the TMP approximately one month after construction has commenced and half-way through the WWF project cycle to ensure that the TMP is relevant. Consultation may be required with DTP and MSC and/or other parties to ensure the latest information from stakeholders.

The TMP should also be updated if any notable changes affecting the expected or actual traffic volumes generated by site works occur, or if changes to working hours, delivery scheduling or other factors of consequence affecting site traffic and transport are proposed.

WAPL will audit the TMP as part of the inspection processes and also ensure that any contractor produced TMPs take into account the prescribed recommendations.

Any identified deficiencies should be reported immediately to the site supervisor/works manager, and rectification carried out immediately to maintain safety and integrity of the TMP.

8.3. TMP Auditing

In accordance with the Road Management Act 2004, audits of the TMP will be undertaken to achieve worksite safety both within and outside of the works site. The audits may include:

1. **Compliance Audits:** to verify compliance with the TMP, undertaken as follows:
    a. Prior to the commencement of works (at the completion of road construction works approved as part of this TMP).
    b. At the commencement of works (and at times of erecting any traffic control devices).
    c. At any changes to the TMP (maybe due to unforeseen hazards).
    d. During both day / night operations for long term works (not considered applicable in this case but should be mindful).
    e. If the TMP results in significant disruptions to traffic (considered to be minimal in this case).
    f. If requested by health and safety representative, employees or local community.

1. **Road Safety Audits (RSA):** Only if significant construction works occur on the local road network. It is likely that the priority access intersection and haul routes would be subject to RSAs to ensure safe facilitation of the expected vehicular movements.
2. Audits will include an action plan to implement any recommendations and will be lodged with MSC and DTP for review. All audits will be undertaken by suitably qualified and experienced personnel.

9. Summary and Actions

The greatest traffic impact of the WWF development will occur during the construction period of the development. Traffic generated during this phase will consist of OSOM vehicles, construction vehicles and personnel vehicles.

The approved WWF development is not expected to create a significant adverse impact on the operation of the surrounding road network when compared to background traffic.

The use of OSOM vehicles require that some localised road upgrades are required based on their swept paths and in consultation with relevant authorities. These include:

- Upgrade the Penshurst-Warrnambool Road / Woolsthorpe-Heywood Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
- Upgrade the Penshurst-Warrnambool Road / Penshurst-Port Fairy Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
- Upgrade the Princes Highway / Penshurst-Port Fairy Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
- Upgrade the Princes Highway / Tyrendarra-Ettrick Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
- Upgrade the Tyrendarra-Ettrick Road / Woolsthorpe-Heywood Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
- Upgrade the Woolsthorpe-Heywood Road / Hamilton-Port Fairy Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.
- Upgrade the Penshurst-Warrnambool Road / Woolsthorpe-Heywood Road intersection to provide sufficient manoeuvrability of turning OSOM vehicle movements.

It is recommended that the following be finalised prior to commencing construction of the main works for the WWF:

- Liaise with MSC and DTP to confirm school bus operating times and routes along roads to be used by construction and OSOM vehicles (and if found identified private schools themselves).
- Install road safety signage near wind farm access point, including cautionary/advisory signage on surrounding roads.
- Finalise program of regular inspections and rehabilitation works with MSC and DTP, including the commission of agreed RQA.
- Prepare community engagement program to notifications of activities.
- Commission transport contractor and finalise final OSOM route assessments and approvals in consultation with all necessary stakeholders. This would include obtaining necessary permits and approvals for OSOM vehicle transportation from DTP; NHVR and other relevant stakeholders.

A summary of key traffic management activities during the construction phase is presented in Table 9.1.

Table 9.1: Key Traffic Management Activities

Pre-Construction	Core Construction	Post Construction
— Update TMP if other local roads are to be used by construction vehicles. — Agreements to be made with the relevant bodies to confirm certain details of this TMP. — Prepare community engagement program to notify of activities. — Construct site access intersection (Woolsthorpe-Heywood Road access) — Submit permits and obtain approvals from relevant authorities (i.e. NHVR, DTP and DEECA) — Install signage (i.e. site access etc.) — Perform first monthly inspection to obtain pre-existing conditions of upgraded intersections and road network. — Commission OD delivery contractor to perform their audit of the route including mitigation measures using this TMP as a guideline.	— Upgrade Penshurst-Port Fairy Road / Penshurst-Warrnambool Road intersection (prior to first OSOM delivery). — Upgrade Penshurst-Warrnambool Road / Woolsthorpe-Heywood Road intersection (prior to first OSOM delivery). — Deliver material and goods to the site. — Conduct monthly road quality inspections of upgraded intersections and road network. — Perform maintenance works based on outcomes of monthly inspections. — RQA to conduct agreed quality inspections of road network. — Perform maintenance works based on outcomes of regular inspections as identified by RQA in agreement with DTP and MSC. — Undertake dust suppression measures as required by the Environmental Management Plan.	— Rehabilitate all existing public roads to the condition identified in the surveys carried out or to the condition to which the roads have been upgraded, whichever is relevant. — Continue operational stage of WWF.

Appendix A Legislation, Policy and Guidelines

The table below summarises the relevant legislation, policy and guidelines that apply to the WWF project and this TMP.

Legislation / policy / guidelines	Key policies / strategies
Victoria Planning Provisions – 5.32 Wind Energy Facility	The purpose of VPP planning clause 52.32 is to facilitate the establishment and expansion of wind energy facilities, in appropriate locations, with minimal impact on the amenity of the area. With regards to traffic and transport 52.32-4 states that as part of the design response that access road options need to be considered. 52.32-6 states that before deciding on an application, in addition to the decision guidelines of Clause 65, the responsible authority must consider several documents and guides, as appropriate including the *Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria* (Department of Environment, Land, Water and Planning, November 2021).
Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria (November 2021)	The guidelines set out: — A framework to provide a consistent and balanced approach to assist the assessment of wind energy projects; — A set of consistent operational performance standards to inform the assessment and operation of a wind energy facility project; — Guidance as to how planning permit application requirements might be met; and — A framework for the regulation of wind turbine noise. With regards to traffic impacts the guide states: — In Section 4.2.2 Seek Expert Advice, the document states that an application should be accompanied by a planning assessment including an assessment of the traffic impacts (amongst other impacts) of the proposal prepared by suitably qualified persons. — Model planning permit conditions for wind energy facilities are referenced within the guidelines and are available on the "wind energy facility page" at planning.vic.gov.au. These conditions reference Traffic Management and the following are to be considered as an example to local authorities: • Vehicle access point;

Legislation / policy / guidelines	Key policies / strategies
	• Pre-construction public road surveys; • Traffic Management Plan (TMP); and • Traffic upgrade works.
Road Management Act 2004 (Victoria)	Road Management (General) Regulations 2016. Road Management (Works and Infrastructure) Regulations 2015. Code of Practice for Worksite Safety – Traffic Management.
Department of Transport and Planning (VicRoads) – Road Management Plan	The VicRoads Road Management Plan details the management and maintenance of roads registered under the VicRoads register of public roads. VicRoads manages its infrastructure in five phases; development of standards and guidelines, development of a maintenance program, implementation of the management program, auditing and review. The VicRoads road management plan also details maintenance inspection and response schedules.
Moyne Shire Road Management Plan?	The Road Management Plan provides details of: • The roads and road infrastructure for which Council is responsible; • The management system that Council employs for the inspection, maintenance and repair of its roads; • The inspection standards including the nature and frequency of different type of inspections (i.e. reactive and proactive); and • The maintenance standards including intervention level, maintenance response requirements, and maintenance response times.
Transport Integration Act 2010	The Act provides a legislative framework for transport in Victoria. The Act seeks to integrate land use and transport planning and decision-making by applying the framework to land use agencies whose decisions can significantly impact on transport. The Act requires agencies, including the Department of Transport and Planning (DTP) authorities, to consider the potential impact of land use planning proposals on transport.
Road Safety Act 1986	Road Safety Road Rules, 2017. Road Safety (Traffic Management) Regulations, 2009.
Victorian Road Safety Strategy 2021-2030	This strategy aims to halve road deaths by 2030 and put Victoria on a strong path to eliminate all road deaths by 2050. It also seeks to reduce the incidence of serious injury resulting from road crashes.
AS1742.3:2019 – Traffic control for works on roads	This standard sets out all matters to be considered as being essential to a Traffic Management Plan (TMP) such as traffic demand, traffic routing, traffic control, special vehicle requirements and over-dimensional vehicles which will be developed at later stage of the Project following this TMP

Legislation / policy / guidelines	Key policies / strategies
Austroads – Guide to Road Design Part 3: Geometric Design	The Guide to Road Design is one of a set of comprehensive Austroads Guides developed to provide a primary national reference for the development of safe, economical and efficient road design solutions.
Austroads – Guide to Road Design Part 4: Intersections and Crossings	
Austroads Guide to Temporary Traffic Management	The 10 parts of the Guide to Temporary Traffic Management details contemporary temporary traffic management practice for application in Australia and New Zealand. It provides guidance for the planning, design and implementation of safe, economical and efficient temporary traffic management designs. The guidance provided in AGTTM is intended to encourage a consistent level of planning that supports the streamlined safe progress of work. It applies to all works on roads and near roads, in addition to off road development and other activities that interact with and impact on the road environment.
Road Management Act 2004, Code of Practice, Worksite Safety, Traffic Management 2023	The Code of Practice 2023 details the requirement to adhere to Austroads Guide to Temporary Traffic Management with supporting elements where Victorian Specific context is required for temporary traffic management implementation. The AGTTM is now the guiding document for temporary traffic management in Australia, as part of the national harmonisation project.
Infrastructure Design Manual (2022)	The Infrastructure Design Manual (IDM) is a standardised set of requirements for the design and development of infrastructure – required by a set of participating Victorian rural and regional councils (including Moyne Shire Council).

Appendix B Stakeholder Consultation

Ben Thomson

From: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>
Sent: Wednesday, 5 June 2024 3:12 PM
To: Katelyn Nash; Ben Thomson; Aaron Walley; JAMES TAYLOR; Nathan Reibelt
Cc: Peter Gstrein; Steve Van Orsouw; Rob Stewart-Murray; Dave Fary
Subject: RE: Woolsthorpe - TMP
Attachments: 20848T-REP01-F02 Tracked Changes - Council review 2.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Hi all

Please find attached latest version with some comments from Council

Regards

Vicki Askew-Thornton
Senior Energy Projects Liaison
vaskewthornton@moyne.vic.gov.au

PO Box 51, Port Fairy, VIC, 3284
Mobile 0408 668 938
https://url.avanan.click/v2/___www.moyne.vic.gov.au___.YXAzOnJhdG RmNzp0OlQ

Acknowledgement: *We acknowledge the Traditional Owners of the land on which we work, and pay our respects to their Elders past, present a*

From: Katelyn Nash <KatelynN@klms.com.au>
Sent: Wednesday, May 22, 2024 6:42 PM
To: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>; Ben Thomson <BenT@ratio.com.au>; Aaron Walley <aaronw@ratio.com.au>; JAMES TAYLOR <jtaylor@elecnor.com>; Nathan Reibelt <NReibelt@icapartners.com.au>; Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>; Peter Gstrein <peter.gstrein@moyne.vic.gov.au>
Subject: RE: Woolsthorpe - TMP

Hi Vicki and Dave,

Hope you are both well.

Please find attached the updated TMP to reflect the comments provided and our recent meeting.

We note;

- With the AWDT and AADT there was a typo in the report, hence why volumes have not materially changed.

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Signed: for
MINISTER FOR PLANNING
Date: 18/12/2024

- Stakeholder Consultation will be provided in the final document, as records of the email correspondence or meeting minutes from previous discussions (as noted in the report body).

We have provided a 'clean' and track changes version for ease of reference.

If you are able to review and provide any further comments as soon as possible. We are keen to finalise the TMP and submit to DTP (Planning).

We look forward to hearing from you soon.

Thanks,

From: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>
Sent: Friday, May 3, 2024 3:34 PM
To: Katelyn Nash <KatelynN@klms.com.au>; Ben Thomson <BenT@ratio.com.au>; Aaron Walley <aaronw@ratio.com.au>; JAMES TAYLOR <jtaylor@elecnor.com>; Nathan Reibelt <NReibelt@icapartners.com.au>; Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>; Peter Gstrein <peter.gstrein@moyne.vic.gov.au>
Subject: RE: Woolsthorpe - TMP

Hi all

As discussed today, attached is a copy of the TMP with Council's initial comments included.

Regards

Vicki Askew-Thornton
Acting Manager Environment and Energy
vaskewthornton@moyne.vic.gov.au

PO Box 51, Port Fairy, VIC, 3284
Mobile 0408 668 938
www.moyne.vic.gov.au

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Ben Thomson

From: Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>
Sent: Friday, 31 May 2024 12:46 PM
To: Katelyn Nash; Vicki Askew-Thornton; Ben Thomson; Kaylah Vallely; JAMES TAYLOR; Nathan Reibelt; Peter Gstrein
Cc: Laura A Hooper (DTP); Ahmed Ibrahim (DTP)
Subject: RE: Woolsthorpe - TMP

Follow Up Flag: Follow up
Flag Status: Completed

Greetings all and I hope this find everyone well.

Having now reviewed the document, DTP wishes to submit the following comments.

RESPONSE AND COMMENTS:
Generally, DTP holds no objection to the contents of the document.

However, an emerging transportation issue is the increased size of the componentry and finding a suitable route. it has been proposed by the applicant that the Woolsthorpe – Heywood Road could be utilised for the movement of over dimensional sizes blades.

As you would be aware, the Woolsthorpe – Heywood Road has several sections of narrow, fragile and aging pavement, in which the speed limit has been accordingly reduced to ensure the safety of all road users.

DTP is also aware that there really is not too many other viable routes or options, that would not impose an unacceptable and unnecessary imposition for the applicant and the general public.

Therefore, and in principle, DTP consents to the use of the Woolsthorpe – Heywood. However, this must be formalised via the secondary consent process (Pursuant to the Road Management Act), in which the following conditions will apply:

a) Details of the scope of the expertise, duties and role of the nominated Road Quality Auditor engaged, including inspection frequency and reporting requirements.

b) An existing conditions survey and road safety audit of the Heywood – Woolsthorpe Road must be undertaken. This report must specify recommendations regarding the suitability of the road to safely accommodate the use of over dimension components (blades). Where upgrades are required, the report must include:

   a. Detailed engineering plans showing the required works, including cross sections which show pavement formation, depth, drainage, and surface levels.

   b. A program that describes the timing of when the works are to be undertaken.

   c. Provide for appropriate safety measures around school bus routes and school bus times.

   d. A program to rehabilitate the road within agreed timeframes to the condition identified in the surveys carried out under the above condition or to the condition to which the roads have been upgraded, whichever is relevant.

Hopefully the above comments are easily translated into the updated TMP, and please don't hesitate to contact should you wish to discuss this matter further.

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Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

Warm regards

Dave Fary
Acting Team Leader
Statutory Planning
DTP
BSWGR

From: Katelyn Nash <KatelynN@klms.com.au>
Sent: Wednesday, May 22, 2024 6:42 PM
To: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>; Ben Thomson <BenT@ratio.com.au>; Aaron Walley <aaronw@ratio.com.au>; JAMES TAYLOR <jtaylor@elecnor.com>; Nathan Reibelt <NReibelt@icapartners.com.au>; Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>; Peter Gstrein <peter.gstrein@moyne.vic.gov.au>
Subject: [EXTERNAL] RE: Woolsthorpe - TMP

Hi Vicki and Dave,

Hope you are both well.

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We note;

- With the AWDT and AADT there was a typo in the report, hence why volumes have not materially changed.
- Stakeholder Consultation will be provided in the final document, as records of the email correspondence or meeting minutes from previous discussions (as noted in the report body).

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If you are able to review and provide any further comments as soon as possible. We are keen to finalise the TMP and submit to DTP (Planning).

We look forward to hearing from you soon.

Thanks,

From: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>
Sent: Friday, May 3, 2024 3:34 PM
To: Katelyn Nash <KatelynN@klms.com.au>; Ben Thomson <BenT@ratio.com.au>; Aaron Walley <aaronw@ratio.com.au>; JAMES TAYLOR <jtaylor@elecnor.com>; Nathan Reibelt <NReibelt@icapartners.com.au>; Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>; Peter Gstrein <peter.gstrein@moyne.vic.gov.au>
Subject: RE: Woolsthorpe - TMP

Hi all

As discussed today, attached is a copy of the TMP with Council's initial comments included.

Regards

Vicki Askew-Thornton
Acting Manager Environment and Energy
vaskewthornton@moyne.vic.gov.au

PO Box 51, Port Fairy, VIC, 3284
Mobile 0408 668 938
www.moyne.vic.gov.au

Acknowledgement: *We acknowledge the Traditional Owners of the land on which we work, and pay our respects to their Elders past, present and emerging, and the Elders from other communities who may reside in the Moyne Shire.*

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Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

Ben Thomson

From: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>
Sent: Wednesday, 15 May 2024 12:56 PM
To: Ben Thomson
Cc: Aaron Walley; Katelyn Nash
Subject: FW: Traffic Count Slatterys Rd

From: Vicki Askew-Thornton
Sent: Friday, May 3, 2024 3:10 PM
To: Aaron Walley <aaronw@ratio.com.au>
Subject: Traffic Count

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Signed: for
MINISTER FOR PLANNING
Date: 18/12/2024

Vicki Askew-Thornton
Acting Manager Environment and Energy
vaskewthornton@moyne.vic.gov.au

PO Box 51, Port Fairy, VIC, 3284
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Disclaimer

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Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

Ben Thomson

From: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>
Sent: Friday, 3 May 2024 3:56 PM
To: Aaron Walley; Katelyn Nash
Cc: Ben Thomson; JAMES TAYLOR; Nathan Reibelt; Peter Gstrein
Subject: RE: Restriction on the use of Woolsthorpe-Hexham Rd for quarry haulage

Follow Up Flag: Follow up
Flag Status: Completed

Hi all

As discussed today, I have checked the approval docs that Council issued to GPG for heavy haulage from the Salt Creek Quarry to the Hawkesdale Wind Farm site, via a TMP Addendum.
The extracts below show that Council did not allow the use of the Woolsthorpe-Hexham Rd for this haulage, except for the short section of that road between the quarry entrance northwards to the Mortlake-Ararat Rd.

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Date: 18/12/2024

4.1. Sand Backfill - WA Molan's Salt Creek Quarry

WA Molan's Salt Creek Quarry is located off the Hexham – Woorndoo Road, Woorndoo.

The proposed travel route to Hawkesdale Wind Farm East Site Entrance is:

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Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

Salt Creek Quarry
Woorndoo VIC 3272

↑ Head north-east on Hexham-Woorndoo Rd towards Mortlake-Ararat Rd/C148

5.2 km

↱ Sharp right onto Mortlake-Ararat Rd/C148
ⓘ Continue to follow C148

21.8 km

↱ Turn right onto Darlington Rd/Hamilton Hwy/B140
ⓘ Continue to follow Hamilton Hwy/B140

650 m

↻ At the roundabout, take the 3rd exit onto Dunlop St/Hamilton Hwy/B140
ⓘ Continue to follow Hamilton Hwy/B140

32.2 km

↰ Turn left onto Warrnambool-Caramut Rd/C174

29.0 km

↱ Turn right onto Woolsthorpe-Heywood Rd/C176
ⓘ Destination will be on the right

7.8 km

Hawkesdale Wind Farm
780 Woolsthorpe-Heywood Rd, Warrong VIC 3283

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 75 of 110

Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

Vicki Askew-Thornton
Acting Manager Environment and Energy
vaskewthornton@moyne.vic.gov.au

PO Box 51, Port Fairy, VIC, 3284
Mobile 0408 668 938
www.moyne.vic.gov.au

Acknowledgement: *We acknowledge the Traditional Owners of the land on which we work, and pay our respects to their Elders past, present and emerging, and the Elders from other communities who may reside in the Moyne Shire.*

Disclaimer

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ENDORSED PLAN
Sheet 76 of 110

Signed: for
MINISTER FOR PLANNING
Date: 18/12/2024

Ben Thomson

From: Vicki Askew-Thornton <vaskewthornton@moyne.vic.gov.au>
Sent: Friday, 3 May 2024 3:34 PM
To: Katelyn Nash; Ben Thomson; Aaron Walley; JAMES TAYLOR; Nathan Reibelt; Dave Fl
Fary (DTP); Peter Gstrein
Subject: RE: Woolsthorpe - TMP
Attachments: Woolsthorpe WF TMP V1 VAT_PG_AO initial comments.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Hi all

As discussed today, attached is a copy of the TMP with Council's initial comments included.

Regards

Vicki Askew-Thornton
Acting Manager Environment and Energy
vaskewthornton@moyne.vic.gov.au

PO Box 51, Port Fairy, VIC, 3284
Mobile 0408 668 938
https://url.avanan.click/v2/___www.moyne.vic.gov.au___.YXAzOnJhdG 1Yjp0OlQ

Acknowledgement: *We acknowledge the Traditional Owners of the land on which we work, and pay our respects to their Elders past, present a*

Ben Thomson

From: Vincent Heil (DTP) <vincent.heil@transport.vic.gov.au>
Sent: Tuesday, 2 April 2024 8:53 AM
To: Ben Thomson; Dave T Fary (DTP)
Cc: Aaron Walley
Subject: RE: [SEC=OFFICIAL] RE: School Bus Routes - Woolsthorpe Wind Farm TMP

Follow Up Flag: Follow up
Flag Status: Completed

Hi Ben,

My map system is not overly conducive to exporting but here's a screenshot. All the coloured lines represent School Bus Routes.

Regards,
Vinny

Vincent Heil
Senior Regional Public Transport Officer – Barwon South West
Public Transport Services
Department of Transport and Planning

180 Fyans Street
South Geelong, VIC 3220
M: 0429 573 093
vincent.heil@transport.vic.gov.au

VICTORIA State Government | Department of Transport and Planning

From: Ben Thomson <BenT@ratio.com.au>
Sent: Thursday, March 28, 2024 3:31 PM
To: Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>; Vincent Heil (DTP) <vincent.heil@transport.vic.gov.au>
Cc: Aaron Walley <aaronw@ratio.com.au>
Subject: [EXTERNAL] RE: [SEC=OFFICIAL] RE: School Bus Routes - Woolsthorpe Wind Farm TMP

Hi Dave

Thanks for shooting that across. Looks to cover a number of routes on all three approaches. @vincent.heil@transport.vic.gov.au, I might ask if this can be shown diagrammatically for the bus routes as well? If this isn't possible, screenshots are sufficient for the purposes of our work.

Appreciate everyones time on this one and enjoy the long weekend ahed!

Ngā mihi - Kind regards

Ben Thomson RPEng (Civil)
(He/Him)
Senior Transport Engineer

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Email BenT@ratio.com.au

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Gadigal Country
(02) 9696 1225

Brisbane
Jagera Country
(07) 3724 9277

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Transport | Waste Management
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From: Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>
Sent: Thursday, March 28, 2024 3:26 PM
To: Ben Thomson <BenT@ratio.com.au>
Subject: FW: [SEC=OFFICIAL] RE: School Bus Routes - Woolsthorpe Wind Farm TMP

Hi Ben:

The following information has just been sent through to me via DTP's bus team, and hopefully it covers off on all of your proposed routes.

Happy to discuss further and enjoy the Easter Break.

Cheers

Dave

From: Vincent Heil (DTP) <vincent.heil@transport.vic.gov.au>
Sent: Thursday, March 28, 2024 2:50 PM
To: Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>
Cc: Jon S Gunby (DTP) <Jon.Gunby@transport.vic.gov.au>; Robert Dapcevic (DTP) <robert.dapcevic@transport.vic.gov.au>
Subject: [SEC=OFFICIAL] RE: School Bus Routes - Woolsthorpe Wind Farm TMP

Hey Dave,

Long time, no speak. Hope you're doing well.

Here's the info you're after in regards to School Bus routes:

Portland to Woolsthorpe via Princes Highway

- NARRAWONG - PORTLAND (1138-0012) – Heywood (Portland) Buslines
- HEYWOOD - PORTLAND (1138-0006) – Heywood (Portland) Buslines
- BESSIEBELLE – HEYWOOD (1138-0005) – Heywood (Portland) Buslines
- CODRINGTON – PORTLAND (1138-0007) – Heywood (Portland) Buslines
- ALLESTREE - PORTLAND (3177-0001) – Philip Kelly Buslines
- SETTLERS ROAD - NARRAWONG (3132-0001) – Jasper Buslines
- CODRINGTON - PORT FAIRY (1375-0037) – Warrnambool Bus
- ST HELENS – WARRNAMBOOL (1375-0007) – Warrnambool Bus
- ELLERSLIE – WARRNAMBOOL (1375-0038) – Warrnambool Bus
- KIRKSTALL-SOUTHERN CROSS-KOROIT (1375-0045) – Warrnambool Bus
- HAWKESDALE – WARRNAMBOOL (1375-0026) – Warrnambool Bus
- PORT FAIRY (2) – WARRNAMBOOL (1375-0032) – Warrnambool Bus
- BROADWATER – HAWKESDALE (1375-0014) – Warrnambool Bus
- PORT FAIRY (5) – WARRNAMBOOL (1048-0008) – Christians Bus Company
- PORT FAIRY NO 6 – WARRNAMBOOL (3115-0013) – Coles Coaches
- KIRKSTALL-TARRONE LA-HAWKESDALE (3115-0016) – Coles Coaches

Salt Creek Quarry route

- MINJAH – WARRNAMBOOL (1375-0023) – Warrnambool Bus
- COOMETE – WOOLSTHORPE (1375-0025) – Warrnambool Bus
- Framlingham - Grassmere (3115-0017) – Coles Coaches
- Hexham South – MORTLAKE (3115-0008) – Coles Coaches
- CARAMUT – MORTLAKE (3115-0007) – Coles Coaches
- DUNDONELL – MORTLAKE (3115-0010) – Coles Coaches

Holcim Quarry route

- KIRKSTALL-TARRONE LA-HAWKESDALE (3115-0016) – Coles Coaches
- HAWKESDALE – WARRNAMBOOL (1375-0026) – Warrnambool Bus
- BROADWATER – HAWKESDALE (1375-0014) – Warrnambool Bus

Regards,
Vinny

Vincent Heil
Senior Regional Public Transport Officer – Barwon South West
Public Transport Services
Department of Transport and Planning

180 Fyans Street
South Geelong, VIC 3220

M: 0429 573 093
vincent.heil@transport.vic.gov.au

Department of Transport and Planning

From: Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>
Sent: Thursday, March 28, 2024 9:06 AM
To: Jon S Gunby (DTP) <Jon.Gunby@transport.vic.gov.au>
Cc: Vincent Heil (DTP) <vincent.heil@transport.vic.gov.au>
Subject: FW: School Bus Routes - Woolsthorpe Wind Farm TMP

Easter greetings chaps and I hope that you both are fit and well.

The proponent of the Woolsthorpe Wind Farm are seeking DTP's views on following school bus routes (which they are required to avoid), and if you shed any light on the matter, it would be greatly appreciated.

Enjoy the break and talk soon.

Cheers Dave

From: Ben Thomson <BenT@ratio.com.au>
Sent: Wednesday, March 27, 2024 6:09 PM
To: Dave T Fary (DTP) <Dave.Fary@transport.vic.gov.au>
Cc: Aaron Walley <aaronw@ratio.com.au>
Subject: [EXTERNAL] School Bus Routes - Woolsthorpe Wind Farm TMP

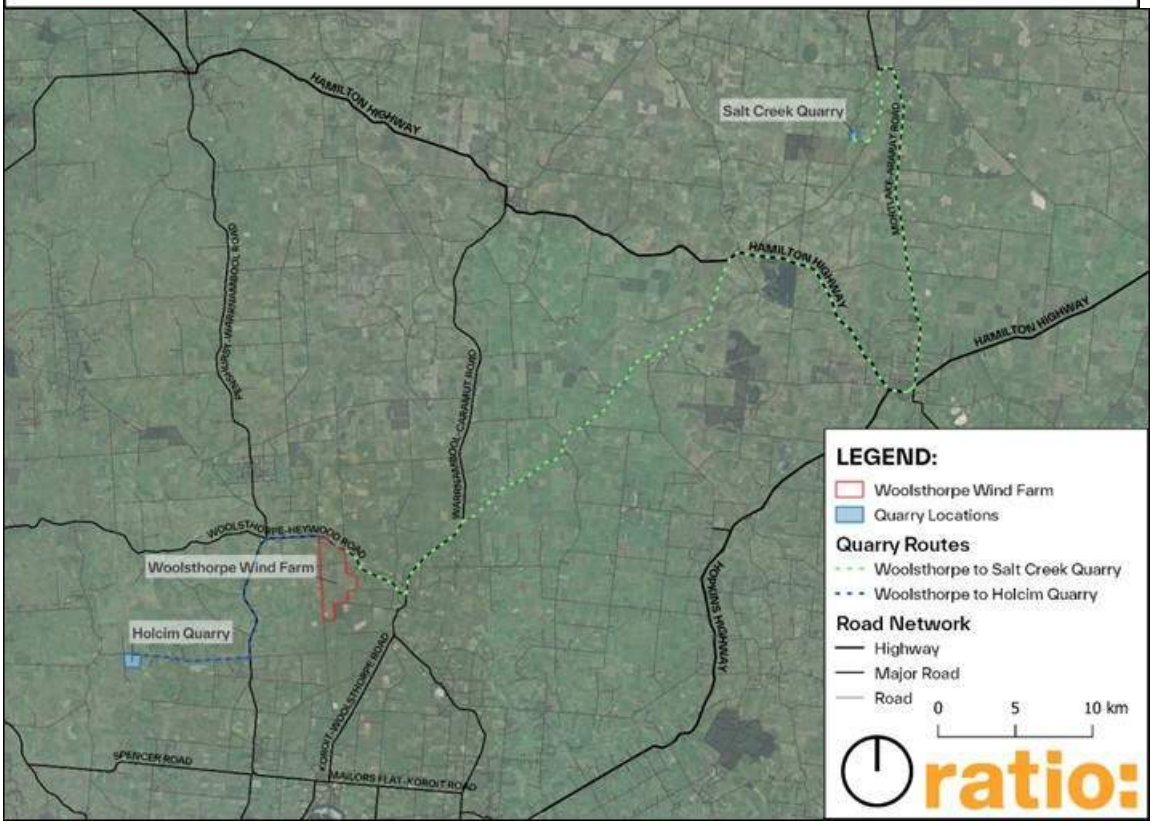
Afternoon Dave

Thanks again for your time in the meeting this morning.

Further to the discussions for our Draft TMP, are you able to issue across information for the school bus routes that operate within the Windfarm core haulage routes? This would include:

- Portland to Woolsthorpe via Princes Highway and Woolsthorpe-Hexham Roads.
- Quarry routes from Tarrone Holcim Quarry and Salt Creek Quarry, Warndoo.

The routes are shown below for reference:



Ngā mihi - Kind regards

Ben Thomson RPEng (Civil)
(He/Him)
Senior Transport Engineer

Phone 03 9429 3111
Email BenT@ratio.com.au

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
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Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

Melbourne
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Geelong
Wadawurrung Country
(03) 4224 0240

Sydney
Gadigal Country
(02) 9696 1225

Brisbane
Jagera Country
(07) 3724 9277

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Appendix C : DTP School Bus Routes

Portland to Woolsthorpe via Princes Highway

— NARRAWONG - PORTLAND (1138-0012) – Heywood (Portland) Buslines
— HEYWOOD - PORTLAND (1138-0006) – Heywood (Portland) Buslines
— BESSIEBELLE – HEYWOOD (1138-0005) – Heywood (Portland) Buslines
— CODRINGTON – PORTLAND (1138-0007) – Heywood (Portland) Buslines
— ALLESTREE - PORTLAND (3177-0001) – Philip Kelly Buslines
— SETTLERS ROAD - NARRAWONG (3132-0001) – Jasper Buslines
— CODRINGTON - PORT FAIRY (1375-0037) – Warrnambool Bus
— ST HELENS – WARRNAMBOOL (1375-0007) – Warrnambool Bus
— ELLERSLIE – WARRNAMBOOL (1375-0038) – Warrnambool Bus
— KIRKSTALL-SOUTHERN CROSS-KOROIT (1375-0045) – Warrnambool Bus
— HAWKESDALE – WARRNAMBOOL (1375-0026) – Warrnambool Bus
— PORT FAIRY (2) – WARRNAMBOOL (1375-0032) – Warrnambool Bus
— BROADWATER – HAWKESDALE (1375-0014) – Warrnambool Bus
— PORT FAIRY (5) – WARRNAMBOOL (1048-0008) – Christians Bus Company
— PORT FAIRY NO 6 – WARRNAMBOOL (3115-0013) – Coles Coaches
— KIRKSTALL-TARRONE LA-HAWKESDALE (3115-0016) – Coles Coaches

Salt Creek Quarry route

— MINJAH – WARRNAMBOOL (1375-0023) – Warrnambool Bus
— COOMETE – WOOLSTHORPE (1375-0025) – Warrnambool Bus
— Framlingham - Grassmere (3115-0017) – Coles Coaches
— Hexham South – MORTLAKE (3115-0008) – Coles Coaches
— CARAMUT – MORTLAKE (3115-0007) – Coles Coaches
— DUNDONELL – MORTLAKE (3115-0010) – Coles Coaches

Holcim Quarry route

— KIRKSTALL-TARRONE LA-HAWKESDALE (3115-0016) – Coles Coaches
— HAWKESDALE – WARRNAMBOOL (1375-0026) – Warrnambool Bus
— BROADWATER – HAWKESDALE (1375-0014) – Warrnambool Bus

Appendix D Crash Data Summary

Table B.1: Crash Data Summary - Primary OSOM Route

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
1	29/8/2019	Night	Dry	2 LV	Right through at intersection	Other injury
2	27/4/2022	Day	Dry	2 LV	Head on (not overtaking)	Other injury
3	3/8/2021	Day	Wet	2 LV	Right near at intersection	Other injury
4	19/10/2018	Day	Dry	2 LV	Cross traffic at intersection	Other injury
5	7/10/2019	Day	Dry	2 LV	Cross traffic at intersection	Other injury
6	18/6/2020	Day	Dry	2 LV	Right far at intersection	Other injury
7	5/1/2021	Day	Dry	2 LV	Right near at intersection	Other injury
8	23/5/2019	Day	Dry	1 LV and 1 HV	Lane change left (not overtaking)	Other injury
9	17/5/2019	Night	Dry	1 LV	Far side ped hit by vehicle from the left	Other injury
10	17/2/2023	Day	Dry	2 LV	Right near at intersection	Other injury
11	20/8/2022	Night	Wet	2 LV	Head on (not overtaking)	Other injury
12	27/5/2023	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Other injury
13	31/1/2022	Day	Dry	1 LV and 1 HV	Vehicle collides with vehicle parked on left of road	Other injury
14	22/9/2020	Night	Wet	1 LV	Struck animal	Other injury
15	3/6/2022	Night	Dry	1 LV and 1 HV	Struck object on carriageway	Other injury

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
16	23/12/2021	Day	Dry	2 LV	Rear end (vehicles in same lane)	Other injury
17	3/12/2021	Day	Dry	1 HV	Off carriageway on right bend	Other injury
18	16/12/2020	Day	Wet	1 LV	Left off carriageway into object/parked vehicle	Other injury
19	2/2/2019	Day	Dry	1 LV	Left off carriageway into object/parked vehicle	Other injury
20	27/1/2019	Day	Dry	1 LV	Off carriageway on right bend	Other injury
21	11/3/2021	Night	Dry	1 LV	Off right bend into object/parked vehicle	Other injury
22	18/2/2023	Day	Dry	2 LV	Right near at intersection	Other injury
23	30/9/2021	Night	Wet	1 HV	Off left bend into object/parked vehicle	Other injury
24	12/5/2021	Day	Dry	2 LV	Rear end (vehicles in same lane)	Other injury
25	5/12/2018	Day	Dry	2 LV	Right near at intersection	Other injury
26	25/9/2022	Day	Unknown	1 Motorcycle	Struck animal	Other injury
27	14/5/2020	Night	Dry	2 LV	Rear end (vehicles in same lane)	Other injury
28	16/9/2018	Night	Dry	1 LV and 1 Bicycle	Lane side swipe (vehicles in parallel lanes)	Other injury
29	16/5/2022	Day	Wet	1 HV and 1 Other vehicle	Head on (not overtaking)	Serious
30	31/12/2021	Day	Dry	1 HV	Off right bend into object/parked vehicle	Serious
31	18/8/2022	Day	Wet	2 LV	Cross traffic at intersection	Serious
32	17/9/2020	Day	Wet	2 LV	Cross traffic at intersection	Serious
33	12/4/2022	Night	Dry	2 LV	Cross traffic at intersection	Serious

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
34	28/12/2020	Day	Dry	2 LV	Cross traffic at intersection	Serious
35	28/8/2021	Dusk	Dry	2 LV	Right through	Serious
36	1/10/2018	Day	Dry	1 LV and 1 HV	Head on (not overtaking)	Serious
37	16/9/2022	Day	Wet	1 LV	Off left bend into object/parked vehicle	Serious
38	28/1/2021	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
39	21/2/2020	Night	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
40	10/12/2019	Day	Dry	1 LV	Left off carriageway into object/parked vehicle	Serious
41	9/8/2019	Day	Wet	1 LV	Off left bend into object/parked vehicle	Serious
42	1/3/2022	Day	Dry	1 LV	Off left bend into object/parked vehicle	Serious
43	24/8/2019	Night	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
44	31/3/2022	Day	Dry	1 LV	Off carriageway on right bend	Serious
45	9/1/2019	Day	Dry	2 LV	Cross traffic at intersection	Serious
46	18/9/2019	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
47	15/5/2023	Night	Dry	1 LV	Off right bend into object/parked vehicle	Serious
48	13/6/2021	Day	Dry	2 LV	Head on (not overtaking)	Serious
49	16/10/2020	Day	Dry	1 LV	Ped emerges from in front of parked or stationary vehicle	Serious

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
50	15/1/2022	Day	Dry	1 LV	Off end of road / intersection	Serious
51	7/4/2022	Day	Dry	1 LV	Off right bend into object/parked vehicle	Serious
52	21/4/2021	Day	Dry	2 HV	Cross traffic at intersection	Serious
53	24/3/2021	Night	Wet	1 LV	Off right bend into object/parked vehicle	Serious
54	14/8/2018	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
55	28/09/2019	Night	Wet	1 Motorcycle	Struck animal	Serious
56	4/5/2022	Day	Wet	1 LV and 1 Other vehicle	Pulling out (overtaking)	Serious
57	23/2/2019	Day	Dry	1 HV and 1 Bicycle	Cross traffic at intersection	Fatal
58	20/1/2019	Night	Dry	1 LV and 1 Motorcycle	Head on (not overtaking)	Fatal
59	3/5/2023	Dusk	Wet	1 LV and 1 HV	Head on (not overtaking)	Fatal

Table B.2: Crash Data Summary – Secondary OSOM Route (Blades Only)

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
1	29/8/2019	Night	Dry	2 LV	Right through at intersection	Other injury
2	27/4/2022	Day	Dry	2 LV	Head on (not overtaking)	Other injury
3	3/8/2021	Day	Wet	2 LV	Right near at intersection	Other injury
4	19/10/2018	Day	Dry	2 LV	Cross traffic at intersection	Other injury
5	7/10/2019	Day	Dry	2 LV	Cross traffic at intersection	Other injury
6	18/6/2020	Day	Dry	2 LV	Right far at intersection	Other injury

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
7	5/1/2021	Day	Dry	2 LV	Right near at intersection	Other injury
8	23/5/2019	Day	Dry	1 LV and 1 HV	Lane change left (not overtaking)	Other injury
9	17/5/2019	Night	Dry	1 LV	Far side ped hit by vehicle from the left	Other injury
10	17/2/2023	Day	Dry	2 LV	Right near at intersection	Other injury
11	20/8/2022	Night	Wet	2 LV	Head on (not overtaking)	Other injury
12	27/5/2023	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Other injury
13	31/1/2022	Day	Dry	1 LV and 1 HV	Vehicle collides with vehicle parked on left of road	Other injury
14	22/9/2020	Night	Wet	1 LV	Struck animal	Other injury
26	25/9/2022	Day	Unknown	1 Motorcycle	Struck animal	Other injury
27	14/5/2020	Night	Dry	2 LV	Rear end (vehicles in same lane)	Other injury
28	16/9/2018	Night	Dry	1 LV and 1 Bicycle	Lane side swipe (vehicles in parallel lanes)	Other injury
29	16/5/2022	Day	Wet	1 HV and 1 Other vehicle	Head on (not overtaking)	Serious
30	31/12/2021	Day	Dry	1 HV	Off right bend into object/parked vehicle	Serious
31	18/8/2022	Day	Wet	2 LV	Cross traffic at intersection	Serious
32	17/9/2020	Day	Wet	2 LV	Cross traffic at intersection	Serious
33	12/4/2022	Night	Dry	2 LV	Cross traffic at intersection	Serious
34	28/12/2020	Day	Dry	2 LV	Cross traffic at intersection	Serious
35	28/8/2021	Dusk	Dry	2 LV	Right through	Serious

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
36	1/10/2018	Day	Dry	1 LV and 1 HV	Head on (not overtaking)	Serious
37	16/9/2022	Day	Wet	1 LV	Off left bend into object/parked vehicle	Serious
38	28/1/2021	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
52	21/4/2021	Day	Dry	2 HV	Cross traffic at intersection	Serious
53	24/3/2021	Night	Wet	1 LV	Off right bend into object/parked vehicle	Serious
54	14/8/2018	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
55	28/09/2019	Night	Wet	1 Motorcycle	Struck animal	Serious
56	4/5/2022	Day	Wet	1 LV and 1 Other vehicle	Pulling out (overtaking)	Serious
57	23/2/2019	Day	Dry	1 HV and 1 Bicycle	Cross traffic at intersection	Fatal
58	20/1/2019	Night	Dry	1 LV and 1 Motorcycle	Head on (not overtaking)	Fatal
60	22/1/2023	Day	Dry	1 HV	Off carriageway on right bend	Other injury
61	27/11/2021	Day	Dry	2 LV	Right near at intersection	Serious

Table B.3: Crash Data Summary – Local Roads in the Vicinity of WWF

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
1	2/11/2021	Day	Dry	1 LV	Off left bend into object/parked vehicle	Other injury
2	18/3/2022	Night	Unknown	1 LV	Off carriageway on left bend	Other injury
3	6/6/2023	Dusk	Dry	1 LV	Struck Animal	Other injury

Crash No.	Date	Conditions		Vehicles Involved	Crash Type	Severity
		Time	Weather			
4	9/1/2019	Day	Dry	1 LV	Left off carriageway into object/parked vehicle	Other injury
5	8/2/2021	Day	Dry	1 LV and 1 HV	Cross traffic at intersection	Other injury
6	24/3/2021	Night	Wet	1 LV	Off right bend into object/parked vehicle	Serious
7	21/4/2021	Day	Dry	2 HV	Cross traffic at intersection	Serious
8	7/4/2022	Day	Dry	1 LV	Off right bend into object/parked vehicle	Serious
9	7/10/2022	Night	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
10	21/4/2023	Day	Dry	1 LV	Off left bend into object/parked vehicle	Serious
11	17/2/2022	Day	Dry	1 LV	Off right bend into object/parked vehicle	Serious
12	22/4/2023	Day	Dry	1 Motorcycle	Struck animal	Serious
13	25/4/2023	Day	Dry	1 LV	Right off carriageway into object/parked vehicle	Serious
14	21/12/2018	Day	Dry	2 LV	Right near at intersection	Serious
15	30/1/2020	Night	Dry	1 LV	Off carriageway on right bend	Fatal

Appendix E : Swept Path Assessment

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
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Sheet 91 of 110

Signed: for
MINISTER FOR PLANNING
Date: 18/12/2024

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 92 of 110

Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Woolsthorpe - Heywood Road, Woolsthorpe
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Google Earth Dated 21.02.2022
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-01.dgn	01 of 09	T.H.	Custom @A3	4.02.2024

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CONDITION 9
ENDORSED PLAN
Sheet 93 of 110

Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024

WOOLSTHORPE-HEYWOOD

ROAD

0 5 10

ratio:

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FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Woolsthorpe - Heywood Road, Woolsthorpe
Swept Path Assessment

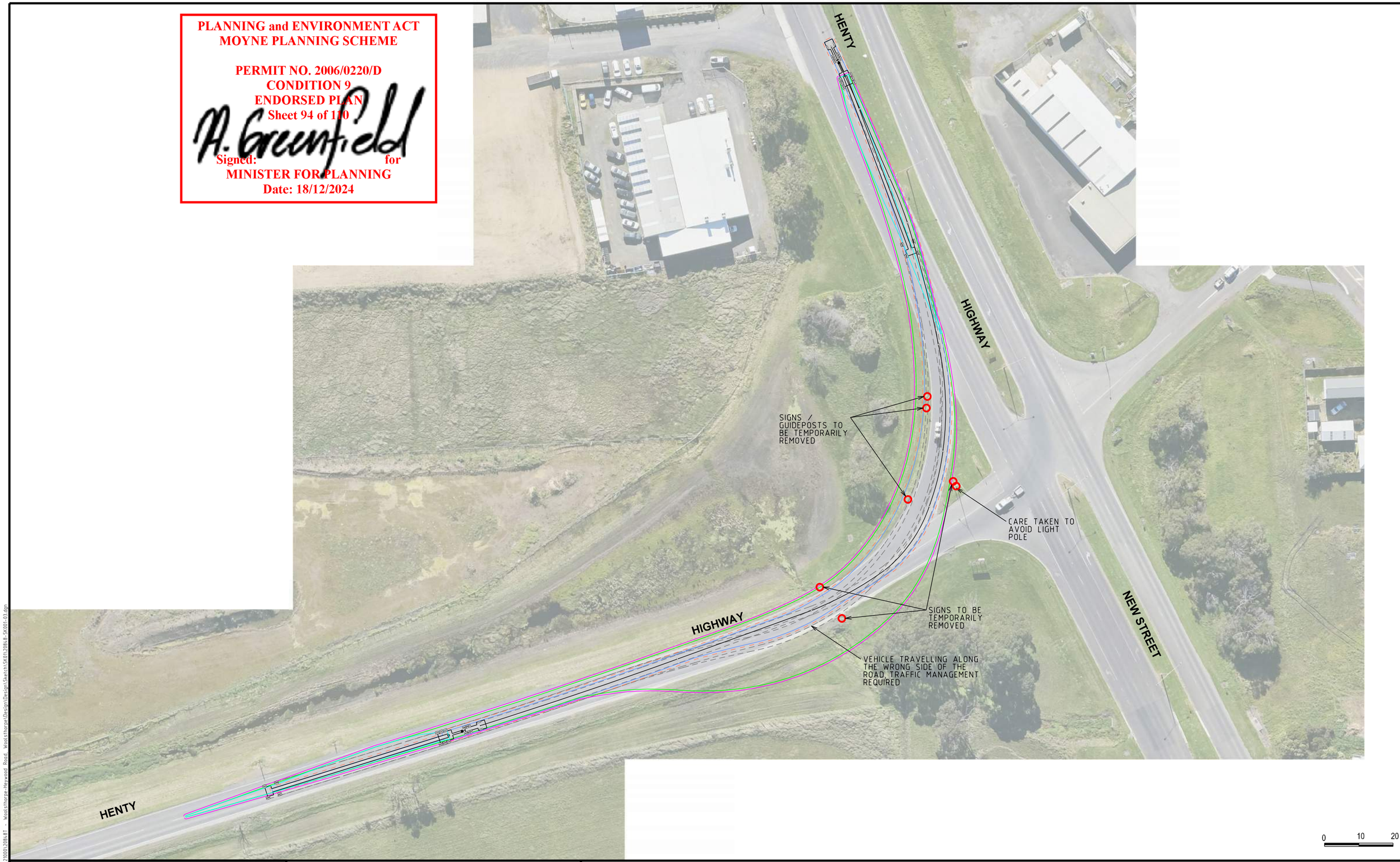
NOTE:
1) Aerial Imagery Obtained from Google Earth Dated 21.02.2022
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-02.dgn	02 of 09	T.H.	1:500 @A3	4.02.2024

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 94 of 110

Signed: A. Greenfield for
MINISTER FOR PLANNING
Date: 18/12/2024



ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Henty Highway / New Street Intersection
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-03.dgn	03 of 09	T.H.	1:1000 @A3	6.02.2024

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 95 of 110

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Date: 18/12/2024

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VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Henty Highway
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-04.dgn	04 of 09	T.H.	1:1000 @A3	6.02.2024

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FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Henty Highway / Princes Highway Intersection
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-05.dgn	05 of 09	T.H.	1:1000 @A3	6.02.2024

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MOYNE PLANNING SCHEME

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TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Princes Highway
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Google Earth Dated 21.02.2022
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-06.dgn	06 of 09	T.H.	1:1000 @A3	6.02.2024

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MOYNE PLANNING SCHEME

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TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Princes Highway / Penhurst-Port Fairy Road
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Nearmap
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-07.dgn	07 of 09	T.H.	1:1000 @A3	6.02.2024

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MOYNE PLANNING SCHEME

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ENDORSED PLAN
Sheet 99 of 110

A. Greenfield

Signed: for
MINISTER FOR PLANNING
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ratio:
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FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Penhurst-Port Fairy Road / Penhurst-Warrnabool Road Intersection
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Nearmap
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-08.dgn	08 of 09	T.H.	1:1000 @A3	6.02.2024

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
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Sheet 100 of 110

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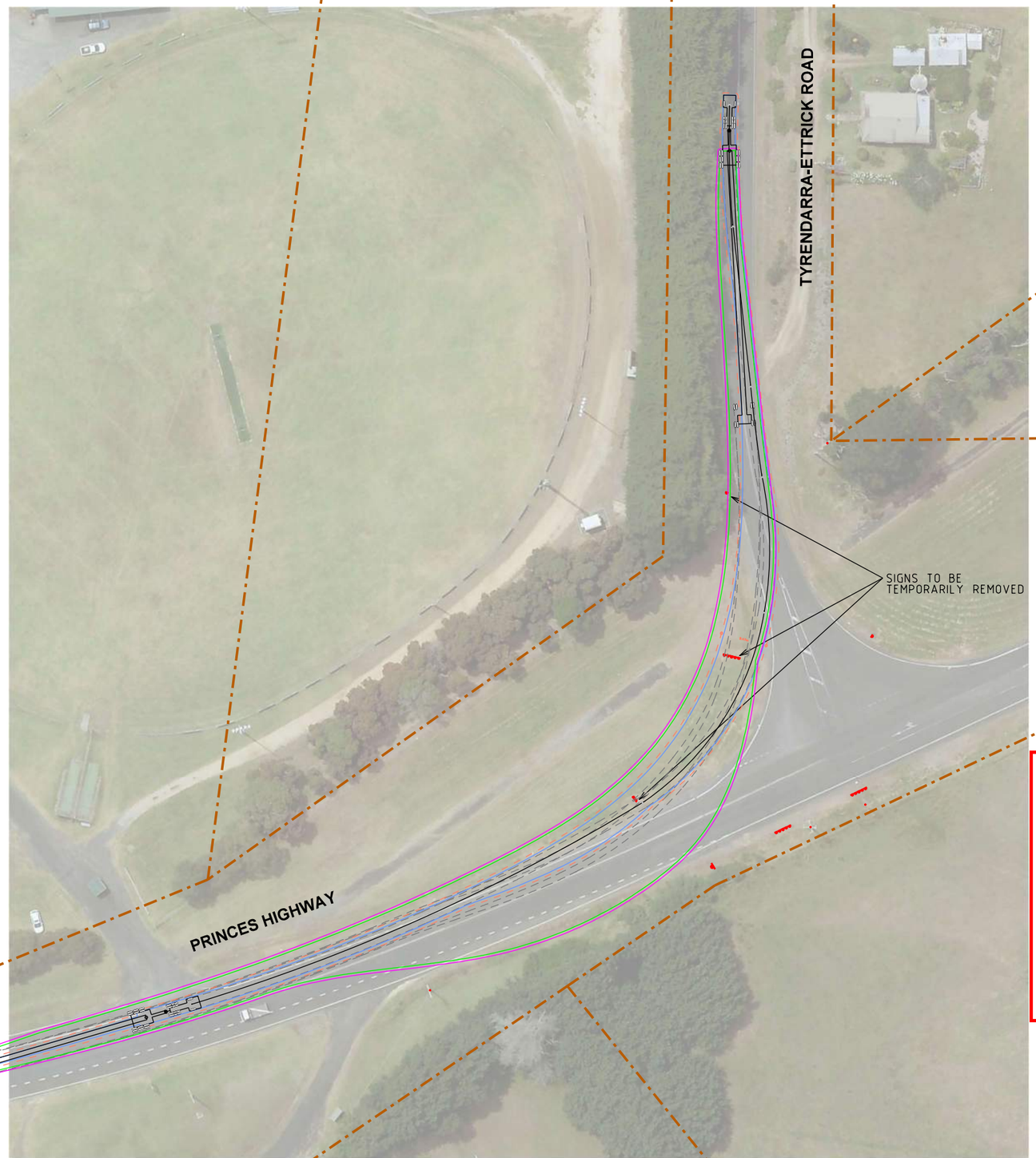
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Woolsthorpe - Heywood Road / Penhurst Warrnabool Road Intersection
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Google Earth Dated 21.02.2022
2) Swept Path Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK001-09.dgn	09 of 09	T.H.	1:1000 @A3	6.02.2024



PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 101 of 110

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Date: 18/12/2024

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CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Tyrendarra-Ettrick Road / Princes Highway Intersection
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK-002-A.dgn	01 of 05	B.K.	1:1000 @A3	12/04/2024

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

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CONDITION 9
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Sheet 102 of 110

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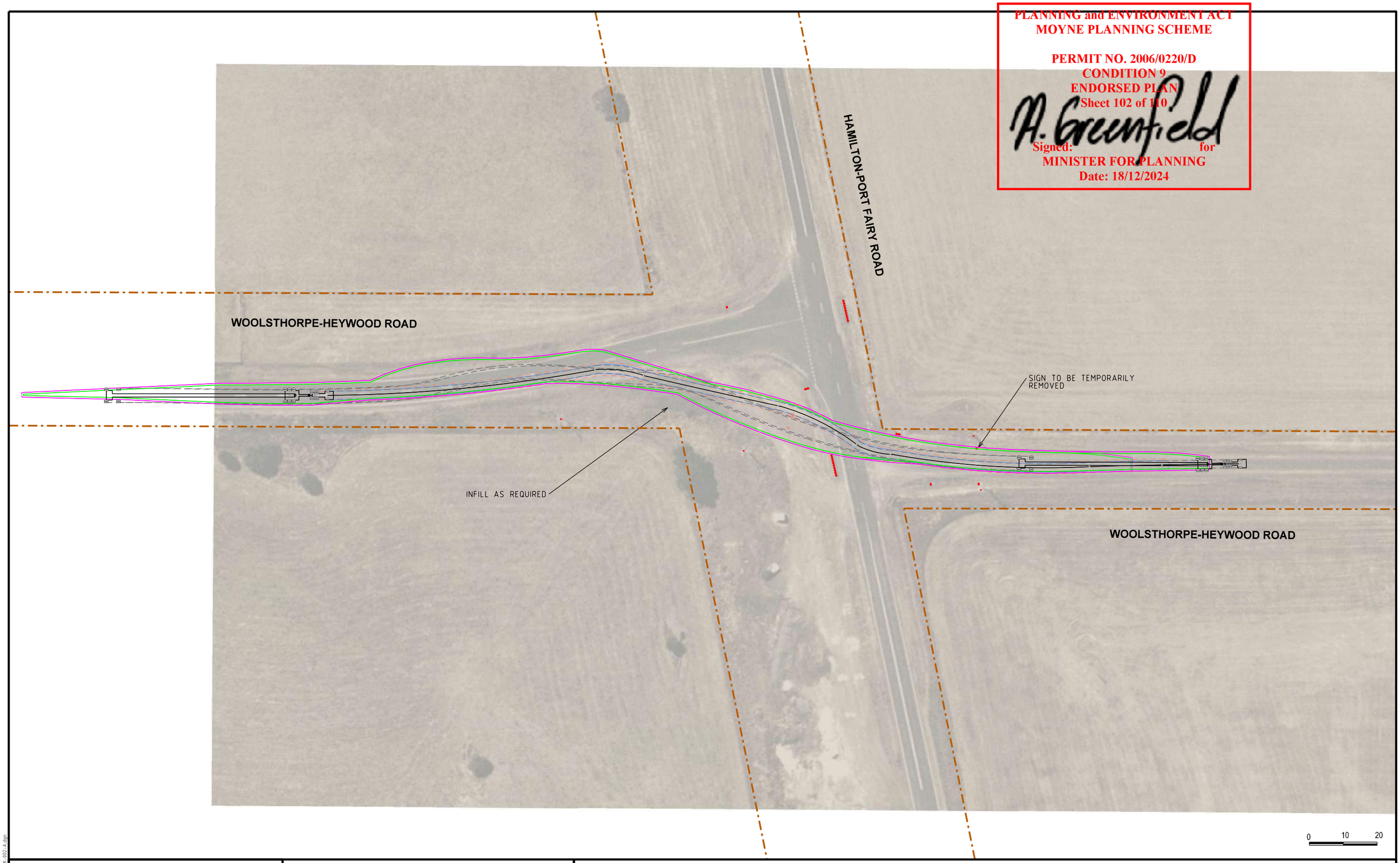

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CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Hamilton-Port Fairy Road / Woolsthorpe-Heywood Road Intersection
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK-002-A.dgn	03 of 05	B.K.	1:1000 @A3	12/04/2024

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PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 103 of 110

Signed: A. Greenfield for
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TREES TO BE PRUNED AS REQUIRED

WOOLSTHORPE-HEYWOOD ROAD

WOOLSTHORPE-HEYWOOD ROAD

0 10 20

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12/04/2024 5:21:24 PM

ratio:

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CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Woolsthorpe-Heywood Road
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK-002-A.dgn	04 of 05	B.K.	1:1000 @A3	12/04/2024

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 104 of 110

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CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Woolsthorpe-Heywood Road
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK-002-A.dgn	05 of 05	B.K.	1:1000 @A3	12/04/2024

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PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

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ENDORSED PLAN
Sheet 105 of 110

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Date: 18/12/2024

WOOLSTHORPE-HEYWOOD ROAD

SIGNS TO BE
TEMPORARILY REMOVED

TYRENDARRA-ETTRICK ROAD

0 10 20

ratio:
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CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

VEHICLE ENVELOPE
500mm CLEARANCE
TIRES
CENTRE LINE
LOAD
LOAD CLEARANCE

Woolsthorpe Wind Farm
Tyrendarra-Ettrick Road / Woolsthorpe-Heywood Road Intersection
Swept Path Assessment

NOTE:
1) Aerial Imagery Obtained from Landchecker
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
20848-SK-002-A.dgn	02 of 05	B.K.	1:1000 @A3	12/04/2024

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Appendix F : Maintenance and Rehabilitation Requirements

MOYNE SHIRE COUNCIL ROADS

Local MSC roads - inspection and rehabilitation frequency

Construction Activity	Minimum inspection and reporting frequency	Tentative schedule*	Rehabilitation timeframes
During public road upgrade construction activities until practical completion of the upgrade works (excluding Slatterys Rd)	Fortnightly and at construction hold points	Months 1	In alignment with the defects found according to the local road management plan and response timeframes agreed between stakeholders. MSC has advised this has typically been 10 working days.
During site civil works until all WTG foundations have been completed	Fortnightly	Months 2 to 9	
From the completion of WTG foundations until the all quarry material has been delivered.	Monthly	Months 10 to 12	

DTP ROADS

Where a road is used and the traffic generated by the subject site exceeds 10% additional traffic as a result of the construction activity;

DTP intervention criteria and treatment for routine pavement maintenance during construction

Pavement distress type and rectification (Job description)	Intervention criteria	Rehabilitation timeframe
Pothole Patching		
Treatment of isolated potholed areas using appropriate materials to repair the defect and restore the riding surface to a smooth condition.	All new potholes.	Inspection at maximum 14-day intervals. Rehab timeframe 2 days maximum.

Pavement distress type and rectification (Job description)	Intervention criteria	Rehabilitation timeframe
Regulation of Wheel Ruts or Depressions Application of a levelling course of bituminous material to depressed or rutted areas of pavement to restore the pavement surface to a smooth condition.	New deformations greater than 100 mm under a 3 m straight edge.	Within two weeks of inspection or notification.
	All new ruts or depressions >25 mm depth measured with 1.2 m straightedge transverse, or under a 3 m straightedge longitudinal.	Rectify within 4 weeks.
Crack Sealing Filling of cracks and joints, excluding "crocodile" cracking, using liquid bituminous sealants in accordance with the monthly works program.	All new cracks greater than 2 mm in width at any point.	Rectify within 2 weeks.
Surface Treatment Application of bituminous materials and cover aggregate to treat pavement surface areas with: (a) loss of aggregate (stripping); (b) bleeding and/or flushing; (c) extensive or "crocodile" cracking.	Treat: (a) when stripping (>50% loss of aggregate for an area >5 m^2) (b) when bleeding/flushing for an area >5 m^2 (c) all new "crocodile" cracking	Inspection at maximum 14-day intervals. Rehab timeframe 7 days maximum.
Pavement Cleaning Cleaning of pavement, to remove debris which is a danger to road users	When fallen debris, slippery substance, accumulation of granular material, ponding of water or any other obstacle becomes a danger to road users.	Materials fallen from vehicles, dead animals, wet clay and other slippery substances, hazardous materials, and accumulation of dirt or granular materials on the traffic lane of sealed roads: Within 72 hours of inspection or notification. Trees, shrubs or grasses that have grown to restrict design sight distance to intersections or restrict viewing of safety signs: Within two weeks of inspection or notification.
Edge Break Repair Repair of broken edges of sealed pavement to line and	All new edge breaks that are a hazard to road users	Inspection at maximum 14-day intervals. Rehab timeframe 7 days maximum.

Pavement distress type and rectification (Job description)	Intervention criteria	Rehabilitation timeframe
level to maintain nominal sealed pavement width.		
Digouts Treatment of isolated failed pavement areas by replacement with new material or improvement of existing material, including reinstatement of road surface.	All new failed areas	Rectify within 7 days.
Unsealed Shoulder Spot filling, grading and reshaping of unsealed shoulders to correct: (a) drop off from edge of the sealed pavement shoulder; (b) roughness, scouring or potholes; (c) holding of water.	New edge drops onto unsealed shoulder greater than 100 mm General: New drop-off>50 mm depth measured over a 20 m length Isolated: New potholes, scouring or roughness >50 mm depth measured with a 1.2 m straightedge, or when there is holding of water	Inspection at maximum 28-day intervals. Rehab timeframe for any defect to be 2 weeks maximum

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 108 of 110

Signed: for
MINISTER FOR PLANNING
Date: 18/12/2024

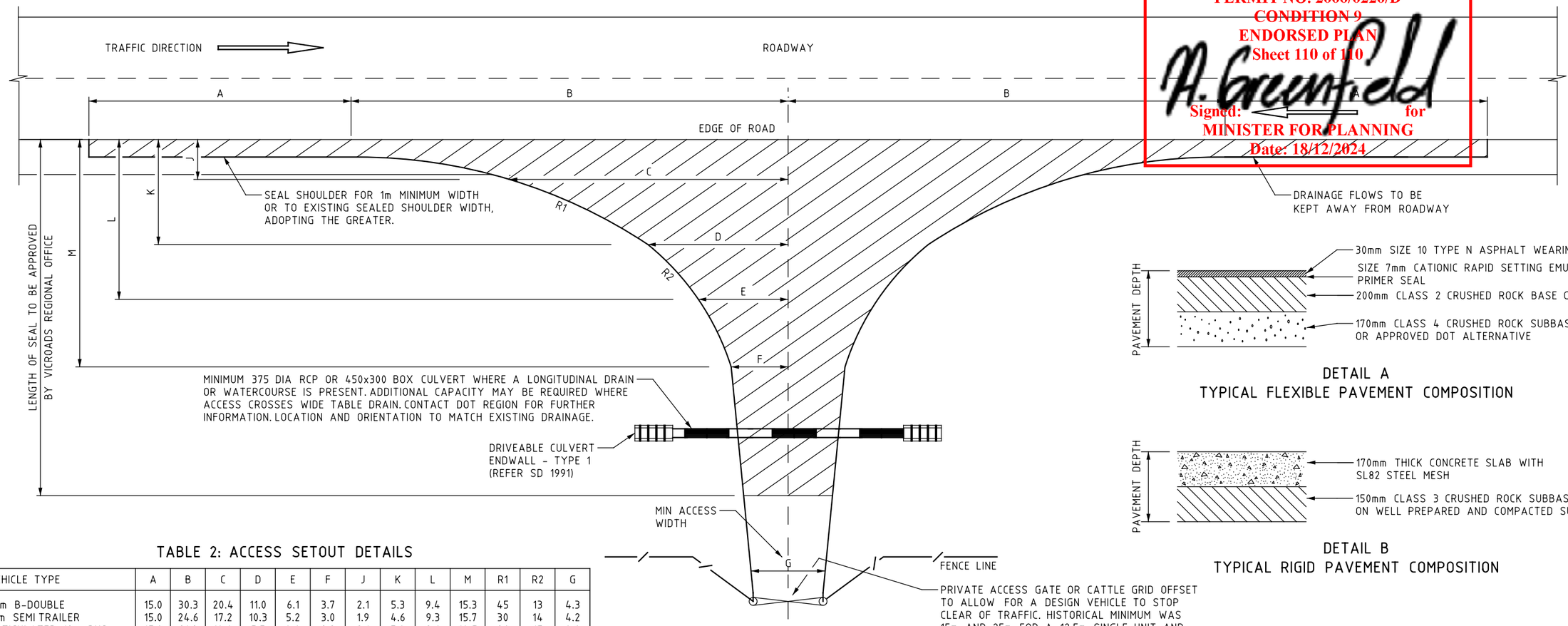
Appendix G : Site Access Requirements

PLANNING and ENVIRONMENT ACT
MOYNE PLANNING SCHEME

PERMIT NO. 2006/0220/D
CONDITION 9
ENDORSED PLAN
Sheet 109 of 110

Signed: for
MINISTER FOR PLANNING
Date: 18/12/2024

ISSUE	APPROVED BY	DATE	AMENDMENT
A	M-RD&SSE	12/21	REVISED PAVEMENT DETAILS AND GENERAL NOTES 1, 2, 3, 4, & 5



PLAN - DRIVEWAY ACCESS LAYOUT

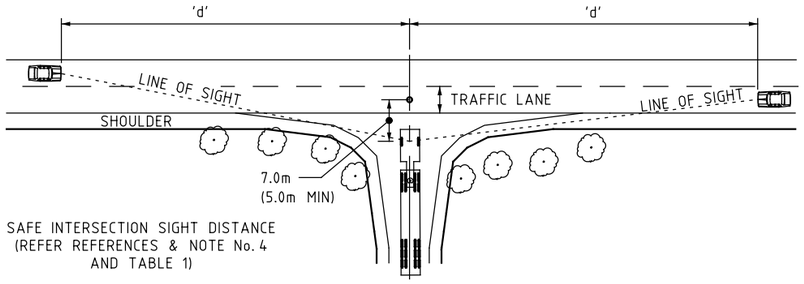
DETAIL A
TYPICAL FLEXIBLE PAVEMENT COMPOSITION

DETAIL B
TYPICAL RIGID PAVEMENT COMPOSITION

TABLE 2: ACCESS SETOUT DETAILS

VEHICLE TYPE	A	B	C	D	E	F	J	K	L	M	R1	R2	G
26m B-DOUBLE	15.0	30.3	20.4	11.0	6.1	3.7	2.1	5.3	9.4	15.3	45	13	4.3
19m SEMI TRAILER	15.0	24.6	17.2	10.3	5.2	3.0	1.9	4.6	9.3	15.7	30	14	4.2
ARTICULATED 19m BUS	15.0	21.9	14.4	7.5	4.4	2.9	2.1	5.4	9.6	14.7	26	15	4.0
12.5m SINGLE UNIT	15.0	20.1	12.9	6.4	4.1	3.0	2.2	5.6	9.7	16.3	23	18	4.0
TRUCK + 3 AXLE TRAILER	15.0	18.3	11.8	6.2	4.0	3.0	2.2	5.7	9.8	14.2	18	18	4.0
TRUCK + 4 AXLE TRAILER	15.0	19.2	12.2	6.0	4.0	3.0	2.3	5.9	9.8	14.0	20	17	4.0
8.8m SERVICE VEHICLE	15.0	12.6	8.7	5.4	4.1	3.5	1.8	4.1	6.7	9.6	10	13	4.0
PASSENGER VEHICLE	5.0	9.3	3.8	1.8	–	–	2.2	7.5	–	–	7.5	–	3.6

SETOUT DETAILS TO BE BASED ON THE DESIGN VEHICLE SELECTED.
CHECK VEHICLE MAY ENCROACH ON TO OPPOSING TRAFFIC LANE IN <80KM/H SPEED ZONE FOR LOW VOLUME ROADS WITHOUT A CENTRAL BARRIER.



MINIMUM VISIBILITY REQUIREMENTS
(NOT TO SCALE)

TABLE 1: SIGHT DISTANCES

DESIGN SPEED (Km/h)	'd' SAFE INTERSECTION SIGHT DISTANCE (m)	CORRECTION (m)							
		ROADWAY UPGRADE				ROADWAY DOWNGRADE			
		2%	4%	6%	8%	2%	4%	6%	8%
60	123	-2	-4	-6	-7	2	5	8	11
70	151	-3	-5	-8	-10	3	7	11	15
80	181	-4	-7	-10	-13	4	9	14	20
90	226	-5	-9	-13	-16	5	11	18	25
100	262	-6	-11	-16	-20	6	14	22	31
110	300	-7	-13	-19	-24	8	17	26	38

THE DESIGN SPEED IS ASSUMMED TO BE 10km/h GREATER THAN THE POSTED SPEED LIMIT FOR RURAL HIGHWAYS AND ROADS

GENERAL NOTES:
1. THE DIAGRAM IS A GUIDE FOR A TYPICAL LAYOUT OF A DRIVEWAY ACCESS FOR A RURAL PROPERTY FOR VEHICLES AS SPECIFIED IN TABLE 2. THIS GUIDE WAS DEVELOPED IN THE INTEREST OF ROAD SAFETY AND TO PROTECT THE ARTERIAL ROAD PAVEMENT AT THE ACCESS LOCATION.
2. SLIGHT VARIATIONS MAY OCCUR AFTER SITE INSPECTION, ANALYSIS AND APPROVAL OF THE LOCATION.
3. THE PAVEMENT COMPOSITION SHALL BE IN ACCORDANCE WITH THAT SHOWN IN DETAIL A. THE PAVEMENT TYPE SHOWN IN DETAIL B IS ONLY SUITABLE FOR INFREQUENT HEAVY VEHICLE TRAFFIC. AN ALTERNATIVE PAVEMENT COMPOSITION WILL REQUIRE APPROVAL BY THE DEPARTMENT OF TRANSPORT. NEW PAVEMENT MUST BE KEYED INTO EXISTING PAVEMENT AND CRACK SEALED.
4. ANY PROPOSED ALTERNATIVE PAVEMENT DESIGNS SHALL BE UNDERTAKEN IN ACCORDANCE WITH VICROADS CODE OF PRACTICE RC 500.22 SELECTION AND DESIGN OF PAVEMENTS AND SURFACINGS AND AUSTROADS GUIDE TO PAVEMENT TECHNOLOGY PART 2 PAVEMENT STRUCTURAL DESIGN.
5. PAVEMENT MATERIALS AND EARTHWORK LAYERS NEED TO BE IN ACCORDANCE WITH DOT STANDARD SECTIONS AND/OR LOCAL GOVERNMENT SPECIFICATION REQUIREMENTS.
6. A PLANNING PERMIT IS REQUIRED FOR A NEW ACCESS OR ALTERATION TO AN EXISTING DRIVEWAY AND MAY BE REQUIRED FOR THE REMOVAL OF NATIVE VEGETATION.
7. A TRAFFIC MANAGEMENT PLAN MUST COMPLY WITH THE ROAD MANAGEMENT ACT AND APPLICABLE CODES IN RELATION TO ANY WORKS UNDERTAKEN WITHIN THE ROAD RESERVE.
8. TRUCK WARNING SIGNS & GUIDE POSTS SHOULD BE INSTALLED IN ACCORDANCE WITH AUSTROADS GUIDE TO TRAFFIC MANAGEMENT & VICROADS SUPPLEMENTS.
9. THE DRIVEWAY ACCESS CONSTRUCTION AND MAINTENANCE IS THE RESPONSIBILITY OF THE PROPERTY OWNER. MAINTENANCE ALSO INCLUDES ASSOCIATED DRAINAGE WORKS.

SIGHT DISTANCE:
10. A DRIVER, WHEN LOCATED 7.0M (5.0M MIN) FROM THE CONFLICT POINT TAKEN AS THE CENTRE OF THE TRAFFIC LANE, NEEDS TO SEE A VEHICLE APPROACHING IN EITHER DIRECTION. REFER TABLE 1 FOR APPROPRIATE SIGHT DISTANCES.
11. TREE CANOPIES, BUSHES OR OTHER OBJECTS SHALL BE REMOVED TO PROVIDE GOOD VISIBILITY. ANY TREE CANOPIES OVERHANGING THE PATH OF A TRUCK SHALL BE A MINIMUM OF 5.0M ABOVE THE GROUND SURFACE.
12. SIGHT LINES MUST ACHEIVE THE MINIMUM SAFE INTERSECTION SIGHT DISTANCE BASED ON AN EYE HEIGHT OF 1.1M TO AN OBJECT HEIGHT OF 1.25M.

NOTES:
1. ALL DIMENSIONS ARE IN METRES, UNLESS SHOWN OTHERWISE
2. THIS DRAWING FORMS PART OF THE VRS TO AGRD PART 4 AND SHOULD BE READ IN CONJUNTION WITH THOSE REFERENCES

REFERENCES:
AUSTROADS GUIDE TO ROAD DESIGN PART 4
AUSTROADS GUIDE TO ROAD DESIGN PART 4A
AUSTROADS GUIDE TO ASSET MANAGEMENT PART 5
AUSTROADS GUIDE TO PAVEMENT TECHNOLOGY PART 2
AUSTROADS GUIDE TO TRAFFIC MANAGEMENT
VICROADS SUPPLEMENTS TO AUSTROADS GUIDES
VICROADS CODE OF PRACTICE RC 500.22
- SELECTION AND DESIGN OF PAVEMENTS AND SURFACINGS
SD 1991 DRIVEABLE CULVERT ENDWALLS (TYPE 1)

vicroads
GUIDELINE DRAWING

AGRD PART 4

TYPICAL ACCESS TO RURAL PROPERTIES

NOT TO SCALE	APPROVED M-SSE 07/2020	GD NO. GD4010	ISSUE A

VicRoads Drawing No. 720453