# **Tallawarra Stage B Gas Turbine Power Station**

Traffic Management Sub-Plan

# **EnergyAustralia Tallawarra Pty Ltd**

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Abbreviations

Abbreviation	Meaning
CCGT	Combined cycle gas turbine
CEMP	Construction environmental management plan
CoA	Conditions of Approval to Major Project MP07-0124
DPIE	Department of Planning, Industry and Environment
EA	Environmental Assessment (SKM, 2009)
EMS	Environmental management strategy
EP&A Act	Environment Planning and Assessment Act 1979
EPA	NSW Environment Protection Agency
EPL	Environment protection licence
ER	Environmental representative
EWMS	Environmental work method statements
GECL	GE Clough, engineering, procurement and construction contractor
HSSE	Health, safety, security and environment
kV	Kilovolts
Mod-1	Modification 1 to Major Project MP07-0124
Mod-2	Modification 2 to Major Project MP07-0124
MW	Megawatts
NAQMP	Noise and air quality management plan
NHVR	National Heavy Vehicle Regulator
OCGT	Open cycle gas turbine
OPLINC	Online Planned Incident System (ServiceNSW)
OSOM	Over size over mass
RNP	Road noise policy
ROL	Road occupancy licence
SoC	Statement of Commitments within the Environmental Assessment and Submissions Report (SKM, 2009/2010)
SWMP	Soil and water management plan
TCaWS	Traffic control at work sites Technical Manual (Version 6.0, RMS 2020)
TCP	Traffic control plan
TMP	(OSOM) Transport management plan

# Contents

1	Introductio	n		6
	1.1	Docum	nent structure	6
	1.2	Locatio	on and land use	6
	1.3	Tallawa	arra A power station	6
	1.4	Objecti	ives	6
		-		
2	Relevant le	gislatio	n and guidelines	8
	2.1	Releva	ant legislation	8
	2.2	Guideli	ines and policies	8
	2.3	Conditi	ions of approval	8
3	Aspects an	-	cts	
	3.1	Aspect	is	11
		3.1.1	Road network	11
		3.1.2	Construction vehicles	13
		3.1.3	Construction vehicle parking	13
		3.1.4	Light vehicle traffic volume and profile	16
		3.1.5	Heavy vehicles	
		3.1.6	Over size over mass vehicles	17
	3.2	Potenti	ial impacts	19
		3.2.1	Project GeoPortal and sensitive area maps	19
		3.2.2	Public road user disruption	
		3.2.3	Road dilapidation	
		3.2.4	Yallah Bay Road bridge loading limits	19
		3.2.5	Internal Tallawarra A Power Station roads	19
		3.2.6	OSOM measures to minimise impacts	20
		3.2.7	Speed limits	
		3.2.8	Construction vehicle code of conduct	20
		3.2.9	Noise and dust	20
	3.3	Hold po	oints	21
		3.3.1	OSOM permitting	21
		3.3.2	Road Occupancy License (ROL) and Section 138	
		3.3.3	Traffic Control Plans and traffic control	
		3.3.4	Road dilapidation	22
			sibilities	
5	Environme	ntal safe	eguards and management measures	24
	5.1	Conditi	ions of approval	24
	5.2	Statem	nent of commitments	24
	5.3		itments made in Project modifications	
	5.4	Enviror	nmental protection licence	24
e	Monitorin			0.0
	_			
7	•		gement	
	7.1		unication	
	7.2		Itation	
	7.3		ng and competency	
	7.4 7.5		g and reporting nt management and corrective actions	
	7.5 7.6		nt management and corrective actionsv	
	7.0	IVENIEM	Vv	

8 References	34
Appendix A: Agency consultation log	35
Appendix B: Principal Contractor OSOM Transport Management Strategy	40
Appendix C: Construction Vehicle Code of Conduct	41
Appendix D: Incident notification requirements (major project approval, Appendix 1)	42
Tables	
Table 1-1. TMP performance objectives and targets	6
Table 2-1: Conditions of approval relevant to the TMP	9
Table 3-1. Vehicle types	13
Table 3-2. OSOM cargo details	17
Table 5-1. Environmental safeguards and management measures for traffic impacts	25
Table 6-1. TMP monitoring requirements	30
Table 7-1. TMP agency consultation	31

# 1 Introduction

### 1.1 Document structure

The Tallawarra B open cycle gas turbine power station project (the Project) Environmental Management Strategy (EMS) provides the overarching strategic environmental management framework for the delivery (design, construction and operation) of the Project.

Within the management framework provided by the EMS, a Construction Environment Management Plan (CEMP) has been developed by EnergyAustralia to provide a system of environmental management for the construction phase of the project. The CEMP includes procedures, policies, and processes to establish and maintain project compliance and best practice controls. Its implementation will ensure that potential environmental impacts are managed during the construction of the Project. The CEMP is structured to include a range of aspect specific management sub-plans, including this document, to translate the corresponding environmental management requirements, commitments, and conditions of approval into an actionable construction management plan.

This Traffic Management Sub-Plan (TMP) has been prepared to supplement the CEMP. It should be read in conjunction with the EMS and CEMP. This TMP should be used to inform the development of activity specific Environmental Work Method Statements (EWMS).

This TMP is required to be implemented by EnergyAustralia and contractors that undertake construction work on the project.

### 1.2 Location and land use

The Project is located at Yallah Bay Road, Yallah approximately 13 km south of Wollongong and 60 km south of Sydney. The site was previously used for a coal-fired power station, which was decommissioned in 1989. The Project will be constructed immediately adjacent to the existing Tallawarra A combined cycle gas turbine power station. As a result of its previous uses, the majority of the land surrounding the Project site (Tallawarra Lands) is vacant and has been cleared of vegetation. Currently, cattle grazing and other rural activities constitute the primary land use beyond the power station site boundary.

# 1.3 Tallawarra A power station

The existing Tallawarra A closed cycle gas turbine power station is operated by EnergyAustralia. It will continue be operational throughout construction of the Project. The Project will utilise much of the existing Tallawarra Stage A power station equipment and infrastructure during construction, including but not limited to internal roads and carparking areas.

# 1.4 Objectives

Objectives, targets, and details of how they will be achieved through the TMP are identified below in Table 1.

Table 1-1. TMP performance objectives and targets

item	Objective	Targets	Measurement tool
Construction compliance	Construction of the project in accordance with environmental approvals and licences	Compliance with all statutory approvals and licences	Safeguards and management measures – Section 5 Audits – Section 7.4 Construction compliance reporting – CEMP Section 13 Management reviews – CEMP Section 13 and 14

item	Objective	Targets	Measurement tool
Public amenity impacts	Minimise potential adverse environmental and public amenity impacts from construction activities	No damage to public infrastructure	Safeguards and management measures – Section 5 Audits – Section 7.4
Construction traffic impacts	Minimise potential adverse impacts from construction traffic to the surrounding road networks	No vehicle or pedestrian accidents stemming from construction actions or traffic management	Safeguards and management measures – Section 5 Audits – Section 7.4
Construction traffic impacts	Minimise potential adverse impacts on other road users	No significant increase in traffic disruption or delay.	Safeguards and management measures – Section 5 Audits – Section 7.4
Complaints	To ensure all traffic and transport complaints are investigated and responded to appropriately	All complaints investigated and management actions undertaken	Monitoring procedures in response to complaints - Section 6.2 Community consultation - Section 7.2 Complaints management - CEMP Section 10.2 Complaints Register – CEMP Section 10.3

# 2 Relevant legislation and guidelines

# 2.1 Relevant legislation

The relevant legislation addressed in this TMP include:

- Environmental Planning and Assessment Act 1979 (EP&A Act)
- EP&A Regulation 2000
- Roads Act 1993
- Road Transport (Vehicle Registration) Regulation 2007
- Road Transport (Mass, loading, and Access) Regulation 2005
- Road Transport Act 2013
- Heavy Vehicle National Law (HVNL) 2014
- Work Health and Safety Act 2011
- Wollongong City Council local requirements.

A responsibility table for addressing approvals, licenses, and permits required for the Project is provided in the EMS Appendix G.

# 2.2 Guidelines and policies

The guidelines and policies addressed in this TMP include:

- NSW EPA Road Noise Policy
- NSW Roads and Maritime (RMS) Operating Conditions: Additional Access Conditions Oversize and overmass heavy vehicles and loads (2017)
- RMS Traffic Control at Worksites Manual (RMS, 2020)
- NSW Speed Zoning Guidelines v. 4 (RTA 2011)
- Austroad's Guide to Traffic Management (Austroad, 2020)
- Austroad's Guide to road safety
- RMS Supplements for Australian Standards.

# 2.3 Conditions of approval

The conditions of approval specifically relating to this TMP are provided in Table 2-1 along with the responsibility for compliance. Where these conditions translate into an environmental safeguard or management measure, Table 2-1 indicates where in this TMP (or other management plan) the condition is addressed.

Table 2-1: Conditions of approval relevant to the TMP

CoA#	Condition Requirement	Responsibility	Where addressed
3.19	The Proponent shall construct and operate the project in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.	HSSE Lead Contractor	NAQMP
3.34	The Proponent shall utilise existing crossings over Yallah Creek and shall avoid constructing temporary watercourse crossings for heavy vehicles and machinery.	HSSE Lead Contractor	Section 3.2.5 Table 5-1
3.57	Upon determining the haulage route(s) for construction vehicles associated with the project, the Proponent shall commission an independent, qualified person or team to undertake a Road Dilapidation Report for Yallah Bay Road. The report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the project. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.	Contractor	Section 3.2.3 Section 3.3.4 Table 5-1
	The Proponent shall ensure that any measures to restore or reinstate roads affected by the project are undertaken in a timely manner, in accordance with the requirements of and to the satisfaction of the relevant road authority, and at the full expense of the Proponent. In the event of a dispute between the parties with respect to the extent of restorative work that may be required under this condition, any party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.	Contractor	Table 5-1
7.3 (b)	As part of the CEMP for the project, required under condition 7.2 of this approval, the Proponent shall prepare and implement the following:  b) a Traffic Management Plan prepared in consultation with TfNSW, Wollongong City Council and emergency services to manage the construction traffic and access impacts of the project including, but not necessarily limited to -	HSSE Lead Contractor	This TMP  Appendix A
	i) details of how construction of project infrastructure will be managed in proximity to local and regional roads,	Contractor	Section 3.1
	ii) details of traffic routes for heavy vehicles, including any necessary route or timing restrictions for oversized loads,	Contractor	Section 3.1
	iii) construction vehicle volumes (construction personnel, heavy vehicle movements and oversized loads),	Contractor	Section 3.1 NAQMP
	iv) measures to ensure traffic volume, acoustic and amenity impacts along construction vehicle routes are minimised,	Contractor	Table 5-1

CoA#	Condition Requirement	Responsibility	Where addressed
	v) details of construction activities that would require disruption to traffic such as road closures and measures to minimise impacts,	Contractor	Section 3.1 Table 5-1
	vi) a Construction Vehicle Code of Conduct to set driver behaviour controls to minimise impacts on land uses along haulage routes	Contractor	Section 3.2.8 Appendix C
	vii) evidence that all statutory responsibilities with regard to road traffic impacts have been complied with.	Contractor	Section 3.3 EMS Section 7.6 EMS Appendix G

# 3 Aspects and impacts

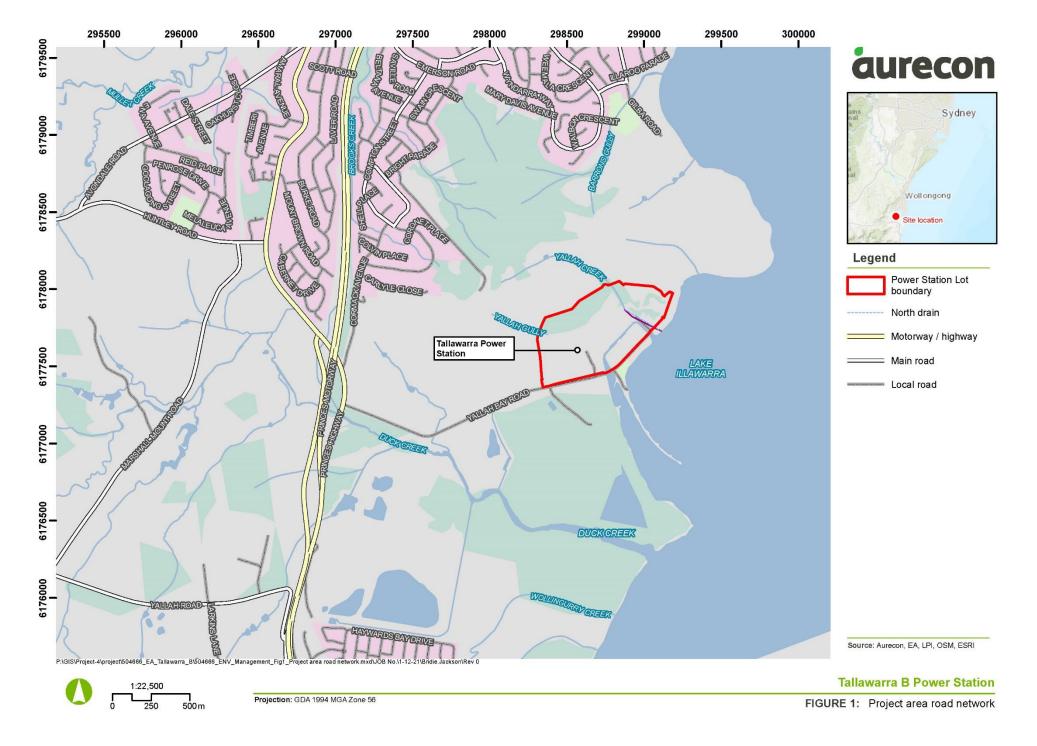
# 3.1 Aspects

#### 3.1.1 Road network

Local roads surrounding the Project site will generally not be used for the Project, except for Yallah Bay Road, which provides the main road access to the Project site from the Princes Highway. Yallah Bay Road is owned and controlled by Wollongong City Council.

Most roads surrounding the Project area that will be used for construction purposes are main roads that are controlled by Transport for NSW. This includes the Princes Highway and Princes Motorway which are located about two kilometres west of the project site. The Princes Highway and Princes Motorway provide the main road accesses north towards Wollongong and south from the project site.

The main roads around the project site are shown in Figure 1.



#### 3.1.2 Construction vehicles

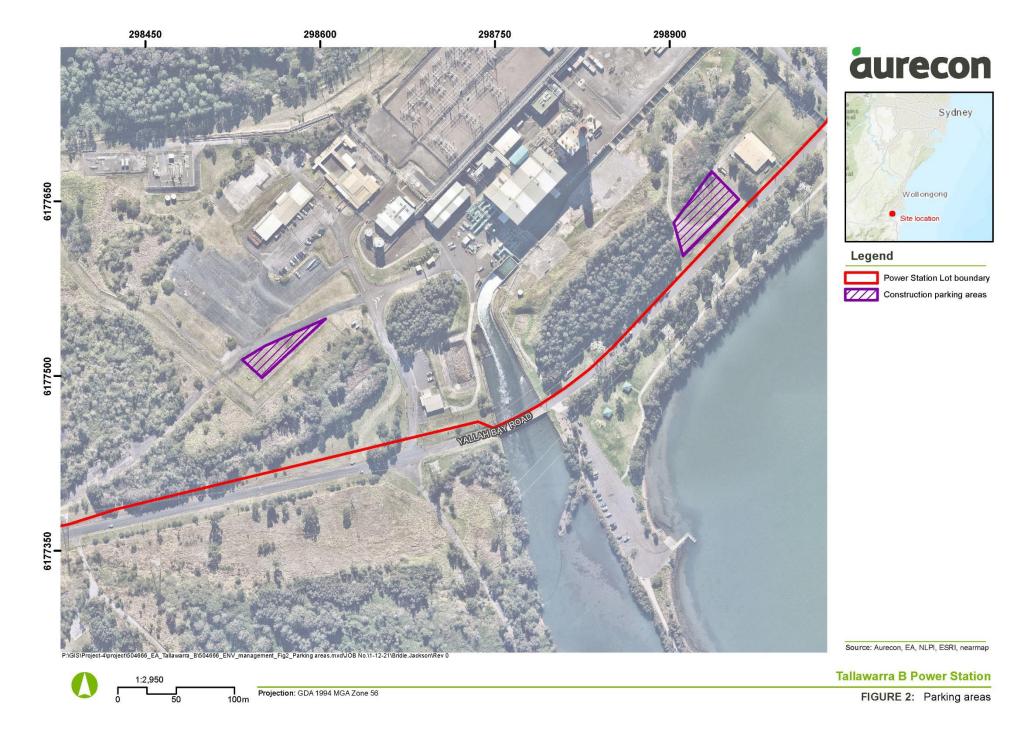
Table 3-1 outlines the main vehicle types that will be used during construction of the Project, and their purpose.

Table 3-1. Vehicle types

Vehicle Type	Purpose
Light vehicles (e.g. cars)	Construction workers, general public and visitors
Heavy vehicles	For equipment and materials transportation
Class 1 Restricted Access Vehicles (OSOM)	Equipment haulage (e.g. the gas turbine, generator, and transformers)
Excavators and backhoes	Excavation for drainage, site levelling and pipeline trenching
Front-end loaders	Removal of excavated material
Graders	Site levelling
Semi-tipper trucks	Equipment haulage, materials and equipment delivery
Scrapers	Excavation and site levelling
Bulldozers	Ground preparation
Rollers	Surface compaction
Water trucks	Dust suppression
Cranes	Assembly of prefabricated building items and positioning of equipment
Cherry picker	Stringing of transmission lines
Compactors	Site compaction for the base of infrastructure items

# 3.1.3 Construction vehicle parking

Construction vehicle parking on the site will be designed to keep interactions between construction traffic, other vehicles (visitors and employees) to a minimum. Construction vehicles will generally use the parking areas identified in Figure 2. However, actual vehicle parking arrangements may be varied on a day to day basis depending on the site activities and stage of construction. The construction ancillary sites may also be used for light vehicle or heavy vehicle parking as required during construction.





### 3.1.4 Light vehicle traffic volume and profile

The existing Tallawarra Stage A power station will be fully operational throughout construction of the Project. Typical light vehicle traffic associated with the Tallawarra Stage A power station includes approximately:

25 light vehicles per day, for a total of 50 light vehicle trips (inbound and outbound) per day

The existing traffic profile for the Tallawarra A operational traffic is generally evenly spread over day and night movements, seven days per week. As the power station operation is intermittent, some variation in the operational traffic profile are common.

In addition to the Tallawarra A power station operational traffic, construction of the Project will generate (approximately) an additional:

200 light vehicles per day, for a total of 400 light vehicle trips (inbound and outbound) per day

Most of these construction traffic movements will occur during standard construction working hours.

Most of the Project construction personnel will commute from the local region to the Project site.

Actual Project traffic volumes and traffic profile will vary on a day to day basis depending on the site activities and stage of construction underway.

#### 3.1.5 Heavy vehicles

#### Heavy vehicle volume and profile

The existing Tallawarra Stage A power station will be fully operational throughout construction of the Project. Typical heavy vehicle traffic associated with the Tallawarra Stage A power station includes approximately:

• 6 heavy vehicles per day, for a total of 12 heavy vehicle trips (inbound and outbound) per day.

The existing traffic profile for the Tallawarra A operational traffic is generally evenly spread over day and night movements, seven days per week. As the power station operation is intermittent, some variation in the operational traffic profile are common.

In addition to the Tallawarra A power station operational traffic, construction of the Project will generate approximately:

50 heavy vehicle per day for a total of 100 heavy vehicle trips (inbound and outbound) per day.

Actual Tallawarra A heavy vehicle traffic volumes varies day to day and Tallawarra B Project heavy vehicle volumes and profile will vary on a day to day basis depending on the site activities and stage of construction. In general, heavy vehicle traffic will be peak during the initial site establishment and set up stage of the project while equipment is being delivered. Throughout construction and into commissioning, deliveries to the project site will continue at a reduced volume compared to the initial peak.

#### Heavy vehicle route

Most of the heavy vehicle traffic is likely to commence from Port Botany as inbound container cargo deliveries to the Project site. The typical transport route from Port Botany to the Project site will be:

- Port Botany (origin)
- 7.5km Botany Road and Foreshore Road to General Homes Drive / M1, Mascot
- 33km A1 to M1, Waterfall
- 50km M1 to Fowlers Road, Dapto
- 5km Fowlers Road to Princes Highway, Yallah
- Yallah Bay Road, Yallah (Project site, destination).

Further detail on heavy vehicle route planning is provided in Appendix B.

#### Heavy vehicle restrictions

Heavy vehicle loads are determined by overall dimensions and mass (weight). For containerised loads to site from Port Botany, heavy vehicles will not exceed:

- 19.0M in overall length including the conveying vehicle (prime mover inclusive)
- 2.5M in overall width
- 5.0M in overall height including the trailing equipment (trailer)
- 42.5 Tonne inclusive of the conveying vehicle, trailing equipment and combined cargo (this represents a 'Divisible Consolidation').

Any containerised packages exceeding the above, will be unpacked at Port Botany and transported as an indivisible load to the Project site.

#### Heavy vehicle delivery timing

Heavy vehicle traffic movements will be timed to arrive and unload at the Project site during standard construction working hours.

#### 3.1.6 Over size over mass vehicles

Over size over mass (OSOM) vehicles are heavy vehicles that carry, or are specially designed to carry, a large indivisible item. OSOM vehicles are defined as Class 1 vehicles under the Heavy Vehicle National Law. A vehicle or vehicle combination is considered to be OSOM if it exceeds any general access mass or dimension limits.

#### **OSOM** movements

OSOM equipment and materials will be needed for the construction of the Project. Three OSOM loads will be transported to the Project site from Port Kembla, for the gas turbine, generator and main transformer.

#### OSOM size and weight

The expected total weight and size of the OSOM cargo is outlined in Table 4. Full details on the size and weight of these loads and how these loads will be carried is provided in Appendix B.

Table 3-2. OSOM cargo details

Title	Dimensions (m)				
	L	W	Н	Weight (t)	Quantity (Pcs)
Turbine	10.83	4.95	5.05	372	1
Generator	12.85	4.16	4.45	365	1
Transformer	11	3.5	4.2	250	1

#### **OSOM** route

The OSOM traffic route will generally follow the route described and assessed in detail by Lampson (2021) as detailed in Appendix B. An overview map of this route from Port Kembla to the Project site is provided in Figure 4. The route generally traverses the following roads:

- Port Kembla (origin)
- Springhill Road
- Five Islands Road
- Princes Motorway
- Princes Highway
- Yallah Bay Road (destination).

This OSOM route will need to address constraints including bridge crossings, overhead electricity lines – including high voltage lines spanning the road, overhead signage, overhead bridges, and the Tallawarra Power Station entry gate. These constraints and the route to be used have been considered in detail in Appendix B and will be addressed by the OSOM permitting process.



Figure 4: OSOM route (Lampson, 2021)

#### **OSOM** timing and timing restrictions

The timing for specific OSOM leads will be subject to detailed planning and will be confirmed with stakeholders as part of the OSOM permitting process (refer to Section 3.3.1).

OSOM traffic movements will generally be conducted outside of peak traffic hours on the local network in accordance with advice from Transport for NSW during consultation (refer to Appendix A). For this purpose, peak hours means Monday to Friday (except on a state-wide public holiday) between the hours of 7:00am and 9:00am and between 4:00pm and 6:00pm. The out of hours work protocol provided in the NAQMP must be followed for project work outside of standard working hours.

OSOM loads wider than 2.5 metres or longer than 22 metres will not travel in a Clearway or Transit Lane in the NSW Urban Zone between Monday and Friday (except on a state-wide public holiday) between the hours of 6:00 am and 10:00 am and between the hours of 3:00 pm and 7:00 pm on a day when a clearway or transit lane restriction applies.

# 3.2 Potential impacts

#### 3.2.1 Project GeoPortal and sensitive area maps

The Project's environmentally sensitive areas are identified and visually displayed in the project <u>GeoPortal</u>. The GeoPortal is a web-based geospatial mapping tool that digitally identifies site environmentally sensitive areas and key project features and ancillary facilities.

Works should consider avoidance, management and/or mitigation of these environmentally sensitive areas.

Further information is available in Section 6.4 of the CEMP.

Specific information available in the Project GeoPortal relevant to the TMP include:

- Aerial imagery
- Road mapping data
- Designated project parking areas
- Construction areas.

#### 3.2.2 Public road user disruption

Pedestrian and public access to public areas adjacent to the site around foreshore areas is permitted through Yallah Bay Road. Most of the public access to the area is based around lakeside recreation. Public carparks are provided south of Yallah Bay Road adjoining the lake. Yallah Bay Road is a not a through-road and the recreation areas it connects to have little public amenities provided. As such, pedestrian and public vehicle movements are generally low in volume.

The impacts on local public traffic as a result of the Project will be minimal, localised, and short-term. The potential for Project traffic to impact public road users in the vicinity of the Project site is very low risk.

During the project some measures may be put in place to manage the movement of pedestrians and public access for safety. The closure of Yallah Bay Road after the public boat ramp and barricading/fencing of the roadsides may be warranted during construction, and the appropriate plans will be submitted to Wollongong City Council to acquire any relevant permits (i.e. Section 138 approval under the *Roads Act 1993*).

As identified in Section 5 Project warning signs for the general public and employees will be provided and maintained.

# 3.2.3 Road dilapidation

Damage of the Wollongong City Council controlled Yallah Bay Road is a potential impact from the project due to the increased traffic volumes associated with construction, and as a result of heavy vehicle, including OSOM vehicle usage.

## 3.2.4 Yallah Bay Road bridge loading limits

Adjacent to the Project site, two bridges are located on Yallah Bay Road. The bridge loading capacity is currently being investigated. EnergyAustralia will ensure that no loads over the specified bridge loading use the bridges. Any loads over the bridge loading limits will be transported through the Tallawarra Power Station site, avoiding the need to cross the Yallah Bay Road bridges.

#### 3.2.5 Internal Tallawarra A Power Station roads

Existing internal Tallawarra Power Station roads and accesses will be utilised during construction of the project. Construction traffic will be confined to maintained tracks and roads.

In accordance with CoA 3.34, existing crossings over Yallah Creek, Yallah Gully and the power station canal will be utilised and no temporary watercourse crossings will be constructed for heavy vehicles and machinery.

#### 3.2.6 OSOM measures to minimise impacts

Due to the changing nature of the road environment, increasing traffic levels and increasing demand for OSOM movements there is need to closely manage the risk and journey disruptions caused by OSOM movements. To provide the necessary increased management of 'High Risk' OSOM movements, the NSW government requires development of OSOM Transport Management Plans (TMP).

An OSOM TMP is a comprehensive document that describes how an OSOM movement will be safely undertaken in NSW. This document is structured to enable the recording of plans, procedures and other operational activities that will be required to safely transport an OSOM movement in NSW. An OSOM TMP provides a comprehensive planning and execution focus for 'High Risk' OSOM movements to ensure that these movements are carried out in a safe and responsible manner with reduced impact on other road users and road infrastructure.

An OSOM TMP must be prepared as part of the process to obtain an OSOM permit (refer to Section 3.3.1) and is a specific requirement of Transport for NSW as identified in consultation for this plan (refer to Appendix A). The OSOM TMP will be prepared consistent with the Principal Contractor OSOM Transport Management Strategy (Appendix B) which also provides additional details on OSOM movements and TMP requirements.

### 3.2.7 Speed limits

Current speed limits employed at the Project site are 80km/hr along Yallah Bay Road, up to 10km/hr on internal and service roads and up to 40km/hr on internal roads in the broader Tallawarra Lands area.

Speed limits during construction may be adjusted in response to construction works going on, in accordance with state and federal legislation, Traffic control at work sites Technical Manual (TCaWS Manual, RMS 2020), NSW Speed Zoning Guidelines, and Australian Standards. All construction personnel must comply with Project speed limits and the Construction Vehicle Code of Conduct (refer to Section 3.2.8).

#### 3.2.8 Construction vehicle code of conduct

A Construction Vehicle Code of Conduct is designed to set minimum standards for driver behaviour to minimise impacts on other road users, land uses or the environment along haulage routes. The Principal Contractor has selected Lampson for undertaking the heavy haulage including the OSOM haulage for the project. The Lampson vehicle Drivers Manual (Appendix C) contains the measures necessary to comply with CoA 7.3.b(vi).

All construction personnel and construction vehicle operators must comply with the code. Evidence will be obtained and kept on record by the Contractor to confirm that the Code of Conduct has been read, understood and signed by all involved in the construction works as part of training and competency.

Other contractors may use their own construction vehicle code of conduct, provided EnergyAustralia has reviewed and approved the code as compliant with CoA 7.3.b(vi) prior to commencement of construction vehicle movements.

#### 3.2.9 Noise and dust

A Road Traffic Noise Assessment is included in the Noise and Vibration Impact Assessment that was prepared for the Project to support MOD 2 (Benbow Environmental, 2020). The impact of road noise was predicted to comply with the Road Noise Policy (RNP). Management and mitigation measures related to construction traffic noise impacts are detailed in the Noise and Air Quality Management Sub-Plan (NAQMP).

Traffic and transport movements can contribute to dust generation, particularly on unsealed roads. The EA (SKM, 2009) assessed construction dust generation to potentially occur during construction and in particular

during windy conditions. Measures to minimise dust generation have been included in the Noise and Air Quality Management Sub-Plan (NAQMP).

# 3.3 Hold points

Hold points relevant to the TMP are associated with OSOM permitting, road occupancy licences, traffic control plans and dilapidation reporting.

#### 3.3.1 OSOM permitting

All heavy vehicles seeking a permit for travel within NSW permit applications must be submitted to the National Heavy Vehicle Regulator (NHVR) via the <a href="NHVR Portal">NHVR Portal</a>. TfNSW and local Councils cannot issue permits directly to operators.

A detailed analysis of OSOM routes and associated permit issues is provided in Appendix B.

No OSOM movements are to be undertaken without a current OSOM permit in place.

#### 3.3.2 Road Occupancy License (ROL) and Section 138

A Road Occupancy Licence (ROL) is required before commencing work within a classified road reserve or commencing work within 100m of traffic signals. The contractor will obtain any necessary ROLs by submitting applications at least 10 business days prior to commencing work. No works are currently proposed that are expected to require a ROL.

If an ROL is required for any aspect of the project it will be obtained by lodging applications through ServiceNSW's Online PLanned INCident System (OPLINC). The process to obtain a ROL is as follows:

- Consult the ROL Manual, at: Road Occupancy Manual (nsw.gov.au)
- Apply for an ROL, at: <u>Apply for a Road Occupancy Licence | Service NSW</u>
- If the business is already registered, contact the Road Occupancy Unit:
  - Phone 8396 1513 from 8.30am to 4.30pm Monday to Friday; or
  - Email TMC PIU@tmc.transport.nsw.gov.au.
- If the business is not registered, register at oplinc (myrta.com).

Approval for road reserve works on Council owned assets is granted by Council under Section 138 of the Roads Act. A Section 138 application to Wollongong City Council is required for undertaking any work on public roads, footpaths, or land between a road and private property. These areas are known as the road reserve. Possible project works that may require a Section 138 applications could include:

- Stringing transmission line conductors over Yallah Bay Road.
- Installation of temporary gates across Yallah Bay Road
- Installation of temporary roadside barriers or fencing on Yallah Bay Road

Any Section 138 applications must be undertaken in accordance with Wollongong City Council guidelines available from <a href="https://www.wollongong.nsw.gov.au/development/construction-and-works/works-on-roads-and-footpaths">https://www.wollongong.nsw.gov.au/development/construction-and-works/works-on-roads-and-footpaths</a>.

#### 3.3.3 Traffic Control Plans and traffic control

Traffic Control Plans (TCPs) are designed to implement the specific traffic and transport controls identified in the CEMP, OSOM TMPs, and any other relevant documents or plans. TCP's will be required for the Project as part of any application for a Road Occupancy Licence (ROL) or Section 138 applications (refer to Section 3.3.2).

It is not anticipated that specific traffic control will be needed along any transport routes, except as may be required by OSOM permits (refer to Section 3.3.1) or in accordance with Road Occupancy Licences or Section 138 applications (refer to Section 3.3.2).

### 3.3.4 Road dilapidation

In accordance with Condition of Approval 3.57, upon determining the haulage route(s) for construction vehicles associated with the Project, the Contractor will commission an independent, qualified person or team to undertake a Road Dilapidation Report for Yallah Bay Road. The Road Dilapidation Report will assess the current condition of Yallah Bay Road and describe mechanisms that will be undertaken to restore any damage that may result from traffic and transport associated with construction of the Project.

Prior to the commencement of haulage the dilapidation report will be provided for review by Wollongong City Council.

EnergyAustralia will ensure that any measures to restore or reinstate roads affected by the project are undertaken in a timely manner, in accordance with the requirements of and to the satisfaction of the relevant road authority, and at the full expense of the Proponent (or contracted party). In the event of a dispute between the parties (i.e. Wollongong City Council and the Proponent) with respect to the extent of restorative work that may be required under this condition, any party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute will be final and binding on the parties. Any dispute between the Contractor and the Proponent in relation to restorative work will be dealt with in accordance with the relevant EPC contract.

# 4 Roles and responsibilities

Project personnel roles and responsibilities are described in the CEMP. Responsibilities for the implementation of specific environmental mitigation measures are indicated in Section 5.

# 5 Environmental safeguards and management measures

The Project environmental safeguards and management measures are consolidated in Table 5-1.

# 5.1 Conditions of approval

The conditions of approval specifically relating to this TMP are provided in **Error! Reference source not f ound.** along with the responsibility for compliance. Where these conditions translate into an environmental safeguard or management measure, they are included in Table 5-1.

# 5.2 Statement of commitments

The Environmental Assessment Statement of Commitments (EA, 2009) provides the mitigation measures and safeguards that have been developed to manage potential environmental impacts associated with the Project. The Environmental Assessment Statement of Commitments specifically applicable to this TMP are addressed in Table 5-1.

The Environmental Assessment Statement of Commitments includes a requirement that "Tallawarra A project traffic and transport mitigation measures and safeguards will be reinstated for the construction of the Tallawarra Stage B power station." To comply with this requirement Table 5 includes the Tallawarra A project traffic and transport mitigation measures and safeguards.

The Submissions Report Statement of Commitments (EA, 2010) modified and augmented several of the Environmental Assessment Statement of Commitments. None of the Submissions Report Statement of Commitments relate to the management of potential traffic impacts.

# 5.3 Commitments made in Project modifications

No commitments relevant to the management of potential traffic impacts have been made in Modification 1, Modification 2, submissions reports associated with these modifications, or technical specialist studies that prepared to support the modification applications.

# 5.4 Environmental protection licence

No licence conditions relevant to the management of potential traffic impacts are required by the environmental protection licence (EPL).

Table 5-1. Environmental safeguards and management measures for traffic impacts

ID	Objective	Action	Timing	Responsibility	Evidence	Reference	
1.	To minimise the impact of construction traffic on surrounding road	A traffic management plan will be developed as part of the CEMP.	Preconstruction	<ul><li>HSSE Lead</li><li>Contractor</li></ul>	■ This plan	Statement of Commitments (SKM, 2009)	
	network	All construction personnel will be trained on the Construction Vehicle Code of Conduct (TMP Appendix C). Evidence that the Code of Conduct has been read, understood and signed by all involved in the construction works will be kept on record.	Construction	<ul><li>Contractor</li></ul>	<ul><li>Training records</li></ul>	<ul><li>Condition of approval</li></ul>	
		Areas identified in Figure 2 and Figure 3 of the TMP will be used for light vehicle or heavy vehicle parking as required during construction. Access to these areas will be designed to minimise the interaction between construction vehicles and other vehicles. Parking of construction vehicles outside of the Lot boundary along Yallah Bay Road is not permitted.	Construction	<ul><li>Contractor</li></ul>	<ul><li>Inspections</li><li>Audits</li></ul>	Modified Statement of Commitment (EnergyAustralia 2009)	
		Consultation with the relevant roads authority will be undertaken before the commencement of works that may affect public roads or traffic. This includes the necessary approvals and conditions required by TfNSW for Over Size Over Mass vehicles.	Preconstruction Construction	<ul><li>Contractor</li></ul>	<ul><li>Appendix A</li><li>OSOM permits</li></ul>	<ul><li>Statement of Commitments (SKM, 2009)</li><li>EA (2009) 8.10.2</li></ul>	
		Traffic and transport mitigation measures and safeguards implemented for the construction of the Tallawarra Stage A plant will be reinstated for the construction of the Project.	Preconstruction Construction	<ul><li>Contractor</li></ul>	■ This plan	Statement of Commitments (SKM, 2009)	
			OSOM movements will be scheduled to depart Port Kembla in the early morning or late at night to avoid peak travel times on public roads.	Preconstruction Construction	<ul><li>Contractor</li></ul>	<ul><li>OSOM permits</li><li>OOHW protocol</li></ul>	TfNSW     consultation     requirement
		Provide Transport for NSW and EPA with an OSOM movement schedule, updated weekly, from the commencement of construction until all OSOM movements are completed	Construction	<ul><li>Contractor</li></ul>	<ul><li>Weekly movement schedule and construction program</li><li>Audit</li></ul>	TfNSW consultation requirement	

ID	Objective	Action	Timing	Responsibility	Evidence	Reference
2.	To ensure public and pedestrian safety	Warning signs associated with the Project for the general public and employees will be re-installed / retained	Preconstruction	<ul><li>HSSE Lead</li><li>Contractor</li></ul>	<ul><li>Audits</li></ul>	<ul><li>EA (2009) 7.10.1</li><li>Tallawarra Stage A measure</li></ul>
		Section 138 Approval under Roads Act 1993 will be acquired from Wollongong City Council to allow for installation of roadside barricading, fencing and installation of temporary gates on Yallah Bay Road	Construction	<ul><li>Contractor</li></ul>	<ul><li>Section 138 Approval</li></ul>	Condition of Approval 1.7
3.	To avoid or mitigate potential water, noise and dust pollution associated with Project traffic	Truckloads that have the potential to create a dust nuisance will, if required, be either covered or dampened prior to traversing public roads	Construction	■ Contractor	<ul><li>EWMS</li><li>Daily visual dust inspections</li></ul>	<ul> <li>EA (2009)</li> <li>Tallawarra     Stage A     measure</li> <li>Benbow     Environmental     (2020)</li> <li>NAQMP</li> </ul>
		All transport vehicles to have proper noise attenuation and maintained in good order	Preconstruction Construction	<ul><li>Contractor</li></ul>	<ul><li>EWMS</li><li>Maintenance records</li><li>Monitoring records</li><li>Complaints</li></ul>	<ul><li>EA (2009)</li><li>Tallawarra Stage A measure</li><li>NAQMP</li></ul>
		Review transport routes and times to minimise noise impact on residents and disruption to general traffic.	Preconstruction	Contractor	<ul> <li>This plan</li> <li>OSOM permits</li> <li>EWMS</li> <li>Audits</li> <li>Complaints</li> </ul>	<ul> <li>EA (2009)</li> <li>Tallawarra Stage A measure</li> <li>NAQMP (Appendix B OOHW Protocol)</li> </ul>

ID	Objective	Action	Timing	Responsibility	Evidence	Reference
		Existing crossings over Yallah Creek will be utilised and no temporary watercourse crossings will be constructed for heavy vehicles and machinery.	Construction	<ul><li>Contractor</li></ul>	<ul><li>Section 3.2.5</li><li>Audits</li></ul>	Condition of approval
4.	To monitor and maintain public roads	Notify Transport for NSW of planned over-dimension and over-weight vehicle movements and obtain conditions	Preconstruction Construction	<ul><li>Contractor</li></ul>	<ul><li>Appendix A</li><li>OSOM permits</li></ul>	<ul><li>EA (2009)</li><li>Tallawarra Stage A measure</li></ul>
		Develop and implement a Construction Vehicle Code of Conduct to set driver behaviour controls and minimise impacts on land uses along haulage routes.	Preconstruction	<ul><li>Contractor</li></ul>	<ul><li>Section 3.2.8</li><li>Appendix C</li></ul>	Condition of approval
		Prevent spillage of materials on public roads and clean up any spilt material.	Construction	Contractor	<ul> <li>Construction         Vehicle         Code of         Conduct         (Section         3.2.8 and         Appendix C)</li> <li>Incident         management         (Section 7.5)</li> </ul>	<ul><li>EA (2009)</li><li>Tallawarra Stage A measure</li></ul>
		Regular (monthly) visual inspections of Yallah Bay Road surface condition will be undertaken to assess road condition against the dilapidation report.	Preconstruction Construction	<ul><li>Contractor</li></ul>	<ul><li>Dilapidation report</li><li>Monitoring reports (section 6)</li></ul>	<ul><li>EA (2009) 7.10.2</li><li>Tallawarra Stage A measure</li></ul>
		Upon determining the haulage route(s) for construction vehicles associated with the project, the Proponent shall commission an independent, qualified person or team to undertake a Road Dilapidation Report for Yallah Bay Road. The report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the project. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.	Preconstruction	<ul><li>Contractor</li><li>Project</li><li>Director</li></ul>	<ul> <li>Dilapidation report</li> <li>Wollongong City Council consultation records</li> </ul>	Condition of Approval 5.7

ID	Objective	Action		Responsibility	Evidence	Reference
		The Proponent shall ensure that any measures to restore or reinstate roads affected by the project are undertaken in a timely manner, in accordance with the requirements of and to the satisfaction of the relevant road authority, and at the full expense of the Proponent. In the event of a dispute between the parties with respect to the extent of restorative work that may be required under this condition, any party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.	Construction	<ul><li>Contractor</li><li>Project</li><li>Director</li></ul>	<ul> <li>Dilapidation report</li> <li>Wollongong City Council consultation or inspection records</li> </ul>	Condition of Approval 5.7
		Determine Yallah Bay Road bridge weight loading limits and limit the use of bridges by construction vehicles, plant and equipment to comply with bridge load limits.	Preconstruction Construction	<ul><li>Project Director</li></ul>	<ul><li>Dilapidation report</li></ul>	<ul> <li>Wollongong City Council consultation requirement</li> </ul>
5.	To minimise impact of construction traffic to other road users	Provide adequate off-road parking for construction workforce.	Preconstruction	Project Director	Section 3.1.6	<ul><li>EA (2009)</li><li>Tallawarra Stage A measure</li></ul>
		Traffic will be confined to maintained tracks and roads.	Construction	<ul><li>HSSE Lead</li><li>Contractor</li></ul>	<ul><li>Section 3.1.5</li><li>EWMS</li></ul>	<ul><li>EA (2009)</li><li>Tallawarra Stage A measure</li></ul>
6.	Compliance and Monitoring	Complaints will be investigated promptly, and appropriate action initiated to reduce impact as per guidelines in the CEMP.	Construction	<ul><li>HSSE Lead</li><li>Contractor</li></ul>	<ul><li>CEMP</li><li>Audits</li><li>Complaints Register</li></ul>	<ul><li>EA (2009)</li><li>Tallawarra Stage A measure</li></ul>
		Regular internal and external inspections	Construction	<ul><li>HSSE Lead</li><li>Contractor</li></ul>	<ul><li>Inspection Reports (section 6)</li><li>ER reports</li><li>External reports</li></ul>	<ul><li>EA (2009)</li><li>Tallawarra Stage A measure</li></ul>

# 6 Monitoring

Monitoring, measurement, analysis and evaluation for the project is detailed and maintained as part of the EMS, Section 7.5. Specific monitoring requirements that apply to this TMP are provide in Table 6-1.

Table 6-1. TMP monitoring requirements

Туре	Purpose	Frequency	Responsibility
Public road dilapidation	To check that the Project does not cause damage to Yallah Bay Road, in accordance with the Road Dilapidation Report prepared under CoA 3.57.	Monthly (visual)	Construction Manager Contractor

Regular inspections are a requirement of the CEMP (Section 12). Regular inspections are to include consideration of:

- Construction parking and internal access requirements
- Appropriate covers for loads entering and leaving the site
- Dust and noise generation from construction vehicles
- Maintenance of pedestrian controls
- General road safety
- Weight of heavy vehicle loads
- Construction Vehicle Code of Conduct training and associated record keeping.

# 7 Compliance management

#### 7.1 Communication

Communication shall be undertaken as outlined in the EMS Section 6.

For OSOM movements Transport for NSW has requested a weekly movement schedule be provided via email to interested parties along with a construction program. A safeguard has been included in Table 5-1 to provide for this communication.

### 7.2 Consultation

Consultation requirements with agencies or Public Authorities where relevant to the TMP are identified in Table 7-1. Appendix A contains a detailed agency consultation log.

Table 7-1. TMP agency consultation

Agency	Purpose of consultation	Main issues raised and addressed
Transport for NSW	<ul> <li>To comply with condition of approval 7.3 (b)</li> <li>If any road occupancy licences are required</li> <li>In planning for and implementing OSOM movements</li> <li>Following preparation of the road dilapidation report</li> </ul>	OSOM management
Wollongong City Council	<ul> <li>To comply with condition of approval 7.3 (b)</li> <li>In planning for and implementing OSOM movements</li> <li>Dilapidation of Yallah Bay Road</li> <li>Local road and public open space</li> </ul>	<ul> <li>Main issues raised at interactive presentation:</li> <li>Public access to foreshore</li> <li>Road and bridge dilapidation management</li> <li>Note, formal written comments have not been received.</li> </ul>
NSW Police	<ul> <li>To comply with condition of approval 7.3 (b)</li> <li>In planning for and implementing OSOM movements</li> </ul>	OSOM management

# 7.3 Training and competency

All project personnel are required to undergo site induction training which incorporates TMP measures in accordance with Section 9 of the CEMP.

# 7.4 Auditing and reporting

Regular audits are to be completed in accordance with Section 12 of the CEMP. Audits will assess TMP compliance, to identify any issues of noncompliance, and to confirm licence and approval conditions are being met. Audits shall also consider how following targets that apply to this TMP are being addressed:

- Adherence to relevant legislation, statutory requirements, permit and/or licenses
- No accidents stemming from unsafe actions or traffic management
- No complaints received in relation to traffic management practices, including no complaints from other road users, residents, or the public regarding traffic disruptions and traffic flow.

EnergyAustralia has engaged an approved independent auditor to undertake independent audits in accordance with the *Independent Audit Post Approval Requirements* (DPIE, 2020). Further information on the independent auditing schedule and requirements is found in the EMS Section 7.2.2.

Environmental reporting for traffic management and compliance will be undertaken to track and record environmental management and compliance for the life of the project. Reporting on audit outcomes is to be undertaken in accordance with Section 13 in the CEMP. Additional reference is made to Table 13.1 of the CEMP which details specific reporting requirements that are relevant to this plan.

# 7.5 Incident management and corrective actions

The management, investigation, reporting and notification process for environmental incidents is to be undertaken in accordance with:

- GECL Emergency Response Plan for Tallawarra B (where related to the construction of the project)
- EnergyAustralia TQMS12-HSE-L001 Emergency Response Plan (where related to the broader project site or Tallawarra A operations)
- Conditions of Approval incident reporting requirements
- EPL 555 requirements.

The EnergyAustralia **TQMS12-HSE-L001 - Emergency Response Plan** applies to the broader project site and incidents that may occur in relation to Tallawarra A operations, and the surrounding Tallawarra Lands. If there is any doubt as to which Emergency Response Plan applies during an incident, the EnergyAustralia **TQMS12-HSE-L001 - Emergency Response Plan** will apply.

If the incident involves pollution or the threat of pollution, the EnergyAustralia **TQMS12-HSE-L001-A02 - Pollution Incident Response Management Plan** (PIRMP) must be followed. This plan is a component of the EnergyAustralia Emergency Response Plan.

Environmental incident notification and reporting would ensure that all environmental incidents and non-compliances must be immediately reported to the HSSE Lead and Construction Manager. Verbal notification must occur immediately on becoming aware of the incident or non-compliance. EnergyAustralia will notify NSW EPA immediately of all pollution incidents that cause or threaten material harm to the environment. EnergyAustralia will also notify the ER of any environmental incident immediately or within 24 hours of becoming aware of the incident.

EnergyAustralia will notify the Secretary in writing via the Major Projects website immediately after it becomes aware of an environmental incident following the requirements of CoA 5.1 and Appendix 1 of the major project approval. The major project approval Appendix 1 incident reporting requirements are replicated in Appendix D of this TMP.

For full details of incident management requirements, refer to Section 10 of the CEMP.

#### 7.6 Review

This plan will be subject to continuous review throughout the construction and pre-operational stage of the Project, aimed at identifying areas for improvement. Review will be carried out in accordance with procedures described in the Section 14 of the CEMP.

This plan will be subject to continuous review throughout the construction stage of the Project, aimed at identifying areas for improvement.

Specific review of this plan is required to comply with Condition of Approval 7.7. This condition requires that within 3 months, unless the Secretary agrees otherwise, of:

- a) the submission of an incident report under condition 5.1 of this approval;
- b) the submission of an Independent Environmental Audit report under condition 5.11 of this approval;

- c) the approval of any modification to the conditions of this approval; or
- d) a direction from the Secretary under condition 1.3 of this approval;

EnergyAustralia must review and, if necessary, revise the studies, strategies or plans required under the conditions of approval to the satisfaction of the Secretary.

Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted to the Secretary for approval, unless otherwise agreed with the Secretary.

In accordance with project condition of approval 7.8, to ensure the studies, strategies and plans for the project are updated on a regular basis and incorporate any required measures to improve the environmental performance of the project, EnergyAustralia may submit revised studies, strategies or plans required for the project under the conditions of approval at any time.

With the agreement of the Secretary, EnergyAustralia may also submit any study, strategy or plan required under the conditions of this approval on a staged basis. The Secretary may approve a revised strategy or plan required under the conditions of approval, or the stage submission of these documents, at any time.

With the approval of the Secretary, EnergyAustralia may prepare the revised or staged strategy or plan without undertaking consultation with all parties nominated under the applicable condition in this approval.

# 8 References

Aurecon. (2021). *Tallawarra Stage B Gas Turbine Power Station: Environmental Management Strategy*. Report prepared for EnergyAustralia Tallawarra Pty Ltd. Sydney: Aurecon Australasia.

Aurecon. (2021). *Tallawarra Stage B Gas Turbine Power Station: Construction Environment Management Plan.* Report prepared for EnergyAustralia Tallawarra Pty Ltd. Sydney: Aurecon Australasia.

Aurecon. (2021). *Tallawarra Stage B Gas Turbine Power Station: Noise and Air Quality subplan*. Report prepared for EnergyAustralia Tallawarra Pty Ltd. Sydney: Aurecon Australasia.

Aurecon. (2020). *Tallawarra Stage B Gas Turbine Power Station: Modification 2 Environmental Assessment.* Report prepared for EnergyAustralia. Sydney: EnergyAustralia.

Benbow Environmental. (2020). *Noise* and Vibration Impact Assessment for Tallawarra-B Power Station Modification. Report prepared for EnergyAustralia, Sydney.

Energy Australia (n.d.). *Tallawarra Stage B OCGT Project: Project Execution Plan*. Retrieved from <u>20210123</u> - <u>Tallawarra B-PEP-CP3\_v4.1(final).docx (sharepoint.com)</u>.

EnergyAustralia (2009). *Tallawarra Stage B Gas Turbine Power Station: Environmental Assessment*. Report prepared for TRUenergy.Sydney: Sinclair Knight Merz.

EnergyAustralia. (2010). *Tallawarra Stage B Gas Turbine Power Station: Submissions Report*. Report prepared for TRUenergy.Sydney: Sinclair Knight Merz.

Lampson (2021). OSOM Route Survey Report, From Port Kembla NSW to Tallawarra Power Station NSW, 2746-RS-01.

Minister for Planning. (2020, December 7). *State Significant Infrastructure: Tallawarra B (MOD2) - Consolidated Project Approval.* Retrieved from Department of Planning, Industry and Environment: <a href="https://www.planningportal.nsw.gov.au/major-projects/project/16696">https://www.planningportal.nsw.gov.au/major-projects/project/16696</a>

SKM. (2007). *Tallawarra Stage B Gas Turbine Power Station: Preliminary Environmental Assessment*. Report prepared for TRUenergy.Sydney: Sinclair Knight Merz.

TfNSW (2020). Traffic control at work sites Technical Manual (TCaWS Manual), Version 6.0, Roads and Maritime Services, accessed at <a href="https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/documents/technical-manuals/traffic-control-at-worksites-manual-v6.pdf">https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/documents/technical-manuals/traffic-control-at-worksites-manual-v6.pdf</a>

TfNSW (2021). NSW OSOM Load Carrying Network. Retrieved from: NSW Oversize Overmass Load Carrying Vehicles Network Map < Heavy vehicles > Transport for NSW

# Appendix A: Agency consultation log

Consultation undertaken for this TMP is summarised below.

Agency	Date	Method	Actions and responses
Transport for NSW	03-09-2021	Email and phone call	Emails sent to Transport for NSW seeking consultation contacts
			<ul> <li>Phone call from James Grima, Network Interface Coordinator – South, Customer &amp; Network Coordination South, Customer Coordination &amp; Service Delivery   Regional &amp; Outer Metropolitan indicating he was the appropriate contact for consultation on this project</li> </ul>
			Discussed the project details
			TfNSW pleased to be consulted
			TfNSW indicated OSOM is the main issue likely to be of interest
			TfNSW requested draft TMP by email to review and comment
Transport for NSW	03-09-2021	Email	Draft TMP provided to James Grima, TfNSW by Aurecon via email
Transport for NSW	09-09-2021	Phone call and email	Call received from James Grima, TfNSW requesting a copy of the project conditions of approval.
			Aurecon provided Conditions of approval by email in response to the request.
Transport for NSW	14-09-2021	Email - written comments received from TfNSW  Comments addressed in TMP.	<ul> <li>Written comments received from James Grima, TfNSW. Consultation comments / issues outlined below:</li> <li>Comment: Further details will need to be provided on the items/components which will require transportation including duration of deliveries along with the dimensions/weight expected of OSOM vehicles. Can there be a commitment to provide a weekly movement schedule via email to interested parties along with a construction program.</li> </ul>
			<ul> <li>Response: The EPC Contractor has developed an OSOM strategy to cover these details and is included in Section 3.1.6, Section 3.2.6, Section 3.3.1 and Appendix B of the TMP.</li> </ul>
			Comment: As these Over Size Over Mass vehicles will significantly impact the state road network and to minimise the impact to traffic and pedestrians it would be recommended to depart the ports early morning/late night. This will ensure that when the OSOM vehicles travelling along the corridor will be outside peak travel times and the impact to the transport network and the customer will be minimal and will also allow for a greater contingency if the vehicle is delayed or any issues arises on the network.  The TRO On the transport of the Vehicle is delayed.
			<ul> <li>Response: The EPC Contractor has been informed of this requirement. The TMP Table 5-1 has been updated with a safeguard to schedule OSOM movements outside of peak times.</li> </ul>

Agency	Date	Method	Actions and responses
			<ul> <li>Comment: Route survey details of the proposed route(s) will need to be provided. Can more detail be provided on the proposed route especially from Port Kembla and is there is an alternate route as some of the components maybe unable to travel under and over bridges in Wollongong/Shellharbour due to the height restrictions and possible weight restrictions on our bridges, further advice will need to be suit from TfNSW bridge teams. Please provided further details on how the intersections will be managed while the OSOM vehicle is traveling along the designated route (further detail required). Route survey details of the proposed route(s).</li> </ul>
			<ul> <li>Response: The EPC Contractor has developed an OSOM strategy to cover these details and is included in Appendix B of the TMP. This information was subsequently provided to TfNSW.</li> </ul>
			• Comment: Rex Andrews will need to provide swept paths from George St, Mayfield East to John Renshaw Drive to ensure OSOM can effectively manage these turns
			<ul> <li>Response: Subsequent discussions and OSOM planning by the EPC Contractor has removed Newcastle Port from being used for the project. It was subsequently confirmed by phone with TfNSW that no further consultation was needed to address this comment.</li> </ul>
			• Comment: Further comments will be sent from Sydney region and Newcastle region as there is a possibility that OSOM movements will need to be transported from either Port Botany or Newcastle Ports.
			Response: Noted.
			• Comment: Below is a link to the Roads-Waterways website which outlines what is required within a TMP along with the process for review. https://roads-waterways.transport.nsw.gov.au/business-industry/heavy-vehicles/road-access/restricted-access-vehicles/oversize-overmass/index.html
			Response: Noted.
			Comment: I have also forwarded the draft TMP onto our OSOM special permits unit for review.
			Response: Noted.
NSW Police	06-09-2021	Email	Email sent to TRAFFICOSOM@police.nsw.gov.au requesting consultation on the draft TMP for the project.  Draft TMP provided and offer made for a presentation, discussion on the project or other details to be provided.
NSW Police	06-09-2021	Email comments	Email comments received from Senior Constable Michael McLoon, NSW OSOM Coordinator, NSW police
			<ul> <li>Comment: Any load on Approved roads 6m wide of &gt; and loads 40m long and &gt; require Police escorting.</li> <li>This is a standard requirement throughout the state.</li> </ul>
			Response: Noted. This will be addressed through any OSOM permits obtained for the project.

Agency	Date	Method	Actions and responses
			<ul> <li>Comment: OSOM loads are not permitted to travel in convey.</li> <li>Response: Noted. This will be addressed through any OSOM permits obtained for the project.</li> <li>Comment: Load being escorted by Company pilots and or Police are to communicate on the 1 radio channel.</li> <li>Response: Noted. This will be addressed through any OSOM permits obtained for the project.</li> <li>Comment: When submitting your permit to the NHVR, If police are required? They are there purely to assist in the free flow of the load through traffic to mitigate as much as possible any negative impact the load movement has on other road stakeholders. Police are not to form part of the load convey nor are they to be depicted as such.</li> <li>Response: Noted.</li> <li>Comment: In addition to my comments, I think it would be prudent to send the TMP through to Wollongong Police for their pursual and comment as well. The OSOM contact for Wollongong is Sergeant Phil Roberts 38906 @police.nsw.gov.au Ph: 4226 7899</li> <li>Response: Request for consultation and comment has been sent to Sergeant Phil Roberts (refer to consultation records in the table below).</li> </ul>
NSW Police	07-09-2021	Email	<ul> <li>Email sent to Sergeant Phil Roberts requesting consultation on the draft TMP for the project in accordance with consultation comments received from Senior Constable Michael McLoon. Draft TMP provided and offer made for a presentation, discussion on the project or other details to be provided.</li> </ul>
NSW Police	07-09-2021	Email	<ul> <li>NSW Police representative Senior Constable David Adams, Wollongong Police District responded to the email to Sergeant Phil Roberts with one comment.</li> <li>Comment: The only question I would have at this stage is the roads used for the loads leaving the Port. If the load is exiting Port Kembla via Tom Thumb Road then it will be Wollongong Responsibility to assist. If you are using the exit on the southern side of the Port it will be the responsibility of Lake Illawarra Police to assist. The minimum time for police required is 3 hours.</li> <li>Response: Noted. This information has been provided to the EPC Contractor for addressing alongside any OSOM permit applications.</li> </ul>
Wollongong City Council	22-07-2020	Consultation meetings and invitation to comment during public exhibition of Mod-2	<ul> <li>Council was invited to respond to EnergyAustralia's Modification 2 when it was placed on public exhibition.</li> <li>Council's formal submission to mod 2 indicated general support for the project and identified no issues that would be relevant to traffic management planning.</li> </ul>

Agency	Date	Method	Actions and responses
Wollongong City Council	30/08/21	Email: introduction of the project	<ul> <li>Purpose of the email was to introduce the project, the proponent and the Condition of Approval requirement of consultation with Council for the traffic, water quality, flooding and the visual impact management plans</li> <li>Aurecon requesting availability of Wollongong City Council for a TEAMs/virtual meeting of the relevant management plans</li> <li>Aurecon requesting confirmation of contacts for consultation</li> </ul>
Wollongong City Council	01/09/21	Email: response to initial project introduction email	<ul> <li>Response from Andrew Heaven from Council confirming a TEAMS/virtual meeting with key stakeholders within Council would be beneficial</li> <li>Meeting proposed for 08/09/21</li> <li>Andrew Heaven requesting an agenda with key items for discussion during the meeting including background regarding the project, timing, constraints, as well as any plans / images</li> </ul>
Wollongong City Council	02/09/21	Email: Aurecon confirmed meeting date	<ul> <li>Response email to email sent on 01/09/21 accepting/confirming proposed meeting day/time</li> <li>Aurecon confirming that agenda and reference materials would be sent to Council prior to meeting</li> </ul>
Wollongong City Council	03/09/21	Email: sent meeting agenda and draft management plans	<ul> <li>Aurecon sent through meeting agenda</li> <li>Attached to the email was the draft Soil and Water Management Plan (SWMP), draft Landscape Plan and the draft Traffic Management Plan (TMP)</li> </ul>
Wollongong City Council	06/09/21	Email: Council confirmation of agenda and management plans received	Confirmation email from Council that meeting agenda and attached management plans have been received
Wollongong City Council	08/09/21	Online/virtual consultation meeting with Wollongong City Council	<ul> <li>MS Team meeting held with the following Council representatives; Andrew Heaven, Nathan Mcbriarty, Rob Gaudiosi, Nur Joy, Nicole Ashton, David Green, David Fitzgibbon, Matthew Carden, John Wood.</li> <li>Aurecon and EnergyAustralia presented the project, discussed key issues and outlines proposed management approaches for aspects of interest to Council.</li> <li>Minutes from the meeting were finalised and included the following comments relevant to the Traffic management Plan:</li> <li>Comment: Council queried EnergyAustralia regarding the use of Council land for a carpark lease.</li> </ul>

Agency	Date	Method	Actions and responses
			<ul> <li>Response: EnergyAustralia responded and resolved the query indicating that the land was Crown Land so no further consultation with Council was required</li> </ul>
			<ul> <li>Comment: Council raised issue that one of the bridges was in poor condition and wasn't to be used for construction traffic. EnergyAustralia responded to the issue by acknowledging that this was a footbridge over the inlet canal and was currently closed. To resolve the issue Council have requested that EnergyAustralia ensure that bridges used for construction traffic can take the load by reviewing the Traffic Management Plan any documentation of proposed bridges for heavy vehicle use.</li> </ul>
			<ul> <li>Response: EnergyAustralia has updated the TMP to include a specific safeguard in Table 5-1 ID 4 to review bridge loadings and to conduct the project so that bridge loadings are not exceeded.</li> </ul>
			<ul> <li>Council requested the next versions of the management plans as well as providing indication of which CoA relates to which part of the TMP to assist in the TMP review process. This has been resolved in the correspondence to Council from the 09/09/21.</li> </ul>
Wollongong City	08/09/21	Email: Nicole Ashton	Email from Nicole Ashton from Wollongong City Council providing preferred contact details
Council		providing direct contact details	Request to identify which condition Aurecon is providing the information for
Wollongong City Council	08/09/21	Email: Aurecon response with indicative timings for management plan submission	<ul> <li>Aurecon responding to Wollongong City Council with confirmation/commitment of re-submitting updated management plans including cross-references to the CoAs within a week</li> </ul>
Wollongong City Council	09/09/21	Email: meeting minutes	Email to Wollongong City Council and other attendees circulating meeting minutes. Meeting minutes attached to email
Wollongong City	09/09/21	Email: re-attached	Draft management plans re-attached to email
Council		management plans and CoA cross-reference	Email contains a CoA table with cross-references to where this is addressed in the Plan
			Attached to the email was a full copy of the current CoAs for the project
Wollongong City Council	20/09/21	Email: follow up on written comments	<ul> <li>Follow up email sent to Council acknowledging key issues raised in the consultation meeting.</li> <li>Request for expected timing on written comments given no written comments have been received to date.</li> </ul>

# Appendix B: Principal Contractor OSOM Transport Management Strategy





### **ROUTE SURVEY**

# ON BEHALF OF **CLOUGH**

FOR THE TRANSPORTATION OF TURBINE, GENERATOR AND TRANSFORMER

FROM PORT KEMBLA, NSW

TO
TALLAWARRA POWER STATION, NSW

## FOR TALLAWARRA B PROJECT

LAMPSON (AUSTRALIA) PTY LTD LOT 3 AWABA RD, TORONTO NSW 2283

Telephone No.: (02) 4941 0400 Facsimile No.: (02) 4950 4645

DOCUMENT №: 2746-RS-01		FOR INFORMATION	ISSUE DATE: 9/12/2021
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NAME: Karl Newman		Joe Hinds	John Lee
SIGNATURE:			
DATE: 27/10/2021		27/10/2021	27/10/2021



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Rev	Section	Page	Revision Description	Reviewed	Approved	Date
Α	-	-	ISSUED FOR TENDER	JH 27/10/21	JL 27/10/21	27/10/2021
В	-	-	Updated with survey undertaken 2-3/12/21	KN 8/12/21	JL 8/12/21	9/12/2021



### **CONTENTS**

1.0	SUMMARY	.4
2.0	VEHICLE AND LOAD DETAILS	.5
2.1	PROPOSED TRAVEL ARRANGEMENT	.6
3.0	PROPOSED TRAVEL ROUTE - OPTION A	.9
3.1	ROUTE SURVEY DETAILS1	10
4.0	PROPOSED TRAVEL ROUTE - OPTION B	
4.1	ROUTE SURVEY DETAILS	36
5.0	PROPOSED TRAVEL ROUTE - OPTION C	
5.1	ROUTE SURVEY DETAILS	11
6.0	PROPOSED TRAVEL ROUTE - OPTION D	
6.1	ROUTE SURVEY DETAILS5	50



### 1.0 SUMMARY

The following route survey is based on data from route surveys conducted during July 2019 and the 2<sup>nd</sup> and 3<sup>rd</sup> of December 2021. In this document we have included the current load dimensions, weights and transport arrangement drawings in section 2. Four possible routes have been identified. Final route selection will be subject to bridge assessments and discussions with regulatory bodies.

Option A is via Springhill Rd, Five Islands Rd, Princes Mwy, and contraflow on Princes Hwy to Yallah Bay Rd.

Option B is via Springhill Rd, Masters Rd, Princes Mwy, and contraflow on Princes Hwy to Yallah Bay Rd.

Option C is via Springhill Rd, Five Islands Rd, contraflow on Princes Mwy, Fowlers Rd, Princes Hwy and Yallah Bay Rd.

Option D is via Springhill Rd, Masters Rd, contraflow on Princes Mwy, Fowlers Rd, Princes Hwy and Yallah Bay Rd.

A significant number of powerlines are present along the route surveyed. An additional route survey conducted by the power company will be required to compliment this document.

Sign posts, temporary concrete barriers, traffic lights and Armco rails that may require temporary removal on the travel routes to Tallawarra Power Station have been identified. Low clearances for overhead signs and overpasses have also been identified with directions of travel past these obstacles included.

Overpasses along Springhill Rd and the Princes Motorway have clearances lower than the nominal transport travel height. The trailer and beam set will be hydraulically altered at these overpasses. Height adjustments along the Princes Motorway will be made through the trailers hydraulic system.

Solid branches from trees along the route will need to be trimmed to a clearance height to permit transport to pass along these roads. Trimming should be completed close to the travel timing.



### 2.0 VEHICLE AND LOAD DETAILS

It is proposed that the transport arrangement for the following items will consist of four prime movers pulling **two 2-file x 14-line modular trailers** configured in a jinker arrangement, and **two 2-file x 12-line modular trailers** configured in a jinker arrangement in the case of item 3.

Dimensions of Transported Item 1: 372 tonne Turbine

Overall Length	10.832m
Overall Height	5.054m
Overall Width	4.954m
Overall Mass	372.0t

Dimensions of Transport Combination: (Item 1)

nis of Transport Combination: ( <b>item 1</b> )		
Combination Overall Length		110.235m
Combination Overall Height - standard		6.006m
Combination Overall Width		6.352m
Combination Overall Mass (incl prime movers)		726.2t
14 Axle Trailer Overall Mass	314.1t	314.1t
Axle Spacing	1.800m	1.800m

Dimensions of Transported Item 2: 365 tonne Generator

Overall Length	12.850m
Overall Height	4.458m
Overall Width	4.160m
Overall Mass	365.0t

Dimensions of Transport Combination: (Item 2)

Combination Overall Length		112.035m	
Combination Overall Height - standard		5.318m	
Combination Overall Width	5.400m		
Combination Overall Mass (incl prime movers)		719.4t	
14 Axle Trailer Overall Mass	310.7t	302.7t	
Axle Spacing	1.800m	1.800m	

Dimensions of Transported Item 3: 250 tonne Transformer

_		<u>-</u>
	Overall Length	11.000m
	Overall Height	4.200m
	Overall Width	3.500m
	Overall Mass	250.0t

Dimensions of Transport Combination: (Item 3)

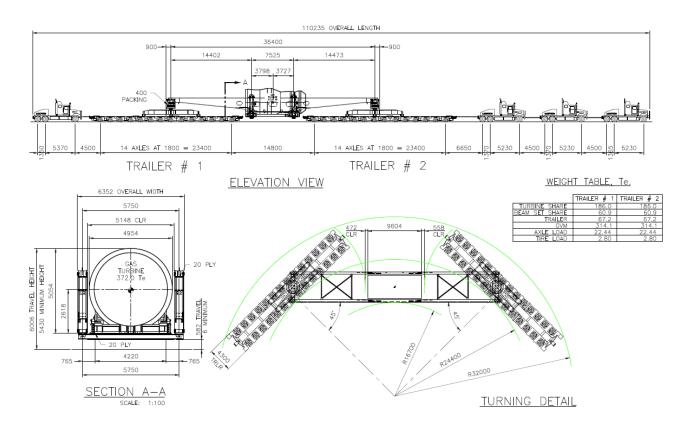
Combination Overall Length		93.300m
Combination Overall Height - standard		5.250m
Combination Overall Width		6.250m
Combination Overall Mass (incl prime movers)		513.7t
12 Axle Trailer Overall Mass	220.1t	220.1t
Axle Spacing	1.800m	1.800m

The overall height may be reduced in some locations to assist in clearing overhead obstacles. Similarly, the trailer may be raised to assist with ground clearance when crossing any existing road infrastructure.



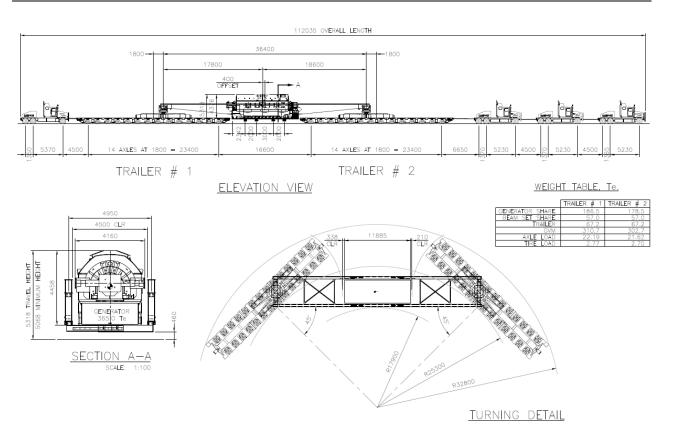
### 2.1 PROPOSED TRAVEL ARRANGEMENT

Drawings depicting the transport arrangements for the <u>loads</u> are shown below:



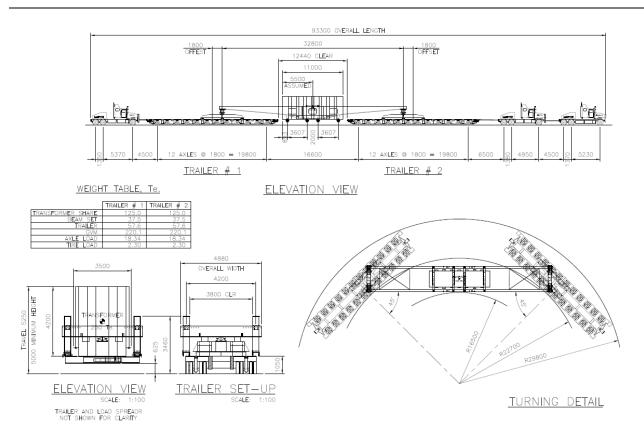
Transport Arrangement - Item 1: Turbine





Transport Arrangement - Item 2: Generator





Transport Arrangement - Item 3: Transformer

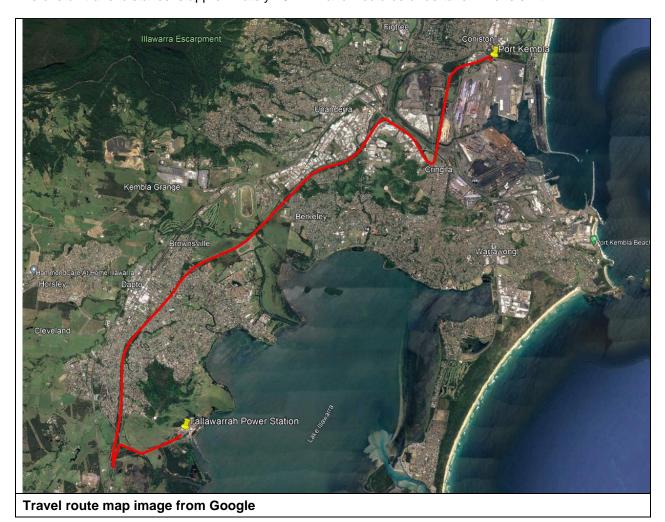


### 3.0 PROPOSED TRAVEL ROUTE - OPTION A

The route from the Port of Port Kembla, NSW to Tallawarra Power Station, Yallah, NSW will be via the following roads:

lollowing roads.	
Route Details	Estimated Time (hr:min)
Start at Tom Thumb Rd, Port Kembla, NSW	00:00
Turn left and contraflow along Springhill Rd travelling south-west	00:10
Turn right onto Five Islands Rd, continuing contraflow	00:50
Turn left onto Princes Motorway, travelling on correct side of road	01:06
Exit and reverse contraflow along Princes Hwy travelling contraflow	03:16
Turn left onto Yallah Bay Rd	03:38
Finish at Tallawarra Power Station, Yallah, NSW	03:44

The overall travel distance is approximately 18.7 km and would be undertaken in one shift.

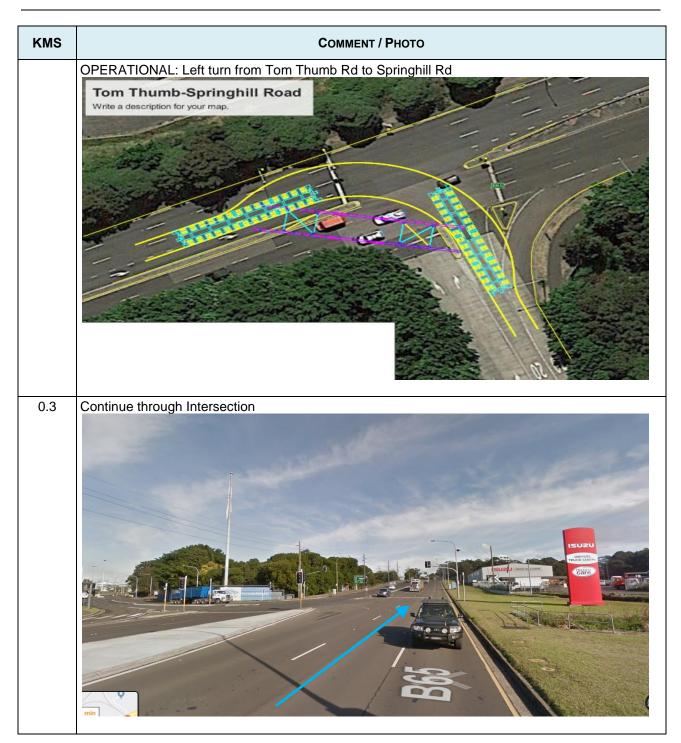




### 3.1 ROUTE SURVEY DETAILS







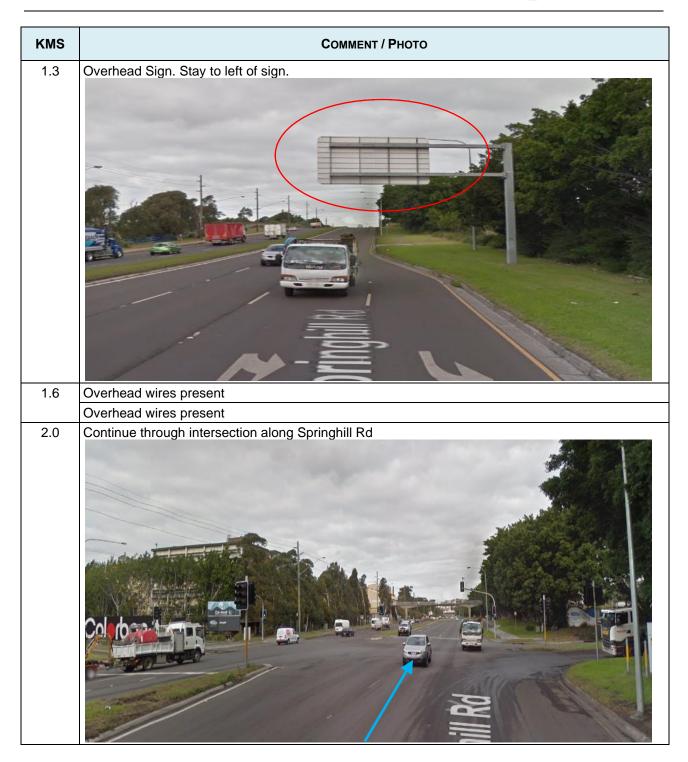


**KMS COMMENT / PHOTO** 0.6 Bridge Must cross contraflow over bridge heading south-west Overhead sign will be avoided while travelling contraflow Trees need trimming to allow for a 6 m travel height



**KMS COMMENT / PHOTO** 0.7 Bridge Must cross contraflow over of bridge heading south-west Continue through intersection of Springhill Rd and Masters Rd 1.0







**KMS COMMENT / PHOTO** 2.1 Overpass: Foot Bridge Bridge height 5.85 m at far left curb, 6.32 m at centre curb, 5.99 m at far right curb Stay left beside the centre median 2.6 Overhead wires present Bridge over Creek 2.7 Overhead wires present



**KMS COMMENT / PHOTO** Overpass: Road bridge 2.8 Bridge height clearance 6.45 m far left curb, 5.79 m at centre curb, 6.21 m at far right curb Lower transport height to 5.6 m, keep right Overpass: Train Bridge Correct side: bridge height clearance 6.59 m at far left curb, 6.53 m at centre Incorrect side: height clearance 5.72 m at centre curb, 6.44 m at centre lane, 6.52 m at right

- Maintain transport height of 5.6 m and stay right, maintaining clearance from streetlight

Raise to normal travel height after passing under bridge

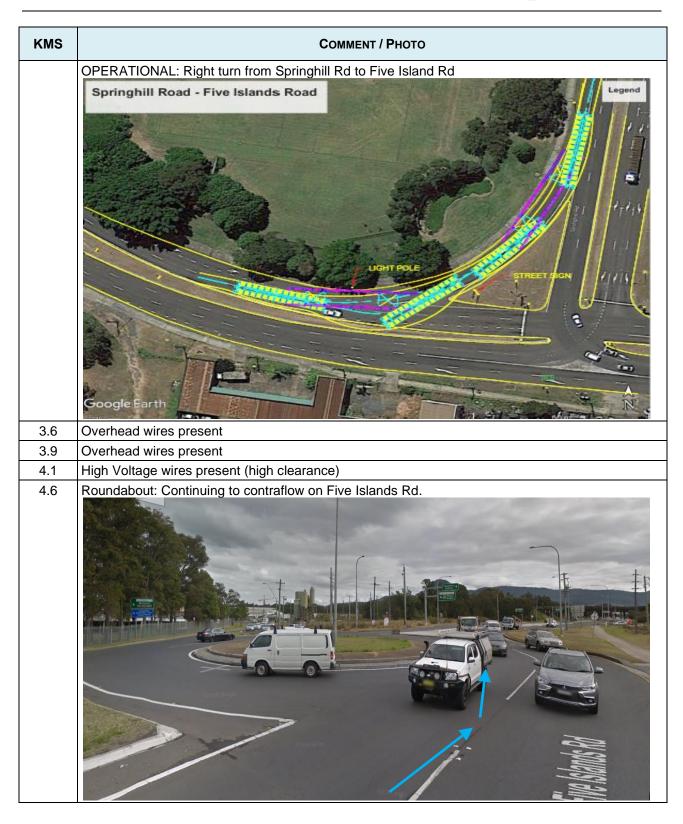


2.9 Overhead wires present

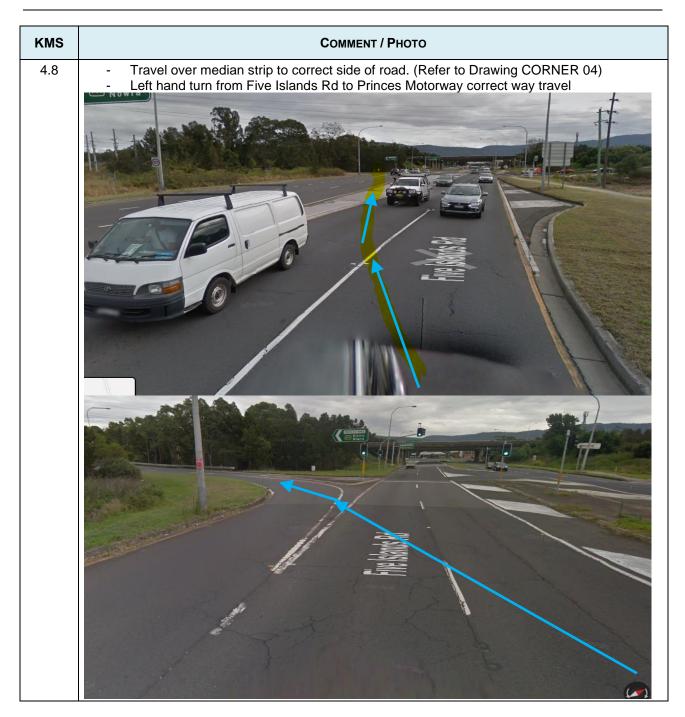


**KMS COMMENT / PHOTO** 3.1 Right hand turn using intersection to Five Islands Rd, continuing to contraflow from Springhill Rd to contraflow along Five Islands Rd.











**KMS COMMENT / PHOTO** OPERATIONAL: Through WRONG side of roundabout, over median strip onto correct side of road, making left turn from Springhill Rd to Princes Motorway Five Island Road - Princess Motorway Entrance **CORRECT WAY TRAVEL** 4.9 Overhead wires present 5.7 Overpass: Berkeley Rd Bridge height 5.317 m at far left curb, 5.856 m at right edge Lower transport height to 5.5 m Stay far right beside the centre median



**KMS COMMENT / PHOTO** 6.2 Overpass: Road Bridge 8.6 m clearance at far left curb. High clearance overpass, maintain normal travel height. Overpass: Nolan St 6.4 Bridge height 6.41 m at far left curb Stay far left of road 7.0 Overhead wires present 7.5 Overhead high voltage wires present

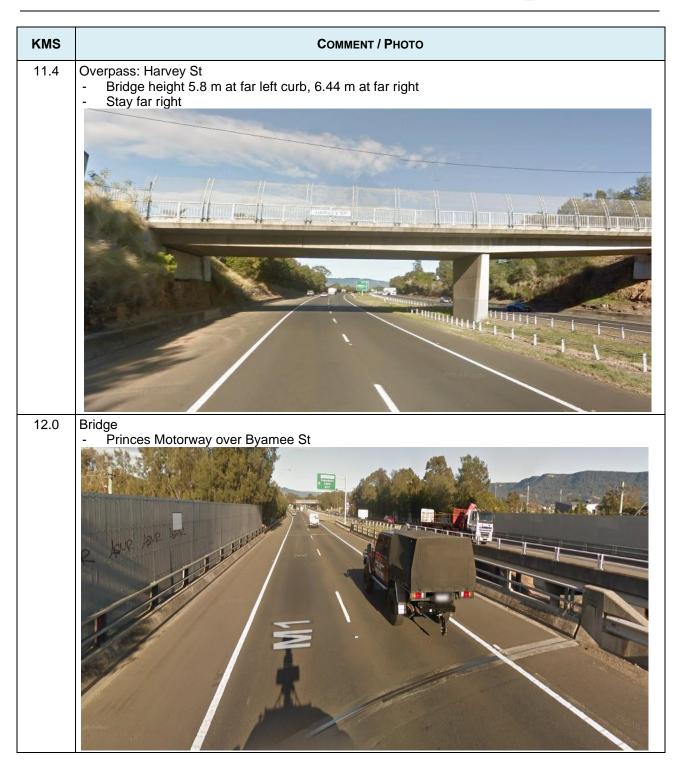


**KMS COMMENT / PHOTO** 8.0 Bridge Princes Motorway over Northcliffe Dr 8.8 Bridge Princes Motorway over Mullet Creek Very long bridge 9.7 Overhead high voltage wires present



# **KMS COMMENT / PHOTO** 10.1 Overhead road sign Stay far right beside the centre median 10.6 Overpass: Kanahooka Rd 6.43 m clearance at left hand curb Stay far left of road







# Overhead road sign - Stay to left side of road 12.3 Overpass: Fowlers Rd - Bridge height 5.68 m at far left curb, 5.85m at right edge - Lower transport height to 5.6m - Stay far right



12.4 Overhead wires present



**KMS COMMENT / PHOTO** 13.0 Overpass: Emerson Rd Bridge height 5.86 m at far left curb, 6.32 m at right edge Stay far right beside the centre median 14.1 Overpass: Pedestrian Bridge Bridge height 5.77 m at far left curb, 6.69 m at right edge Stay far right beside the centre median

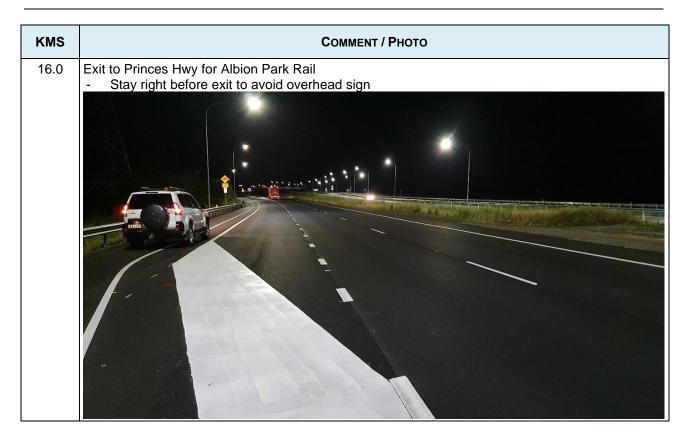
Overhead wires present

14.7



KMS	COMMENT / PHOTO
15.2	Bridge
	- Princes Motorway over Princes Hwy
15.3	Overhead high voltage
15.5	Bridge - Princes Motorway over Duck Creek
15.6	Overhead high voltage wires present
15.9	Overhead high voltage wires present





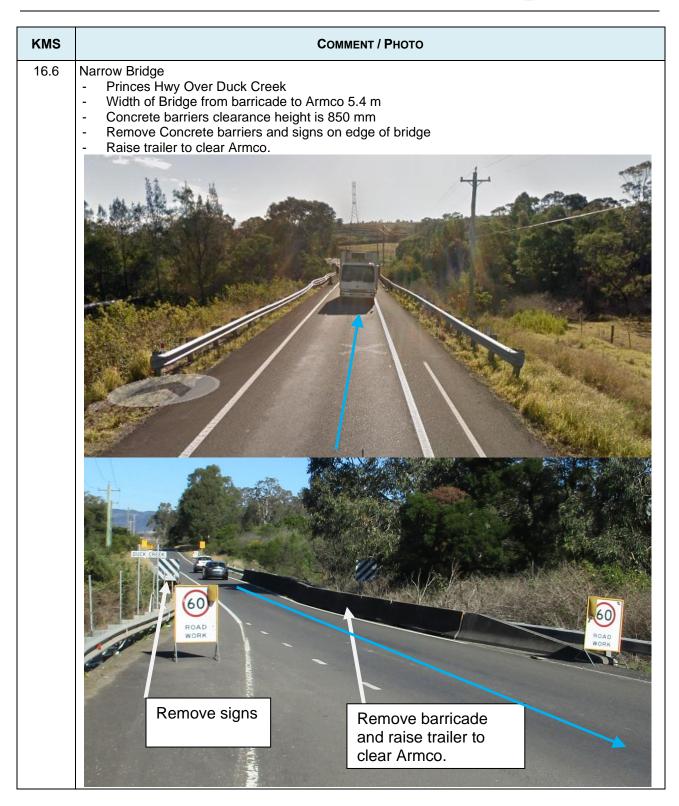


KMS	COMMENT / PHOTO
16.1	REVERSE UP PRINCES HWY TOWARDS YALLAH BAY RD, contraflow along Princes Hwy. Remove bike crossing sign.
16.1 16.2	Overhead wires present (along Princes Motorway)  Overhead high voltage wires present

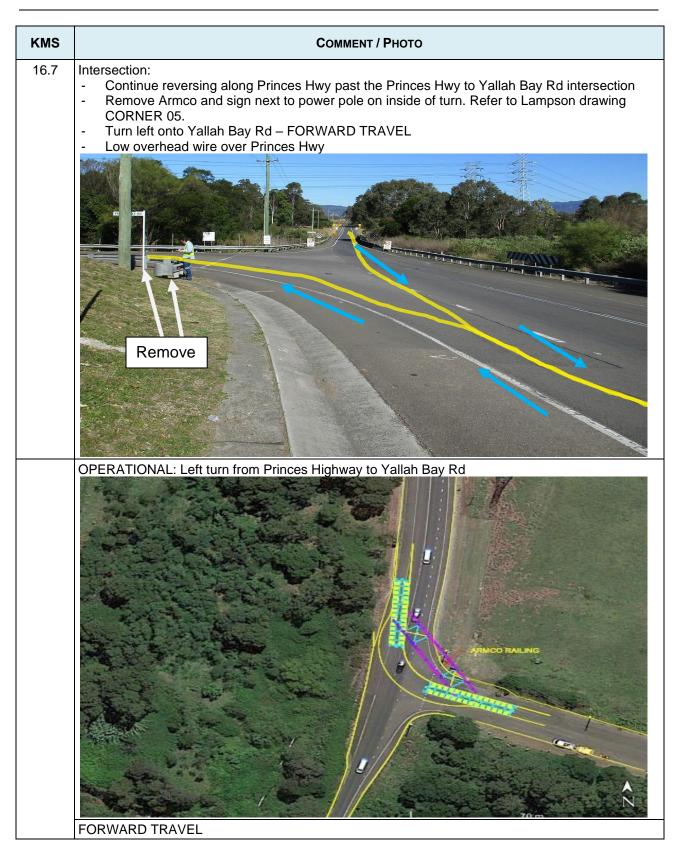


KMS	COMMENT / PHOTO
16.3	Trees need trimming to allow for a 6 m travel height











KMS	COMMENT / PHOTO
16.8	Between 16.8 km and 17.3 km, trees need trimming to allow for 6m travel height
17.9	Overhead wires present
18.0	Overhead wires present
18.5	Overhead wires present
18.6	Overhead wires present







#### 4.0 PROPOSED TRAVEL ROUTE - OPTION B

The route from the Port of Port Kembla, NSW to Tallawarra Power Station, Yallah, NSW will be via the following roads:

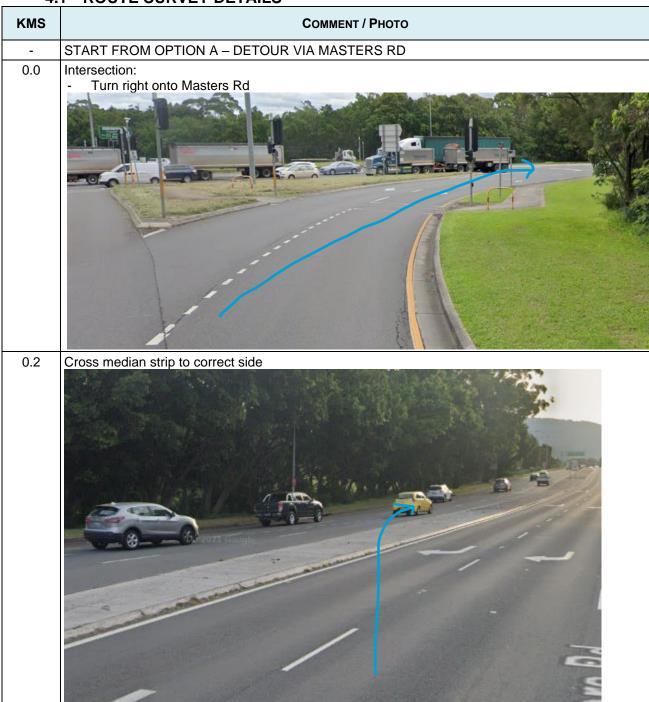
Route Details	Estimated Time (hr:min)
Start at Tom Thumb Rd, Port Kembla, NSW	00:00
Turn left and contraflow along Springhill Rd travelling south-west	00:10
Turn right onto Masters Rd, crossing median to correct side	00:25
Turn left onto Princes Motorway	00:37
Exit and reverse contraflow along Princes Hwy travelling contraflow	03:14
Turn left onto Yallah Bay Rd	03:20
Finish at Tallawarra Power Station, Yallah, NSW	03:39

The overall travel distance is approximately 18.3 km and would be undertaken in one shift.





# 4.1 ROUTE SURVEY DETAILS

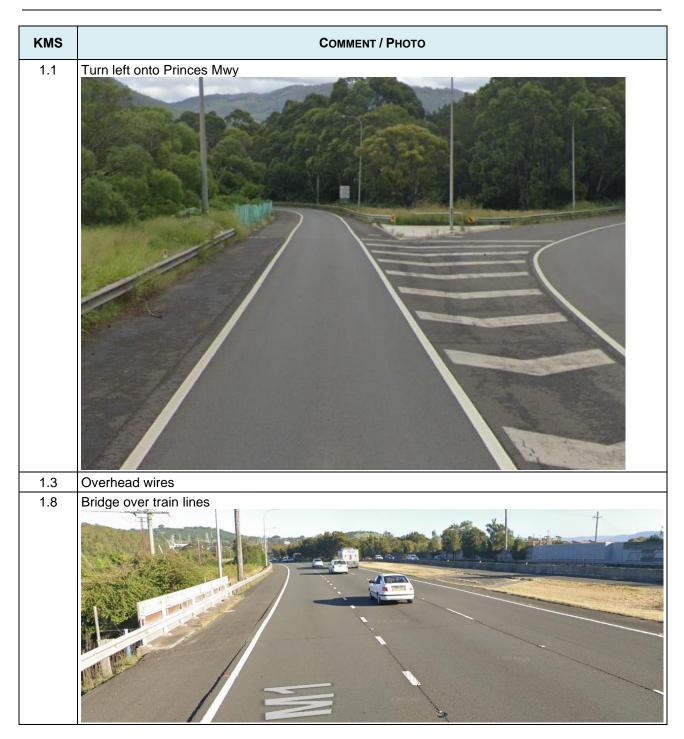




**KMS COMMENT / PHOTO** 0.6 Overhead sign: Vertical clearance 6.5 m 0.9 Bridge over train lines Overhead sign: Lower transport height to clear if required









KMS	COMMENT / PHOTO
2.6	Bridge over train lines
2.8	Bridge over Five Islands Rd
2.9	Overhead wires
3.1	CONTINUE OPTION A – END DETOUR

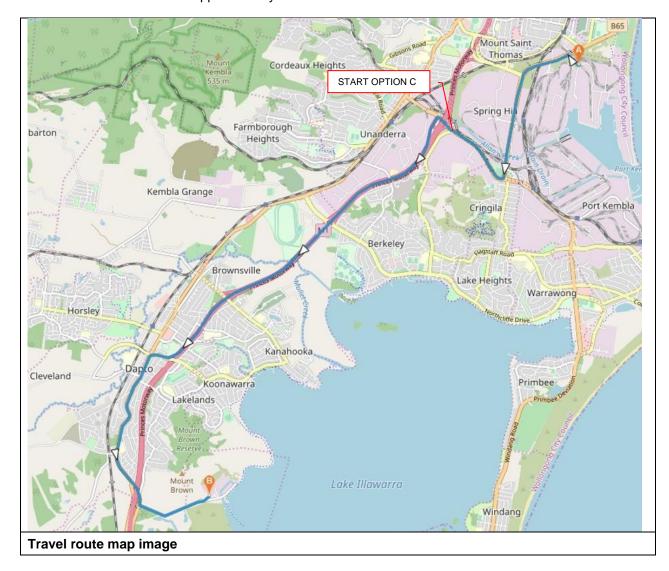


### 5.0 PROPOSED TRAVEL ROUTE - OPTION C

The route from the Port of Port Kembla, NSW to Tallawarra Power Station, Yallah, NSW will be via the following roads:

Tollowing roads.	•
Route Details	Estimated Time (hr:min)
Start at Tom Thumb Rd, Port Kembla, NSW	00:00
Turn left and contraflow along Springhill Rd travelling south-west	00:10
Turn right onto Five Islands Rd, continuing contraflow	00:51
Turn left onto Princes Motorway, continuing contraflow	01:15
Exit onto Fowlers Rd, continuing contraflow	02:43
Turn left onto Princes Hwy	02:50
Turn left onto Yallah Bay Rd	03:31
Finish at Tallawarra Power Station, Yallah, NSW	03:50

The overall travel distance is approximately 19.2 km and would be undertaken in one shift.



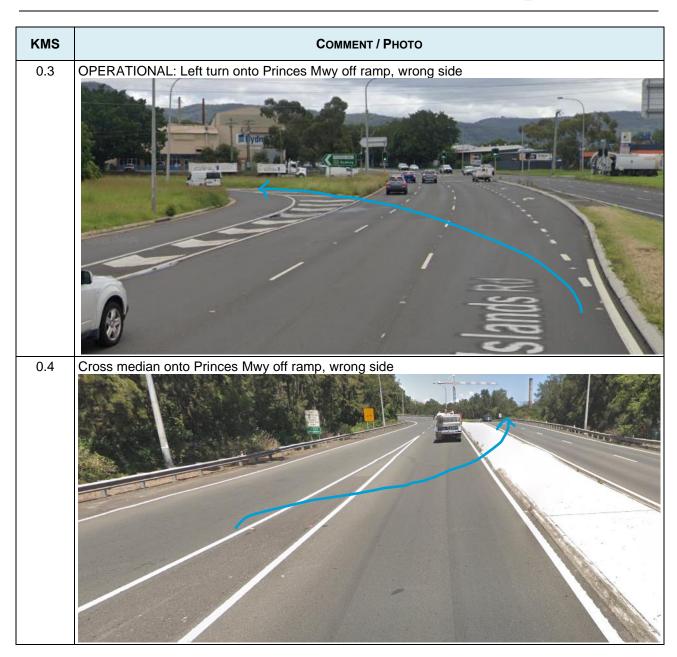


#### **ROUTE SURVEY DETAILS** 5.1

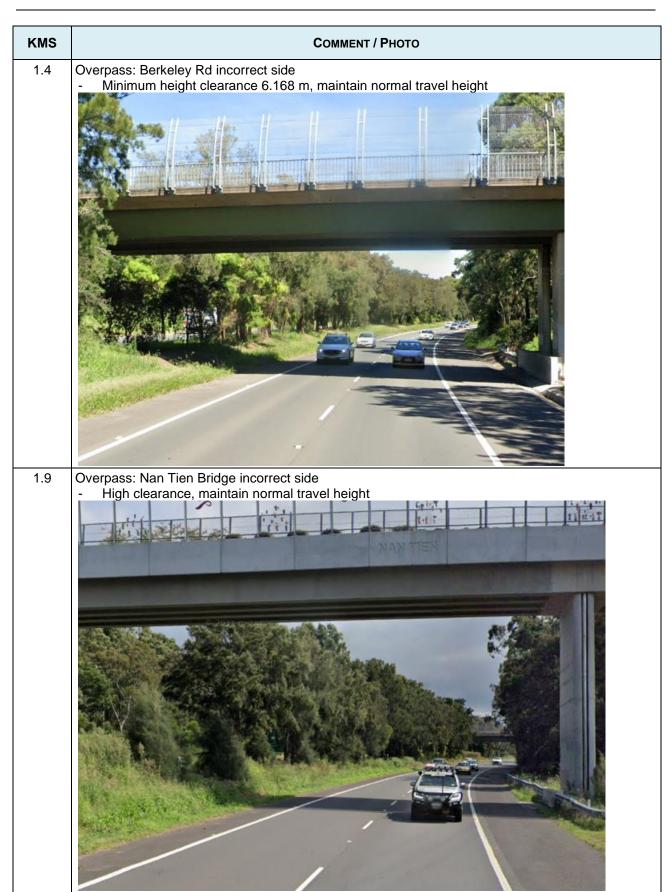
**KMS COMMENT / PHOTO** START FROM OPTION A - DETOUR STRAIGHT ON FIVE ISLANDS RD 0.0 Continue straight on Five Islands Rd, correct side Stay right to clear traffic light 0.1 Overhead sign Stay right to clear 0.2 Overpass: Princes Mwy Lower transport height if required. Clearance appears sufficient.



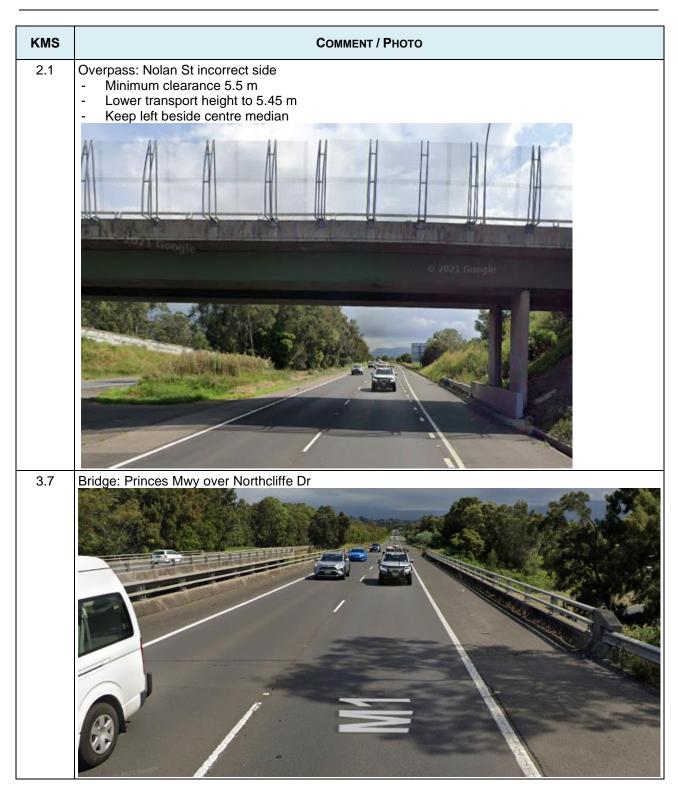












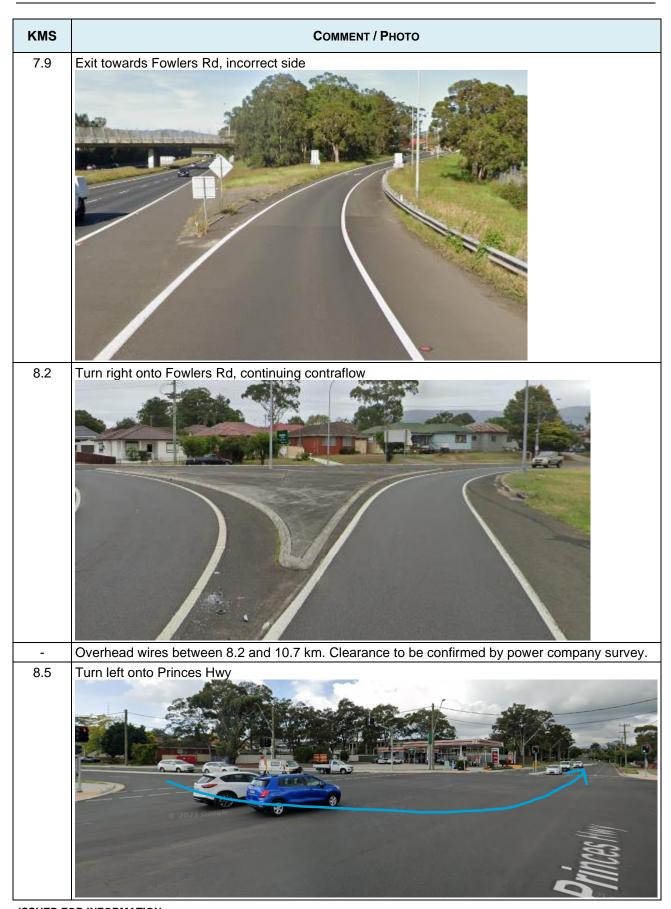


**KMS COMMENT / PHOTO** Bridge: Princes Mwy over Mullet Ck 4.7 Very long bridge 6.4 Overpass: Kanahooka Rd incorrect side Minimum clearance 5.7 m Lower transport height to 5.6 m and stay far left beside centre median



**KMS COMMENT / PHOTO** 7.2 Overpass: Harvey St incorrect side Clearance noticeable higher than correct side Maintain normal travel height and keep right 7.7 Bridge: Princes Mwy over Byamee St







KMS	COMMENT / PHOTO
-	Alternate correct side and contraflow travel along Princes Hwy for maximum height clearance from overhead wires
11.6	Overpass: Princes Mwy - Minimum clearance at left edge 5.88 m - Minimum clearance at right edge 5.64 m - Lower transport height to 5.6 m and keep left

Turn left onto Yallah Bay Rd. CONTINUE OPTION A - END DETOUR.

12.0



# 6.0 PROPOSED TRAVEL ROUTE - OPTION D

The route from the Port of Port Kembla, NSW to Tallawarra Power Station, Yallah, NSW will be via the following roads:

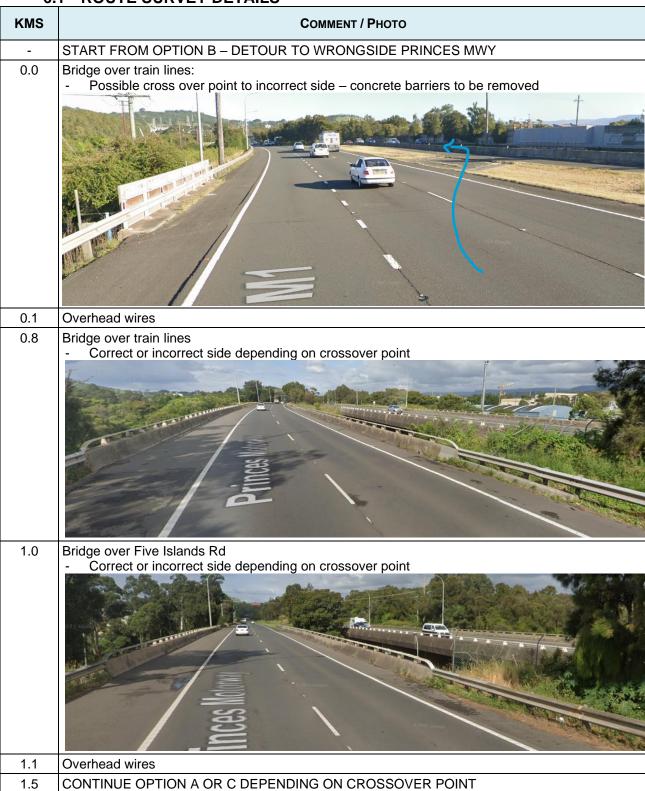
Tollowing roads.	
Route Details	Estimated Time (hr:min)
Start at Tom Thumb Rd, Port Kembla, NSW	00:00
Turn left and contraflow along Springhill Rd travelling south-west	00:10
Turn right onto Masters Rd, crossing median to correct side	00:25
Turn left onto Princes Motorway, crossing median to incorrect side	00:37
Exit onto Fowlers Rd, continuing contraflow	02:28
Turn left onto Princes Hwy	02:36
Turn left onto Yallah Bay Rd	03:16
Finish at Tallawarra Power Station, Yallah, NSW	03:33

The overall travel distance is approximately 17.8 km and would be undertaken in one shift.





# 6.1 ROUTE SURVEY DETAILS





KMS	COMMENT / PHOTO
4.9	Possible cross over point to incorrect side between Northcliffe Dr and Mullet Ck. Tree to be trimmed to provide 6m clearance.
4.9	CONTINUE OPTION C – END DETOUR

# Appendix C: Construction Vehicle Code of Conduct



# VEHICLE OPERATOR'S MANUAL



# **VEHICLE OPERATOR'S MANUAL**



# VEHICLE OPERATOR'S MANUAL



### **INDEX**

1.0	Introduction	
2.0	Conduct	
3.0	Drivers License	£
4.0	Fitness	€
5.0	Personal Appearance	7
6.0	Courtesy to Customers and Public	7
7.0	Handling of Equipment and Goods	7
8.0	Vehicle Operators Daily Log Sheets	7
9.0	Carrying of Passengers	7
10.0	Lunch Break	7
11.0	Overtime	7
12.0	Suggestions	7
13.0	Equipment Checks	8
14.0	Equipment Defect Reporting	8
15.0	Communications	8
16.0	Consignment Notes	8
17.0	Goods not to be Accepted	8
18.0	Documentation	
19.0	Load Restraint	
20.0	Excess Waiting Time	
21.0	Safety	
22.0	Loading	
23.0	Completion of Loading	
24.0	Returning to Depot	
25.0	Ancillary Equipment	
26.0	End of Day	
27.0	Good Driving Practises	
28.0	Mechanical Defects or Failure	
29.0	Defensive Driving	
30.0	Coasting out of Gear	
31.0	Reversing	
32.0	Tyres	
33.0	Brakes	
35.0	Coupling a Prime Mover and Trailer-	12
36.0	Uncoupling Prime Movers and Trailers Error! Bookmark not defi	ned
37.0	Coupling a Dog Trailer	
38.0	Customer Site Safety Rules	
39.0	Washing Vehicles	
41.0	Manual Lifting	
42.0	Unsafe Tools or Equipment	13
43.0	Parked Vehicles	
44.0	Entering or Leaving Vehicles	
45.0	Protective Clothing	
47.0	Motor Vehicle Accident Procedure	
-	ORK PROCEDURE	
	E ACCESS AND EGRESS-Cabs	
	E ACCESS AND EGRESS- Truck and Trailer Trays	
	ING UP TRAILERS	
	Trucks	
	ng Trucksng Trucks	
APPIN		20
	<del></del>	•
A		5
LOADIN	G AND UNLOADING FLATRACKS	23

# **OCCUPATIONAL HEALTH & SAFETY POLICY**



#### VEHICLE OPERATOR'S MANUAL



Lampson (Australia) Pty Ltd is committed to providing a safe and healthy work environment for all employees, contractors and visitors.

It is the policy of this company to make every reasonable effort to prevent accidents, protect employees from injury, and promote the health, safety and welfare of all employees.

Lampson (Australia) Pty Ltd acknowledges the importance of our staff and the valuable contribution they make, our company will strive towards prevention of injuries and regard OHS as a high priority.

The company will make available appropriate resources to ensure that it complies in all respects with relevant occupational health and safety legislation, and to ensure that the workplace is a safe and healthy workplace.

#### The Occupational Health and Safety Program

The company in consultation with management and employees has set up a program of activities and procedures which will be continually reviewed and effectively carried out. This program relates to all aspects of occupational health and safety including:

- Occupational Health & Safety Management
- Employee Induction, education and training in OHS
- Risk management
- Contractor Management
- Safe premises
- Safe Work Procedures
- Records and Documentation
- Injury Management
- OHS Audits workplace inspections and evaluations
- Reporting and recording of incidents, accidents, injuries and illnesses
- Consultation and provision of information to employees.
- Monitoring, review and continual improvement

#### **Employer Commitment**

The National OHS Manager is responsible for coordinating OHS policies and procedures, workers compensation and rehabilitation. Employees should refer any OHS concerns to their Supervisor in the first instance, who will then report this to the relevant OHS Representative, senior management and if warranted the OHS Manager.

The National OHS Manager reports to the Managing Director of the company, who are committed to the implementation of systematic approaches to OHS and injury management.

In meeting its OHS commitments, the company will ensure that:



#### VEHICLE OPERATOR'S MANUAL



- an effective OHS programme is maintained to ensure that all workplace hazards are identified, the associated risks assessed and appropriate measures introduced to control these risks:
- the OHS programme is regularly monitored and reviewed to take account of legislative changes and/or organisational changes and to ensure continual improvement of the programme;
- employees are consulted on OHS issues relevant to them and all relevant documentation relating to OHS issues is retained and accessible to employees;
- appropriate records are kept in relation to the risk management program;
- in dealing with equipment and substances in the workplace, appropriate testing, risk management assessment and regular maintenance inspections will be undertaken;
- all employees and contractors are appropriately trained and supervised and provided with adequate information in order to undertake their daily duties safely and without risks to health;
- employees involved in duties requiring specific qualifications, experience or personal protective equipment (PPE) will be provided with appropriate training to undertake these duties and/or use the PPE; and
- appropriate means are provided to prevent visitors and other unauthorised people from entering restricted areas or parts of the workplace where they may be at risk, or endanger the health and safety of others.
- Non Compliance disciplinary actions shall be taken against any employee who fails to comply with the OHS policies and procedures and puts at risk themselves, other employees, visitors or contractors.

#### **Employee Commitment**

- · adhere to safe work practices, instructions and rules
- immediately report any unsafe work condition or equipment to management
- not misuse, damage, refuse to use, or interfere with anything provided in the interest of occupational health and safety
- perform all work duties in a manner which ensures individual health and safety and that of all other employees
- encourage fellow employees to create and maintain a safe and healthy work environment
- cooperate with all other employees to enable the health and safety responsibilities of all employees be achieved
- take reasonable care for the health & safety of anyone at the workplace (including non employees)
- accept their role in the health & safety program

#### Consultation

The Lampson (Australia) Pty Ltd consulting mechanism will assist in the development and monitoring of the company's occupational health and safety management system. This will include the development of recommendations to management to improve systems of work and continually improve the way OHS is managed.



#### VEHICLE OPERATOR'S MANUAL



Lampson (Australia) Pty Ltd is committed to achieving the highest standards and performance in occupational health and safety and will consult with their employees and contractors in implementing safety practices and systems that will ensure the health, safety and welfare of all persons at the workplace.

Employees must report to their Manager/Supervisor any health and safety concerns that they have about the workplace so any issues can be promptly addressed.

In agreement with Management and their employees consultation arrangements will be monitored and reviewed on an on-going basis to ensure that consultation with all employees is effective and that all safety issues are being addressed.

#### **Workers Compensation**

Lampson (Australia) Pty Ltd is committed to preventing illness and injury at the workplace by providing a safe and healthy working environment but recognises that despite its best endeavours an injury or illness may occur.

Lampson (Australia) Pty Ltd is responsible for developing a Return to Work program that determines the process for managing injured employees.

Injury management combines treatment, rehabilitation, retraining, claims management and employment management practices to facilitate a timely, safe and durable return to work after an injury. Effective claims management is in the interests of all parties

John Lee Managing Director Lampson Australia

Date: December 2017

Date to be revised: December 2019



#### VEHICLE OPERATOR'S MANUAL



#### 1.0 Introduction

The aim of this handbook is to provide the basic information needed to clarify Standard Company Practices and certain areas of transport operations.

Some products and equipment carried by Lampson are subject to special restrictions and procedures and are beyond the scope of this manual. These products are to be handled in accordance with specific Lampson safety procedures.

Procedures which have a direct affect on daily activities performed by vehicle operators have been issued to you upon induction. It is your responsibility to ensure you understand and comply with the content of these procedures without exception.

If ever in doubt, contact your Supervisor. Asking for help costs nothing and can be the difference between doing a job well or losing a valued customer and doing the job for the last time.

#### 2.0 Conduct

The aim of Lampson is to provide our customers with the most efficient, friendly and cost-effective service possible.

It is expected that the vehicle operator of any Lampson vehicle or subcontractor's vehicle will adhere fully to all road transport regulations.

Lampson operates under an Alcohol and Drug Policy, which prohibits vehicle operators being under the influence of substances during work hours.

Lampson are committed to fatigue management, therefore, refreshment and rest breaks are to be taken regularly when needed and conforming to state regulations to ensure the safety of yourself and other road users.

The vehicle (including trailers) shall be kept in a clean and presentable condition. The interior of the cab should be tidy and display good housekeeping by the vehicle operator.

As a professional vehicle operator, everything you say and do reflects on yourself, your workmates, your employer and the transport industry as a whole.

#### 3.0 Drivers License

You must at all times be in possession of a valid driver's licence for the vehicle you are operating. If for any reason your driver's licence has been suspended, you are to notify management immediately and you are not to operate any equipment whilst under suspension or operate a vehicle you are not licenced for.

#### 4.0 Fitness

Commercial vehicle drivers have a duty to take reasonable care of their own safety and health in the workplace. Drivers should be aware of the impact of activities such as a second job, other driving, recreational activities, sport, insufficient sleep, stressful situations and the consumption of alcohol and other recreational drugs or medication on their well being and capacity to work effectively. These activities may affect their state of fatigue, especially cumulative fatigue and capacity to drive safely. It is essential that drivers report for work rested and fit for duty.



#### VEHICLE OPERATOR'S MANUAL



#### 5.0 Personal Appearance

As you are a representative of the company and in most cases the first face to face point of contact with many of our customers on a daily basis, you are expected to maintain a clean and tidy professional appearance. Uniforms are provided for employees and it is expected that you wear your uniform at all times whilst on the job-this includes in transit as well as when on sites.

#### 6.0 Courtesy to Customers and Public

You are expected to show every courtesy and consideration towards our customers and the public alike. Do not argue with the customer. If a situation arises that you are unable to settle in a friendly and courteous manner, contact your Supervisor, report the facts and be governed by his advice. Your attitude and actions at all times must be such that it will not reflect adversely upon Lampson or our customers.

#### 7.0 Handling of Equipment and Goods

You are required to handle all customer goods and company equipment in a careful and safe manner at all times.

#### 8.0 Vehicle Operators Daily Log Sheets

The log sheet is an important document and must be completed every day listing each vehicle operated. It is important that all details are recorded accurately on the log sheet as it forms the basis for controlling fatigue management, invoicing, payroll, payment verification and maintenance programming.

#### 9.0 Carrying of Passengers

Except for company employees, passengers or animals are not to be carried on or in company vehicles without written authorisation from management.

Whilst subcontractors do not operate company vehicles, they are required to comply with these requirements.

#### 10.0 Lunch Break

It is a Lampson requirement that a minimum of half hour lunch break be taken. This is also essential under fatigue management procedures and needs to be managed by you -the operator.

#### 11.0 Overtime

Due to the unpredictable nature of the business and our desire to satisfy our customer, it is sometimes necessary for overtime to be worked on short notice.

#### 12.0 Suggestions

Management recognises that as a professional vehicle operator, you may, through past experiences learned valuable lessons which could assist in improving our service, efficiency and



#### VEHICLE OPERATOR'S MANUAL



safety or the knowledge of less experienced and new operators. Valid suggestions will be welcome.

#### 13.0 Equipment Checks

Before operating equipment, or at the beginning of each driving period, the vehicle operator is to complete a daily vehicle check list and evidence of completion must be provided on the daily trip sheet.

Refer Attachment ... - Lampson (Aust.) Pre-operational Safety Check Sheet (issued numerically specific to all drivers)

#### 14.0 Equipment Defect Reporting

Any problem or defect with vehicles or equipment should be reported promptly by phone, initially to the Supervisor. The relevant equipment defect must be recorded on the Pre-operational check sheet and be returned to your supervisor. Equipment with defects which constitute a safety problem should not be operated.

Refer Attachment ... - Lampson (Aust.) Pre-operational Safety Check Sheet (issued numerically specific to all drivers)

#### 15.0 Communications

In general communications should be made with base when finished unloading on site or when there is a problem which may cause delay in the delivery of product to site.

Regular communication should be maintained with your Supervisor as this will assist with efficient planning and scheduling.

#### 16.0 Consignment Notes

Consignment notes must be raised and completed in full for all work carried out.

This includes tracking of flat racks / cradles recording their asset numbers.

#### 17.0 Goods not to be Accepted

Goods in a damaged or deteriorated condition at time of pick up are to be recorded on the cart note and verified by the customer, or are only to be accepted on authority of your Supervisor. In all cases the condition of goods on pick up is to be entered in the 'Condition of Goods' section on the cart note.

In addition, any freight which is not presented in a safe manner should be refused. All items on pallets and skids are to be strapped down.

#### 18.0 Documentation

Present consignee with the documentation for the goods and point out any discrepancies or damage. Where possible, have the consignee inspect the goods before unloading as any damage caused by their equipment during unloading will be their responsibility.



#### VEHICLE OPERATOR'S MANUAL



Any discrepancies or disagreements should be entered on the cart note or supplier's delivery notes prior to having the person receiving the goods sign the docket. Always obtain a signature on the cart note or supplier's delivery note as proof of delivery, as this is the only record of delivery being made and is therefore the means of invoicing the customer for payment.

#### 19.0 Load Restraint

Loads are to be restrained in accordance with the Load Restraint Guide- NTC booklet.-(ISBN 0 7313 0134X)

It is the vehicle operator's responsibility to ensure load is properly restrained. Do not leave the customer's premises without checking the security of your load. Some clients may have specific requirements- for example-:

- The requirement that where possible, loads are to be unitised so that they can be loaded and unloaded without the need for the driver to climb onto the vehicle.
- Prohibition on the use of over centre "dogs" and require that ratchet binders are used for their load restraint.
- Front and rear gates fitted with steel mesh required for all loads and side gates are to be fitted when transporting general freight items such as valves, fittings etc.

Make sure you know the specific customer requirements before you leave- it is too late when you get there.

# 20.0 Excess Waiting Time

If it appears that you are going to be delayed beyond a reasonable time while making a delivery, contact your Supervisor as appropriate and note the delay on your consignment note and Daily Sheet. Also enter your arrival and departure times on the delivery docket and have the customer acknowledge these times when signing for goods.

#### 21.0 Safety

Your safety and the safety of those around you depend on your precise working knowledge of product and equipment and the confidence you display when operating. If you are not familiar or qualified with the product or equipment allocated to you, ask for assistance before leaving the depot. Make sure you have all PPE required for the sites you are attending. Check with your Supervisor if uncertain of what is required.

#### 22.0 Loading

Safe Loading of Trucks for Safe Unloading:

- o To unload a truck safely it has to be loaded in a safe way.
- It is required that where possible, loads will be unitized to enable safe lifting from the vehicle.
- o Flat racks, cradles, crates and pallets are all examples of unitized loads.
  - o Flat racks should be used to move line pipe, structural steel and pipe spools.



#### VEHICLE OPERATOR'S MANUAL



- Packages under 16kg suitable for manual handling shall not be transported loose but confined within pallet cages or shrink wrapped on pallets. Pallets will be provided for construction projects as hire pallets are not to be used.
- All other packages shall be transported suitable for lifting using material handling equipment on site.
- Where equipment is larger than can be accommodated by these means, focus on preventing people from accessing onto the load for unloading. Some client or site regulations prohibit driver access to vehicle trays except in extreme circumstances) this can be done by leaving slings attached to the load when loaded onto the vehicle and secured for the duration of the journey.

Restraining Freight - Refer to NTC Load Restraint Guide

Refer Safe Working Procedure- Access and Egress- Cabs and Trailers

Refer Safe Working Procedure - Loading Unloading Flat racks.

Refer Safe Working Procedure- Doubling up trailers

Refer Safe Working Procedure – Loading Trucks QPRA023/Unloading trucks QPRA022

#### 23.0 Completion of Loading

On completion of loading, obtain paperwork, sign where necessary. All consignments must have a correctly completed consignment note. Make sure that you have collected all of your gear and any surplus equipment plus the load is secure before departing.

#### 24.0 Returning to Depot

Before returning to the depot on completion of a delivery, where practicable call your Supervisor as appropriate to receive further instructions.

#### 25.0 Ancillary Equipment

Ensure that you have the correct equipment before departing to pick up a load from a third party site.

It is your responsibility to ensure that any additional ancillary equipment, eg. tarps, ropes, chains, dogs, spare wheels, fire extinguishers, straps, etc be returned to the place/s that you obtained them from.

#### 26.0 End of Day

On return to the depot, your vehicle and equipment should be prepared for the next day's work. This may include refuelling the vehicle, washing the vehicle and equipment, attending to punctures and arranging the repairs to be done. It may also include the requirement for preloading; therefore it is essential that you check with your Supervisor prior to finishing for the day.

#### 27.0 Good Driving Practises

- o Recognition of your own and the vehicle's limitations
- Observation of warning signs and changing conditions



#### VEHICLE OPERATOR'S MANUAL



- Awareness of the behaviour of the load
- o Development of judgement of speed and distance
- Expecting the worse of every situation and condition
- Safety margin in all manoeuvres
- o Exercising all your skill and knowledge

#### 28.0 Mechanical Defects or Failure

In the event of a breakdown, try to drive the vehicle off the main part of the road, if possible.

Display reflective warning triangles in appropriate positions to protect yourself and to warn other road users, thus minimising the potential of an accident.

Try to diagnose the fault. If the problem is of a non-critical nature and within your capabilities to repair, then you should carry out repairs without undue delay. A non-critical nature is where the repairs do not compromise the safe operation of the vehicle. If the breakdown is of a critical nature, contact your Supervisor.

If you carried out the repairs yourself, it is still necessary to report the breakdown on returning to the depot.

Under no circumstances is a vehicle or trailer loaded with bulk dangerous goods to be left unattended in a public place. If necessary, obtain assistance from a passing motorist to make a call for assistance on your behalf.

#### 29.0 Defensive Driving

Safety is the golden rule of the professional vehicle operator. Regardless of the circumstances, do not take chances. To be on time is not nearly as important as arriving safely. The constant use of defensive driving techniques, good judgement, courtesy, patience and not taking chances will prevent most accidents from happening.

#### 30.0 Coasting out of Gear

Coasting out of gear is dangerous, contrary to regulations and is prohibited in all Lampson vehicles.

#### 31.0 Reversing

A large number of accidents occur during reversing and are due to the operator failing to check to the rear of the vehicle. Always personally check the rear of the vehicle and surrounding area before reversing. Where necessary, ensure a responsible person is available to guide the vehicle. On some sites a reversing buzzer is required.

#### 32.0 Tyres

In the event of a tyre failure, you are to change the tyre for a spare. If you are operating outside the metropolitan area, make sure you are carrying sufficient spares for the equipment you are using and on return to the depot; all tyres requiring attention are to be reported to your Supervisor.



#### VEHICLE OPERATOR'S MANUAL



Tyre conditions are to be checked both before and during the journey.

Tyre condition checks are to include a visual inspection of the prime mover and trailing equipment for the following:

- Tyre inflation
- Tread wear and depth
- Cuts, abrasions, scuffs

If any of the above items are found during checking, a spare tyre is to be fitted.

#### 33.0 Brakes

Braking is usually done by application of the foot brake only. The trailer brake hand valve is to be used only in case of emergency or to prevent jack-knifing under hazardous road conditions or for hill starts. Do not use trailer brakes to park an unattended vehicle.

All vehicles must be parked with the park brake applied. <u>Under no circumstances</u> should any vehicle be left unattended in gear without the park brake applied.

When parking vehicles not equipped with fail-safe braking systems, or you suspect the braking system may be faulty, the wheels of the vehicle are to be chocked.

## 34.0 Important safety factors

- Check brakes, lights, fuel, oil, water and other equipment before starting out and during regular breaks on each long trip.
- Act responsibly at all times.
- Know and follow the road laws.
- o Watch out for pedestrians; particularly children.
- Don't tailgate. Keep enough distance between your vehicle and the one ahead. Make every effort to let following traffic overtake, especially on long grades where you are moving slowly.
- Always be prepared to give way to avoid a potential conflict.
- o Never drink alcohol whilst on the road or before starting a trip.
- o Don't fight sleep. If drowsy, get off the road and take an appropriate rest.
- Don't hesitate to reduce your speed and be ready to stop the instant potential danger appears.
- Show other road users the courtesy that you would expect them to give to you.

# 35.0 Coupling a Prime Mover and Trailer- (all trailers should be fitted with spring brakes that automatically apply when no air is in the trailer system)

- o Reverse prime mover as close as possible to the trailer without touching.
- Apply prime mover brakes.
- Check height for clearance.
- Make sure jaws on turntable are open.
- If a ball race turntable is fitted, make sure there is a block behind the king pin and ensure the turntable is not pinned-Typically not fitted to Lampson trailers
- Release prime mover brakes and reverse prime mover until turntable jaws lock positively onto kingpin.
- o Attempt to move forward gently in low gear to ensure coupling is secure.
- Check visually for complete jaw closure.
- o Connect air hoses and electrical cable-audibly check that the air brake system charging.



#### VEHICLE OPERATOR'S MANUAL



- Raise landing legs and remove any wheel chocks and dunnage under landing legs.
- Put pin in turntable if vehicle is fitted with a ball race turntable and the trailer is not fitted with a block to the rear of kingpin. Typically not fitted to Lampson trailers
- Check all trailer lights are working.
- o Check brake operation before proceeding.

# 36.0 Uncoupling Prime Movers and Trailers

- o Ensure prime mover and trailer are in a straight line and on a firm, level surface.
- o Apply vehicle brakes and/or chock the wheels.
- o Remove air lines and audibly check that spring brakes apply, remove electrical cable
- Lower landing legs (on dunnage if ground is soft or uneven).
- Release turntable jaws and slowly drive prime mover forward to clear the kingpin. Keep checking the trailer does not drop.
- Visually check trailer stability and safety.

#### 37.0 Coupling a Dog Trailer

When coupling a dog trailer, check the ring feeder pin is firmly locked in place and that the safety lever is fully home.

#### 38.0 Customer Site Safety Rules

It is a condition of entry onto any properties (including sites not controlled by Lampson) that you abide by any on site safety rules or regulations applicable to that site. These may include such things as being prohibited to climb on vehicles, having reversing buzzers fitted, using exclusion zones etc. Check site specifics before or when entering site.

#### 39.0 Washing Vehicles

Vehicle operators are not to place themselves in hazardous positions while cleaning vehicles or vehicle windscreens.

Vehicle cleaning or repairs are not to be carried out while on mine sites. (Some mine sites require the vehicle to be washed down on entry and exit.)

#### 40.0 Forklifts

Whenever operating on a customer's site, remember that forklifts have right of way. You are not permitted to drive a forklift on a third party site unless specifically requested to do so and have been trained and licensed to operate that forklift. Never ride on or allow yourself to be lifted on the blades of a forklift. Trained and certified operators can only operate forklifts.

#### 41.0 Manual Lifting

When lifting heavy or awkward items, use correct lifting techniques and if necessary, seek assistance. Wear gloves when handling objects that may cause damage to your hands.

#### 42.0 Unsafe Tools or Equipment

Do not use damaged, faulty or unsafe equipment. Report defects as soon as possible.



#### VEHICLE OPERATOR'S MANUAL



#### 43.0 Parked Vehicles

Do not go underneath; stand in front of or behind a stationary vehicle while the engine is running.

#### 44.0 Entering or Leaving Vehicles

Care must be taken when entering or leaving the cab of a vehicle or when climbing on or off a trailer or tray.

#### 45.0 Protective Clothing

Appropriate protective clothing must be worn at all times when required by site safety rules or regulations. Generally, the minimum dress standard includes safety footwear, hard hat and safety glasses.

#### 46.0 Oversize Loads

Ensure correct equipment, signage and restraint gear is available for load being picked up. Check with Supervisor re permits, route weight, escort requirements, SEC or Police escorts.

At pick up point, phone Supervisor and confirm weights and dimensions of load before loading.

Once loaded, secure and proceed to site on designated route. Follow instructions from pilot(s) if applicable.

# 47.0 Motor Vehicle Accident Procedure

In the event of an accident involving a company or subcontractor vehicle, the following procedure is to be adopted:

- Stop the vehicle, clear of the carriageway if possible. Turn off the engine and battery isolator switch.
- See if any persons are injured and assist if possible. Contact 000 for Police, Ambulance or Fire Brigade.
- Place warning triangles in appropriate places. Protect the accident scene from further danger by shielding injured persons who cannot be moved and by warning oncoming traffic.
- Contact your nominated Supervisor as soon as possible regardless of the extent of the damage. After hours contact should be made using the after hours numbers list.
- The police must attend the scene if:
- Any person is killed or seriously injured.
- o Damage to property other than the vehicle is in excess of \$1000.00.
- The other driver left the scene without exchanging particulars.
- o Either driver is suspected of being under the influence of alcohol or drugs.
- Any of the vehicles involved are to be towed away.



#### VEHICLE OPERATOR'S MANUAL



If the police do not attend the scene, you must report the accident to the nearest police station.

Complete all details on return on a Motor Vehicle Accident Report Form available from the Lampson Risk Manager. Complete an Incident Report form and hand to Supervisor.

- O Not under any circumstances admit liability regardless of how the accident occurred. You are obliged to supply only your name and address to other persons involved. If involved in a serious accident, it is advisable not to make a statement while under stress or shock at an accident scene.
- Do Not make any media statements. All requests for media statements are to be referred to the Managing Director of Lampson.
- All damage to third party property, i.e. our customer's property is to be reported to the Lampson Risk Manager and your Supervisor as soon as possible.



#### VEHICLE OPERATOR'S MANUAL



## <u>SAFE WORK PROCEDURE</u>

# **VEHICLE ACCESS AND EGRESS-Cabs**

Vehicle access and egress procedures will be dependent on the type of vehicle.

It is essential for your own safety that you utilise the steps and handholds provided.

Please ensure that you maintain 3 point contact at all times.

If you believe that a particular vehicle cannot be accessed in a safe manner please advise your supervisor.

## **SAFE WORK PROCEDURE**

# **VEHICLE ACCESS AND EGRESS- Truck and Trailer Trays**

Procedures for Access and Egress from vehicle trays will be dependent on the type of vehicle. At all times your must use a safe method to get onto and off vehicle trays. This can be either by using ladders correctly positioned against the vehicle or built into the vehicle or even accessing the trailer from steps onto the fuel tank etc on the prime mover or via crash bars at the rear of the trailer.

At all times ensure that you have 3 point contact and that there is no chance of slipping on diesel, mud or grease.

Do not jump off the tray to get down or climb over vehicle gates.

# If you have to be on the back of a truck be aware that it is far enough to fall to seriously hurt yourself

Some sites prohibit access to the tray of any vehicle at any time



#### VEHICLE OPERATOR'S MANUAL



## SAFE WORK PROCEDURE

## **DOUBLING UP TRAILERS**

Trailer to be lifted needs to be safely disconnected and in a stable position with crane access suitable for the operation. A similar procedure is applicable whether the dolly is on or the trailer is on legs.

As much of the operation as possible should be done from the ground to avoid the requirement to access the tray of the trailer to complete any task. Tie down chains should be draped between the inner and outer tyres at front and rear over the wheel spacers prior to lifting the trailer. Where there is no dolly attached the location and placement of the front chain should be done prior to the trailer being lifted.

If using two cranes then dual lift procedures must be followed. Skel trailers can often be lifted successfully using large forklifts. Lift chains should likewise be located so that their placement allows the lift to proceed safely and efficiently but also allows their removal without accessing either trailer. This may require using fibre ropes attached to each set of chains to facilitate dragging them down to an accessible point to disconnect. Logically the chains will be cradled under the trailer at suitable points to allow the lift to proceed safely and efficiently without causing any damage to either the lifting gear or the trailers. Good rigging practice should always be followed and if necessary this procedure should be adapted in the required instances to allow and follow safe and acceptable rigging practices. Tag lines should be used to control and finally locate the lifted trailer into its final position.

The top trailer should be tied adequately to allow safe transport taking into consideration acceptable load restraint practice and the condition of the roads to be traversed. All chaining down should be done from ground level.

Unloading of the trailer should be the reverse of the above procedure with access to the trays of either trailer being avoided where possible.

Please be aware that as a professional transport operator in our area of operation sometimes the only person controlling the actual things you do and the way you do them is you!



# VEHICLE OPERATOR'S MANUAL



# SAFE WORK PROCEDURE

# Looding Trucks

Loau	ing 1r	ucks			ODED ATO	ODG NAME & CICNATUDES
JOB DESCRIPTION LOCATION:		Lampson standard procedure For the loading of trucks		JOB No:		ORS NAME & SIGNATURES
	ır		1	_	<u> -                                     </u>	 II
STEP	DE	SCRIPTION OF JOB STEP	OR HAZ	TAL ACCIDI ARDS.	ENTS	SAFE CONDITION OR ACTIVITY REQUIRED
	OF TH	THE NATURAL STEPS E JOB. LY DESCRIBE WHAT NE	ACCID	HE POTENTI ENTS OR HA CH STEP.		* DESCRIBE SPECIFIC PRECAUTIONS AND KEY POINTS IN DETAIL FOR EACH STEP AND EACH HAZARD. * CONFIRM A BASIC SAFE JOB METHOD. * CONSIDER PEOPLE, PROCESS AND EQUIPMENT.
	GENE	RAL IDERATIONS:				
	MACHI LIFTING FALLIN STRIKI FALLIN OVERL LIFTING DUST, F RADIO: BE AWA SECURI KEEP C LOADS: OBSER	IG, TRIPPING, STUMBLING: NG AGAINST OBJECTS: NG OBJECTS: OADING: G: FUMES, VAPOURS: PERATIONS BY TWO WAY ARE OF HEIGHT DANGERS: E ALL LADDERS: ELEAR OF SUSPENDED				
1.0	THE NO THAT T	E THAT TRUCK IS PARKED AT MINATED POSITION AND HE GROUND IS CAPABLE OF NING THE LOAD OF THE	GROUNE	) FAILURE		STABLE FIRM GROUND
1.1	TO BE E	EESS S TO TRUCK TRAY OR LOAD BY APPROVED STEPS OF THE BED HEIGHT	TRIP FALL HEIGHT	POTENTIAL		ENSURE THAT SURFACE IS CLEAN AND FREE OF WATER, GREASE OR OILS. BE AWARE OF STORED COMPONENTS ON TRUCK. ENSURE THAT STEPS OR LADDER IS TIED OFF. SAFETY HARNESS IS WORN WHERE IT CAN BE APPROPRIATELY SECURED.
1.2		CAL SAFETY QUIREMENTS	OBJECTS CONTUS ABRASIO BURNS U	ION	,	SAFETY BOOTS  SAFETY HELMET GLOVES LONG SLEEVE SHIRT LONG TROUSERS

PERSONAL PROTECTION

DUST, FOREIGN OBJECTS

SAFETY EYE WEAR



# VEHICLE OPERATOR'S MANUAL



1.3	PREPARE FOR LOAD INSALLATION ONTO TRUCK ENSURE THAT ADEQUATE DUNNAGE IS AVAILABLE AND PLACE IN THE CORRECT POSITION ON THE TRUCK (IF REQUIRED). ENSURE THAT YOU HAVE ADEQUATE TIMBER OR RUBBER PACKING AVAILABLE TO TIE THE LOADS DOWN WITH	PINCH POINTS  SLIP/TRIP  DAMAGE OF  COMPONENTS	BE AWARE OF SAFE MODE OF OPERATION.  STORE EQUIPMENT IN STORE BOXES AND KEEP AREA TIDY.  SAFE PACKING
1.4	PREPARATION FOR CRANE SECURE CRANE SHACKLES AND WIRE ROPE OR SOFT SLINGS TO LIFTING POINTS ON THE ITEM. AREA IS CLEAR OF PERSONNEL.	SLING FAILURE SHACKLE FAILURE GROUND FAILURE FALL SUSPENDED LOAD PINCH POINTS CRANE PLACEMENT	RATED SAFE LOAD STAMPED ON SLING RATED SAFE LOAD ON SHACKLE STABLE FIRM GROUND OBSERVE AND BE AWARE OF HEIGHT AND WEAR SAFETY HARNESS WERE APPROPRIATE. BE AWARE OF MOVING LOAD. CRANE TO BE PLACED AT APPROPRIATE POSITION TO SAFELY HANDLE THE LOAD.
1.5	PLACEMENT OF LOAD ON DUNNAGE  10% OF LOAD.  WOODEN DUNNAGE.  STAY CLEAR OF LOAD AND CRANE	SUSPENDED LOAD  LOAD CORRECTLY RIGGED. PLACEMENT AND APPROPRIATE TO TAKE THE LOAD. PINCH POINTS, CRUSHING.	STAY CLEAR OF LIFTED LOAD BE AWARE OF MOVING LOADS. BE AWARE OF HEIGHT AND WEAR APPROPRIATE SAFETY EQUIPMENT FOR REMOVAL OF RIGGING EQUIPMENT. KEEP ARE CLEAN AND TIDY OF EQUIPMENT. ENSURE LOAD PLACEMENT IS FIRM ON DUNNAGE.
1.4	TIE DOWN OF EQUIPMENT  PREVENT STEEL ON STEEL  SECURITY OF LOAD, MOVEMENT OF LOAD.  TIE DOWN LOADS	DAMAGE TO EQUIPMENT  LOSS OF LOAD AND DAMAGE TO EQUIPMENT  KICK BACK OF HOLDING MEDIUM  SLIP TRIP	NYLON TIES OR STEEL CHAINS WITH RUBBER SOFTENERS.  OBSERVE MANUFACTURERS REQUIREMENTS.  KEEP ARE CLEAN AND TIDY OF EQUIPMENT.



# VEHICLE OPERATOR'S MANUAL



# SAFE WORK PROCEDURE

# **Unloading Trucks**

					DED ATO	DRS NAME & SIGNATURES
JOB Lar DESCRIPTION LOCATION:		Lampson standard procedure For the Unloading of trucks		JOB No:		
STE P	DES	SCRIPTION OF JOB STEP	POTENTIAL ACCIDENTS OR HAZARDS.		ENTS	SAFE CONDITION OR ACTIVITY REQUIRED
	OF THE	Y DESCRIBE WHAT	ACCIDI	HE POTENTI ENTS OR HA CH STEP.		* DESCRIBE SPECIFIC PRECAUTIONS AND KEY POINTS IN DETAIL FOR EACH STEP AND EACH HAZARD. * CONFIRM A BASIC SAFE JOB METHOD. * CONSIDER PEOPLE, PROCESS AND EQUIPMENT.
	GENER	AL CONSIDERATIONS:				
	LIFTING: FALLING STRIKING FALLING OVERLO. LIFTING: DUST, FU RUN OPE RADIO: BE AWAR SECURE A KEEP CLI	ERY IN MOTION:  , TRIPPING, STUMBLING: G AGAINST OBJECTS: OBJECTS: ADING:  MES, VAPOURS: RATIONS BY TWO WAY  RE OF HEIGHT DANGERS: ALL LADDERS: EAR OF SUSPENDED LOADS: E LOCAL SAFETY				
1.0	THE NOM THE GRO	THAT TRUCK IS PARKED AT INATED POSITION AND THAT UND IS CAPABLE OF NG THE LOAD OF THE TRUCK	GROUND	) FAILURE		STABLE FIRM GROUND
1.1		O TRUCK TRAY OR LOAD TO PROVED STEPS OF THE	SLIP TRIP FALL HEIGHT	POTENTIAL		ENSURE THAT SURFACE IS CLEAN AND FREE OF WATER, GREASE OR OILS. BE AWARE OF STORED COMPONENTS ON TRUCK. ENSURE THAT STEPS OR LADDER IS TIED OFF. SAFETY HARNESS IS WORN WHERE IT CAN BE APPROPRIATELY SECURED.
1.2	LOCAL SAFETY REQUIREMENTS		OBJECTS CONTUS: ABRASIC BURNS U BURNS L	ION	Y	SAFETY BOOTS  SAFETY HELMET GLOVES LONG SLEEVE SHIRT LONG TROUSERS SAFETY EYE WEAR



### VEHICLE OPERATOR'S MANUAL



1.3	PREPARE FOR LOAD REMOVAL REMOVE ALL TIE DOWN CHAINS OR OTHER TIE DOWN MEDIUMS.	PINCH POINTS  KICK BACK OF HOLDING MEDIUM.  SLIP/TRIP	BE AWARE OF SAFE MODE OF OPERATION. OBSERVE MANUFACTURERS INSTRUCTIONS. STORE EQUIPMENT IN STORE BOXES AND KEEP AREA TIDY.
1.3	PREPARATION FOR CRANE SECURE CRANE SHACKLES AND WIRE ROPE OR SOFT SLINGS TO LIFTING POINTS ON THE ITEM.	SLING FAILURE SHACKLE FAILURE GROUND FAILURE FALL PINCH POINTS CRANE PLACEMENT	RATED SAFE LOAD STAMPED ON SLING RATED SAFE LOAD ON SHACKLE STABLE FIRM GROUND OBSERVE AND BE AWARE OF HEIGHT AND WEAR SAFETY HARNESS WERE APPROPRIATE. BE AWARE OF MOVING LOAD. CRANE TO BE PLACED AT APPROPRIATE POSITION TO SAFELY HANDLE THE LOAD.
1.4	REMOVAL OF EQUIPMENT ENSURE THAT AREA IS CLEAR OF PERSONNEL. 10% OF LOAD. WOODEN DUNNAGE. STAY CLEAR OF LOAD AND CRANE	SUSPENDED LOAD  LOAD CORRECTLY RIGGED. PLACEMENT AND APPROPRIATE TO TAKE THE LOAD. PINCH POINTS, CRUSHING.	STAY CLEAR OF LIFTED LOAD  MOVEMENT OF LOAD  CLEAN AND FREE FROM ROT.  BE AWARE OF LIFTED LOAD AND LOAD MOVEMENT.
1.5	PLACEMENT OF LOAD ON DUNNAGE	SUSPENDED LOAD PINCH POINTS HEIGHT POTENTIAL  SLIP, TRIP SECURITY OF LOAD	STAY CLEAR OF LIFTED LOAD BE AWARE OF MOVING LOADS. BE AWARE OF HEIGHT AND WEAR APPROPRIATE SAFETY EQUIPMENT FOR REMOVAL OF RIGGING EQUIPMENT. KEEP ARE CLEAN AND TIDY OF EQUIPMENT. ENSURE LOAD PLACEMENT IS FIRM ON DUNNAGE AND SECURED IF REQUIRED BY TIE DOWN MEDIUM.

### **APPENDIX A**

# **SAFE WORK PROCEDURE**

# **LOADING AND UNLOADING FLATRACKS**

The majority of steel structural elements (except oversized columns and fabricated components) for the Cloudbreak project will be transported to site in container based flat racks.



#### VEHICLE OPERATOR'S MANUAL



All stacking of these fabricated elements into the flat racks will be done by the fabrication company who made the components. It should be packed with sufficient dunnage to allow safe and efficient stacking and chaining down.

Each Lampson trailer will be supplied with 6 chain and dog sets to chain the steel into the flat rack. All chaining and tensioning is to be done on the ground prior to the flat rack being lifted onto the truck/trailer to avoid any working at heights. Load restraint shall be done in accordance with the NTC Load Restraint Guide suggested methods and extents. As professional truck operators you also have to use your judgement and experience to assess where the most suitable and efficient actual chain down positions are. In all instances the distance to site and the road conditions that will be encountered must also be taken into consideration.

Once adequately chained into the rack it can then be lifted by crane or forklift into place on the trailer where it must be secured by twist locks.

The integrity of the chaining in must be assessed during your transit to site and tightened or adjusted as required to allow safe carriage of the load at all times.

Unloading operation shall mirror the loading process. If the load has shifted within the rack during transport the removal process may have to be reviewed and adjusted to allow this operation to proceed safely. Typically there is to be no access onto the rack whilst it is on the trailer. Likewise there should be no removal of chains allowed whilst the rack is still on the trailer.

Once the flat rack has been removed from the trailer and placed on the ground the chains can be removed if their removal will not create any potential unsafe conditions.

As a truck operator you are not to participate in the unloading operation and should remain in the cabin of the truck or move to a safe location out of the operating area if the crane operations involve slewing the load over or near the cab of your truck.

AT ALLTIMES DURING THE CHAINING-LOADING-TRANSPORT-UNLOADING-UNCHAINING OPERATIONS YOUR OWN PERSONAL SAFETY AND THE SAFETY OF THOSE AROUND YOU IS THE PRIME OBJECTIVE- NOTHING ELSE IS AS IMPORTANT AS THAT!

# Appendix D: Incident notification requirements (major project approval, Appendix 1)

#### Written incident notification requirements:

- A written incident notification addressing the requirements set out below must be submitted
  to the Secretary via the Major Projects website within seven days after the Proponent
  becomes aware of an incident. Notification is required to be given under this condition even
  if the Proponent fails to give the notification required under condition 5.1 or, having given
  such notification, subsequently forms the view that an incident has not occurred.
- 2. Written notification of an incident must:
  - a. identify the development and application number;
  - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
  - c. identify how the incident was detected;
  - d. identify when the Proponent became aware of the incident;
  - e. identify any actual or potential non-compliance with conditions of approval;
  - f. describe what immediate steps were taken in relation to the incident;
  - g. identify further action(s) that will be taken in relation to the incident; and
  - h. identify a project contact for further communication regarding the incident.
- 3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Secretary, the Proponent must provide the Secretary and any relevant public authorities (as determined by the Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
- 4. The Incident Report must include:
  - a. a summary of the incident;
  - b. outcomes of an incident investigation, including identification of the cause of the incident;
  - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
  - d. details of any communication with other stakeholders regarding the incident.

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