Appendix B1

Construction Transport and Traffic Management Sub-plan

M12 Motorway – Central

January 2025

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Document control

File Name	M12 Central CEMP: Appendix B1
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Approval and authorisation

Plan reviewed by:	Plan reviewed by:
[redacted] Seymour Whyte Environmental Site Representative	[redacted] Seymour Whyte Project Manager
18/01/2025	18/01/2025
	

Revision history

Revision	Date	Description
A	18/02/2022	First draft for TfNSW review
B	29/04/2022	Updated in response to TfNSW review
C	20/06/2022	Updated in response to TfNSW review
D	27/07/2022	Updated in response to TfNSW and ER review
E	18/08/2023	Updated in response to OCEMP review
F	18/01/2025	Updated in response to OCEMP review

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Glossary / Abbreviations

Abbreviation	Expanded text
AR	Amendment Report
AS	Australian Standard
CAQMP	Construction Air Quality Management Sub-plan
CoA	Condition of Approval
Commonwealth CoA	Federal Conditions of Approval under the EPBC Act
Construction	Includes all activities required to construct the CSSI as described in the documents listed in Condition A1, including commissioning trials of equipment and temporary use of any part of the CSSI, but excluding Low Impact Work which is carried out to complete prior to the approval of the CEMP, works approved under a Site Establishment Management Plan, approved under a Consistency Assessment, demolition of acquired residential houses, structures and sheds, and works specified in Appendix B and approved under an environmental management plan(s) in accordance with Condition A24.
CSSI	Critical State Significant Infrastructure
CFFMP	Construction Flora and Fauna Management Sub-plan
CNVMP	Construction Noise and Vibration Management Sub-plan
CPTED	Crime Prevention Through Environmental Design
CSWMP	Construction Soil and Water Management Sub-plan
CTTMP	Construction Transport and Traffic Management Sub-plan
DAWE	Former Commonwealth Department of Agriculture, Water and the Environment (Now Department of Climate Change, Energy, the Environment and Water)
DCCEEW	Commonwealth Department of Climate Change, Energy, Environment and Water
Division 5.2 Approval	Approval issued by NSW Minister for Planning and Public Spaces for the M12 Motorway
DPE	Former NSW Department of Planning and Environment (formerly NSW Department of Planning, Industry and Environment)
DPIE	Former Department of Planning, Industry and Environment
DPHI	NSW Department of Planning, Housing and Infrastructure (formerly NSW DPIE)
EIS	Environmental Impact Statement

Abbreviation	Expanded text
EMS	Environmental Management System

Environmental Assessment Documentation (EAD)	The set of documents that comprise the Division 5.2 Approval: • Roads and Maritime Services (October, 2019) M12 Motorway, Environmental Impact Statement (EIS) • Transport for NSW (October, 2020) M12 Motorway, Submissions Report (the Submissions Report) • Transport for NSW (October, 2020) M12 Motorway, Amendment Report (AR) • Transport for NSW (December, 2020) M12 Motorway, Amendment Report submissions report (ARSR) • Transport for NSW (March, 2021) The M12 Motorway Amendment Report Submissions Report – Amendment (ARSR amendment) • WSP (October, 2021) M12 Motorway – West Package Detailed Design Consistency Assessment • GHD (October, 2021) M12 Motorway – Central Package Detailed Design Consistency Assessment • Arcadis (June, 2022) M12 Motorway – Sydney Water Crossings Consistency Assessment • Arcadis (July, 2022) M12 Motorway – Design Boundary Changes Consistency Assessment • Arcadis (August, 2022) M12 Motorway – Minor Consistency Assessment for Proposed Change to the M12 Motorway Project (M12 Central) • Arcadis (rSeptember, 2023) M12 Motorway – Devonshire Road Temporary Roundabout Consistency Assessment • WSP (September, 2023) M12 Motorway – Elizabeth Drive Connections Consistency Assessment • TfNSW (September, 2023) M12 Motorway – Minor Consistency Assessment M12 West demolition of structures at 752 Luddenham Road • TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East AF9 Power Supply • TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East Cecil Road Laydown Area • TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East Temporary Construction Signage • Arcadis (December, 2023) M12 Motorway – East Site 48, 50 and 51 Boundary Changes Minor Consistency Assessment • Arcadis (January, 2024) M12 Motorway – Minor Consistency Assessment M12 Central Water Tower Access Road The documents that comprise the EPBC referral: • Submission #3486 – The M12 Motorway Project between the M7 Motorway, Cecil Hills and The Northern Road, Luddenham, NSW

Abbreviation	Expanded text
	Notification of referral decision and designated proponent - controlled action; date of decision 19 October 2018; ID: 2018-8286.
EPA	NSW Environmental Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999
EPL	Environment Protection Licence
ER	Environmental Representative
ESM	TfNSW Environment and Sustainability Manager
ESR	Environmental Site Representative (Seymour Whyte)
FCC	Fairfield City Council
Federal Approval	Approval (EPBC 2018/8286) for carrying out the M12 Project under Part 8 of the Environmental Protection and Biodiversity Conservation Act 1999 subject to specific CoA as detailed in Annexure A of the approval.
Final construction footprint	The area shown in the map(s) submitted under Commonwealth CoA 2, determined by TfNSW in accordance with a consistency assessment(s) or a modification assessment under the NSW Environmental Planning and Assessment Act 1979 where no new significant impacts to protected matters are identified.
GSO	Greater Sydney Operations (incorporates the TMC)
Hold Point	A point beyond which a work process must not proceed without express written authorisation from Transport for New South Wales
Infrastructure Approval	Approval (SSI 9364) for carrying out of the M12 Project under Section 5.19 of the *Environmental Planning and Assessment Act 1979* subject to specific CoA as detailed in Schedule 2 of the approval.
LCC	Liverpool City Council
Local Road	Any road that is not defined as a classified road under the *Roads Act 1993 (NSW).*
LoS	Level of Service
LUIIP	Western Sydney Land Use and Infrastructure Implementation Plan by DPIE 2018
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water (formerly NSW DPE which has now been split into NSW DCCEEW and NSW DPHI)
OCEMP	Overarching Construction Environmental Management Plan

Abbreviation	Expanded text
OCS	Overarching Communication Strategy
OSOM Vehicle	Oversize and / or overmass vehicle
PCC	Penrith City Council
PMP	Pedestrian Movement Plans
Primary CoA	CoA that are specific to the development of this Plan
Project, the	The CSSI as approved by the Minister for Planning and Public Spaces on the 23 April 2021 (SSI 9364)
QA	Quality Assurance
REMM	Revised Environmental Management Measure as provided in the Amendment Report
Roads and Maritime	Former Roads and Maritime Services, now Transport for NSW
ROL	Road Occupancy Licence
RTA	Former Roads & Traffic Authority
SEARs	Secretary's Environmental Assessment Requirements
Secondary CoA	CoA that are related to, but not specific to, the development of this Plan
SZA	Speed Zone Authorisations
TGS	Traffic Control Plan, now referred to as Traffic Guidance Schemes (TGS)
TCWS	TfNSW Traffic Control at Work Sites Manual (version 6.1) (2022)
TfNSW	Transport for New South Wales
TGS	Traffic Guidance Schemes, formerly referred to as Traffic Control Plans
TMC	Transport Management Centre
TMP	Traffic Management Plan
TSP	Traffic Staging Plan
VMP	Vehicle Movement Plan
VMS	Variable message sign
WSIA	Western Sydney International Airport

1 Introduction

1.1 Context

This Construction Transport and Traffic Management Sub-plan (CTTMP or Plan) forms part of the Construction Environmental Management Plan (CEMP) for the M12 Motorway – Central package.

This CTTMP has been prepared under the Overarching Construction Environmental Management Plan (OCEMP) and relevant sub-plans developed for M12 Motorway (the Project), to address the requirements of the Minister's Conditions of Approval (CoA), Revised Environmental Management Measures (REMMs) listed in the Environmental Impact Statement (EIS), Submissions Report, Amendment Report, and Amendment Report Submissions Report (ARSR), ARSR Amendment Report, all subsequent Consistency Assessments (CA's) all applicable legislation, and Transport for New South Wales (TfNSW) specifications.

1.2 Background

1.2.1 M12 Motorway (the Project)

TfNSW is planning to construct and operate the M12 Motorway (the Project) to provide direct access between the Western Sydney International Airport (WSIA) at Badgerys Creek and Sydney's motorway network. The M12 Motorway will run between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham for about 16 kilometres (km) and is expected to be opened to traffic prior to opening of the WSIA.

Key features of the Project include:

- An east-west 16 km motorway between the M7 Motorway, Cecil Hills and The Northern Road, Luddenham
- A motorway built for four lanes (with provision for up to six lanes) with a median to separate opposing traffic flows
- A direct connection to Western Sydney International Airport
- A new connection to The Northern Road with traffic lights
- A motorway-to-motorway interchange at the M7 Motorway
- Provision for a future interchange connecting Mamre Road and Devonshire Road at the M12 Motorway.

A detailed Project description is provided in Section 2.1 of the CEMP.

1.2.2 Statutory Context

The Project is subject to an approval under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as Critical State Significant Infrastructure (CSSI). The Project is also a controlled action under Section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), requiring a separate approval from the Australian Minister for the Environment.

The Project was assessed as part of an EIS, Submission Report, Amendment Report, ARSR and ARSR Amendment Report which are herein referred to as the Environmental Assessment Documentation. REMMs are nominated in these assessments to manage the identified impacts.

Approval for the Project under the EP&A Act was granted by the Minister for Planning on 23 April 2021 (CSSI 9364). Approval for the Project under the EPBC Act was granted by the Australian Minister for the Environment on 3 June 2021 (EPBC 2018/8286).
The following additional assessments have since been undertaken:

- Two Consistency Assessments (CA) for M12 West and Central addressing detailed design changes for the Project construction boundary approved in October 2021
- Sydney Water Consistency Assessment related to construction boundary extensions associated with Sydney Water utility crossings; approved in June 2022
- Design Boundary Change Consistency Assessment related to design boundary changes within the M12 alignment. This required an extension of the construction footprint and operational footprint, property adjustments and the demolition of Building No.1 at McMasters Field Station; approved in July 2022. Threatened Species Surveys were also undertaken along the M12 alignment between September and December 2021 to satisfy the NSW Conditions of Approval (CoA) E4, E5 and E6; the outcomes of which captured within the Design CA.
- Minor Consistency Assessment required amendments to the construction footprint as a result of utility adjustments and tie in works, property adjustments for flood alleviation and improvements to ancillary facility access due to safety concerns, temporary widening of Elizabeth Drive and signage installation; approved in August 2022.

1.2.3 M12 Motorway Delivery Strategy

The Project will be constructed in three stages under separate construction contracts:

- **M12 West**– between The Northern Road, Luddenham and about 250 metres east of Badgerys Creek
- **M12 Central** (the subject of this Plan) – between about 500 metres west of South Creek and the Western Sydney Parklands at Duff Road, Cecil Park
- **M12 East** Elizabeth Drive connections, at Cecil Park and
- **M12 East -** the M7/M12 interchange.

Each package of work is to be delivered under separate contracts on behalf of the proponent TfNSW. While the packages will commence at different times there will be periods during which the packages works will overlap. Co-ordination between the contractors will be required to manage cumulative impacts.

1.3 M12 Central

Seymour Whyte has been engaged to deliver the M12 Central package. Construction of the M12 Central package involves building 7.5 km of motorway from west of Badgerys Creek to the Water Tower Access Road within Western Sydney Parklands.

The M12 Central package will provide a dual carriageway with a wide median to allow for future widening to six lanes. Safety barriers will be provided along the length of the package. Emergency

stopping bays and emergency crossovers will also be provided at regular intervals. A shared user path with lighting will provide an active transport link along the motorway and eastward to the M7.

The M12 Central package includes the following bridges:

- Twin bridges over South Creek
- A bridge for Clifton Avenue over the M12 Motorway
- Twin bridges over Kemps Creek
- Twin bridges over Elizabeth Drive near Mamre Road
- Twin Bridges over Range Road
- A bridge for the Water Tower Access Road over the M12 Motorway
- A private property access bridge in University of Sydney land.

Retaining walls will be provided around Range Road to help limit Project impacts on Range Road. Adjustments will be made to local roads including Clifton Avenue and Salisbury Road.

The M12 Central package also requires relocation of utility services including electricity, water, gas and telecommunications. Urban design features of this package include Aboriginal artwork on bridges, rest areas on shared user paths, interpretive signage and landscape planting.

A detailed description of the M12 Central package is provided in Section 2.3 of the CEMP.

1.4 Scope of the Plan

The scope of this CTTMP is to describe how the potential transport and traffic impacts will be managed during construction of the M12 Central package. This Plan has been prepared under and consistent with the OCEMP, and in particular the Overarching Construction Transport and Traffic Management Sub-Plan (OCTTMP) considering relevant construction activities and constraints. In the preparation and ongoing implementation of this Plan, SMART (Specific, Measurable, Achievable, Realistic and Timely) principles are to be considered and applied.

This Plan is applicable to all activities during construction of the M12 Central package, including all areas where physical works will occur or areas that may otherwise be impacted by the construction works, and under the control of Seymour Whyte. All Seymour Whyte staff and sub-contractors are required to operate fully under the requirements of this Plan and related environmental management plans, over the full duration of the construction program.

A copy of this CTTMP will be kept on the premises for the duration of construction.

Operational transport and traffic impacts and operation measures do not fall within the scope of this CTTMP and therefore are not included within the processes contained within this Plan.

1.5 Environmental Management Systems overview

The Environmental Management System (EMS) for the M12 Central package is described in Section 3 of the CEMP. The EMS is consistent with the overarching EMS described in Section 3 of the OCEMP.

To achieve the intended environmental performance outcomes, Seymour Whyte have established, implemented, maintained and continually improved an EMS in accordance with the requirements of

ISO14001:2015. The Seymour Whyte EMS will be adopted as the guiding environmental management framework for the M12 Central package.

The EMS consists of governance documentation, incorporating environmental management plans, policies, procedures and tools including:

- **M12 Central Environment and Sustainability Policy**. Outlines the commitments and intentions established by Seymour Whyte to ensure environmental performance and sustainability objectives and targets are achieved (Appendix A3 of the CEMP)
- **CEMP**. Details the processes and procedures to be implemented during the M12 Central package to comply with applicable CoA, REMMs, Environment Protection Licence (EPL), legislative obligations and contractual requirements. The relevant compliance obligations are detailed in Appendix A1, with a cross reference to where they are met in this Plan
- **Environmental Management Sub-plans**. These documents describe procedures and controls for specific environmental aspects requiring more rigorous management strategies
- **Monitoring Programs**. Details the monitoring regime to be implemented during construction to compare the actual performance of construction against the objectives outlined in the relevant Plan, including setting specific triggers and associated responses
- **Sensitive Area Plans (SAPs)**. A series of maps providing key features of the alignment and relevant environmental constraints. Features include waterways, heritage, biodiversity contamination and sensitive receivers amongst other site relevant features.
- **Environmental Work Method Statements (EWMS)**. Management measures identified in this Plan may also be incorporated into site or activity specific Environmental Work Method Statements (EWMS). EWMS incorporate appropriate mitigation measures and controls and identify key procedures to be used concurrently with the EWMS (refer to CEMP Section 3.3.3 for requirements for EWMS preparation and approval).
- **Traffic Management Plans**. Developed for site specific activities and incorporating relevant documents, such as the Traffic Staging Plans (TSP), Traffic Guidance Scheme (TGS), Signage Strategy, Vehicle Movement Plans (VMP) and Pedestrian Movement Plans (PMP) for relevant road authority acceptance
- **Road Dilapidation Reports**. Must be prepared before any local road is used by heavy vehicles M12 Central package unless otherwise agreed by the relevant road authority
- Procedures, strategies and protocols. Detailed procedures for inclusion in work packs.

1.5.1 CTTMP preparation, endorsement and approval

The OCTTMP has been prepared to satisfy the NSW CoA in relation to transport and traffic management during construction of the Project, particularly NSW CoA C4(a) and has subsequently been approved by the Planning Secretary. This stage-specific CTTMP for the M12 Central package has been developed under and consistent with the approved OCTTMP.

This CTTMP will be reviewed by the TfNSW Senior Project Manager and the TfNSW Environment and Sustainability Manager (ESM) (or delegate) and the independent Environmental Representative (ER) to confirm it is consistent with, and incorporates, all relevant elements of the approved OCEMP, prior to submission to the Planning Secretary for information. Construction of the M12 Central package will not commence until the CTTMP has been reviewed to the satisfaction of the TfNSW ESM and ER and provided to the Planning Secretary for information.

1.5.2 Interactions with other management plans and strategies

This Plan has the following interrelationships with other management plans and documents:

- Site Establishment Management Plan (SEMP), which identifies adjacent residential and other receivers. The SEMP includes details of site-specific traffic, transport and access management requirements
- M12 Central Communication and Stakeholder Engagement Strategy which has been developed under the Overarching Communication Strategy (OCS), and details procedures and processes for community notification, consultation and complaints management
- Construction Noise and Vibration Management Sub-plan (CNVMP) addresses noise impacts associated with construction traffic on surrounding areas
- Construction Air Quality Management Sub-plan (CAQMP) addresses emission impacts associated with increased vehicles within the road network and dust impacts from construction roads
- Construction Soil and Water Management Sub-plan (CSWMP) addresses soil, erosion and water quality impacts associated with site access points and construction roads
- M12 Central Sustainability Management Plan, developed under the overarching Project Sustainability Strategy and considers transport and traffic emissions from vehicles.

1.6 Consultation

The OCTTMP has been prepared in consultation with relevant Councils including Penrith City Council, Liverpool City Council and Fairfield City Council. Key matters raised by stakeholders and how they have been addressed are outlined in the OCTTMP including consultation evidence in accordance with NSW CoA C4 and A5. This stage-specific CTTMP has been prepared under and consistent with the OCTTMP and therefore no further consultation is required as part of the preparation of this Plan.

Ongoing consultation between TfNSW, Seymour Whyte, neighbouring Project packages, other construction projects, stakeholders, the community and relevant agencies regarding the management of impacts on transport and traffic will be undertaken during the construction of the M12 Central package as required. The process for the consultation will be consistent with the OCS and as described in the M12 Central Community and Stakeholder Engagement Strategy which will be approved and implemented prior to traffic management.

Ongoing consultation related to transport and traffic will include, but not be limited to:

- Consultation with affected businesses and properties where pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties cannot be maintained. In accordance with NSW CoA E96 and REMM TT07, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected businesses and implemented before the disruption
- Consultation with TfNSW, relevant councils and bus operators regarding bus stop closures and / or relocations in accordance with REMM TT02
- Consultation with affected businesses and properties where property adjustments, including replacement of farm infrastructure (such as fencing) and relocation of property access is required in accordance with REMM SLP04

- Consultation with TfNSW, councils and other relevant stakeholders regarding the development of site-specific Traffic Management Plans (TMP) and associated elements such as Traffic Staging Plans (TSPs), Traffic Guidance Scheme (TGSs), Signage Strategy, Vehicle Movement Plans (VMPs) and Pedestrian Movement Plans (PMPs) in accordance with TfNSW QA Specification G10 – Traffic Management
- Notification of any changes in traffic conditions on roads or paths to road users, emergency services (police, ambulance and fire), public transport operators, and other relevant stakeholders in in accordance with REMM TT01 and subject to their requirements you may need to provide alternate access.
- Consultation with WSIA and Sydney Metro – Western Sydney Airport for traffic and access interfaces in accordance with REMM TT01
- Consultation with the operators of the M7 Motorway to develop measures to manage the potential impacts of construction within the operating M7 Motorway corridor
- Community notifications delays to road users and local communities with timely, accurate, relevant and accessible information about changed traffic and access arrangements, potential, and out of hours works with provision for feedback through a complaints line during construction.

The contact of relevant stakeholders is provided in Table 1-1.

Table 1-1: Stakeholder contact details

Position / Organisation	Name	Phone
EPA pollution hotline	n/a	131 555
Fire and Rescue NSW	n/a	000 (for pollution incidents that present an immediate threat to human health or property) 1300 729 579 (for pollution incidents that do not present an immediate threat to human health or property)
NSW Health – South Western Sydney Local Health District	n/a	(02) 8738 5755
SafeWork NSW	n/a	131 050
Penrith City Council	[redacted]	[redacted]
Liverpool City Council	[redacted]	[redacted]

Position / Organisation	Name	Phone
Project Manager – East	[redacted]	[redacted]
Project Manager – Central	[redacted]	[redacted]
Project Manager – West	[redacted]	[redacted]
TfNSW Project Director	[redacted]	[redacted]
TfNSW Utilities Manager	[redacted]	[redacted]
TfNSW Environment and Sustainability Manager	[redacted]	[redacted]
TfNSW Senior Environment and Sustainability Manager	[redacted]	[redacted]
TfNSW M12 Community and Stakeholder Engagement Representative	[redacted]	[redacted]
TfNSW M12 WHS Partner	[redacted]	[redacted]
TfNSW Environment and Sustainability Manager	[redacted]	[redacted]
Transit Systems		[redacted]
Department of Planning, Industry and Environment	Post-Approval: [redacted] Senior Compliance Officer: [redacted]	[redacted]
Sydney Metro – Western Sydney Airport	[redacted]	[redacted]
University of Sydney	[redacted]	[redacted]
Western Sydney International Airport	[redacted]	[redacted]

2 Purpose and objectives

2.1 Purpose

The purpose of this CTTMP is to describe how Seymour Whyte will manage potential transport and traffic impacts during construction of the M12 Central package.

2.2 Objectives

The key objective of the CTTMP is to ensure that potential transport and traffic impacts from construction of the M12 Central package are minimised. To aid in achieving this objective all CoA, REMMs and licence/permit requirements relevant to transport and traffic are described, scheduled and assigned responsibility as outlined in:

- Environmental Assessment Documentation
- Infrastructure Approval CoA (SSI 9364)
- Environment Protection Licence
- TfNSW Quality Assurance (QA) Specifications G1, G10 and G36
- TfNSW Sustainability Strategy 2019-2023
- All relevant legislation and other requirements described in Section 3.1 of this Plan.

2.3 Target

Targets for managing transport and traffic impacts during the M12 Central package include:

- Full compliance with the relevant legislative requirements, CoA and REMMs
- Ensure safe and continuous traffic movement for construction workers and the general public
- Maintain the capacity of existing roads where possible during construction to minimise road user delays
- Maintain continuity of access to local roads and properties
- Maintain or provide alternative safe pedestrian and cyclist access around work sites
- Undertake appropriate consultation with impacted residents and businesses and stakeholders
- Implement traffic control operations to minimise delays to road users taking into consideration traffic volumes including peak times of the day and seasonal traffic
- Avoid road occupancy where possible
- Plan all construction vehicle movements to minimise disruption to traffic flow on roads within the M12 Central package and surrounds
- Minimise impacts on, and complaints from, the community and stakeholders through the implementation of management measures as described in Section 5.18.

3 Environmental requirements

In accordance with NSW CoA A7, references in the terms of this Plan to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in at the date of the Infrastructure Approval (CSSI 9364).

3.1 Relevant legislation and guidelines

3.1.1 Legislation and regulatory requirements

Legislation relevant to transport and traffic include:

- *Roads Act 1993*
- *Road Transport Act 2013*
- *Transport Administration Act 1988*
- *Local Government Act 2013*
- *Dangerous Goods (Road and Rail Transport) Act 2008 (NSW)*
- Identified regulatory requirements are:
- Approved and valid Road Occupancy Licences (ROL)
- Approved relevant Speed Zone Authorisations (SZA)
- Australian Road Rules.

Legislation relevant to traffic management also includes the *Environmental Planning and Assessment Act 1979* (EP&A Act), under which the project approval was granted. Relevant provisions of the EP&A Act are explained in the register of legal and other requirements included in Appendix A1 of the CEMP.

3.1.2 Guidelines and standards

The main guidelines, specifications and policy documents relevant to this Plan include:

- Australian Standard 1428.1-2009 Design for access and mobility
- Australian Standard AS 1742 Parts 1 to 14, Manual of Uniform Traffic Devices (as required)
- Australian Standard AS 1743.3-2009 Traffic control devices for works on roads
- Australian Standard AS 3845:1999 Road Safety Barrier Systems
- Austroads Guide to Traffic Management – Parts 1-13 (2020)
- Austroads Guide to Road Design – Parts 1-8 (2020)
- Austroads Guide to Road Safety – Parts 1-9 (2019)
- NSW Bicycle Guidelines
- NSW Speed Zoning Guidelines (2011)
- Roads and Maritime Delineation Manual (2008)
- Traffic Control at Work Sites Manual (version 6.1) (2022)

- Transport Management Centre – Road Occupancy Manual (2015)
- Transport for New South Wales QA Specification G1 – Job Specific Requirements for The M12 Motorway
- Transport for New South Wales QA Specification G10 – Traffic Management
- Transport for New South Wales QA Specification G36 – Environmental Protection (Management System)
- PS311 – Environmental Design and Compliance, specifically:
    - M12 Motorway – Central Package, Building Condition and Public Utilities Assessment Report (GHD, 2021).
- Subsequent Consistency Assessments:
    - M12 Motorway – Sydney Water crossings Consistency Assessment (Arcadis, 2020a)
    - M12 Motorway – Design boundary changes Consistency Assessment (Arcadis, 2022b)
    - M12 Motorway – Minor design boundary changes and temporary signage areas Consistency Assessment (Arcadis, 2022c).

3.2 Ministers Conditions of Approval

The primary NSW CoA relevant to the development of this CTTMP are listed in Table 3-1. Secondary CoA relevant to this Plan have been listed in Appendix B. A cross reference is also included to indicate where the CoA is addressed in this CTTMP or other project management documents.

Table 3-1: Primary NSW CoA

CoA No.	Condition Requirement	Document reference
C4	The following CEMP Sub-plans must be prepared in consultation with the relevant government and other agencies identified for each CEMP Sub-plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP Sub-plan, including copies of all correspondence from those agencies as required by Condition A5. (a) Traffic and Transport - Relevant Council(s)	OCTTMP Section 1.6
C5	The CEMP Sub-plans must state how: (a) the environmental performance outcomes identified in the documents listed in Condition A1 will be achieved;	Section 2.2 Section 2.3
	(b) the mitigation measures identified in the documents listed in Condition A1 will be implemented;	Section 5
	(c) the relevant terms of this approval will be complied with; and	Section 3.2 Appendix A

CoA No.	Condition Requirement	Document reference
	(d) issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART (Specific, Measurable, Achievable, Realistic and Timely) principles.	Section 1.4 includes a commitment to applying SMART principles. Issues requiring management and ongoing risk analysis are discussed in Section 4. How the issues will be managed is in Section 5 and 6. Cumulative impacts and how they are identified and managed are addressed in Section 5.17 of this Plan.

3.3 Revised Environmental Management Measures

The primary REMMs relevant to the development of this CTTMP are listed in Table 3-2. Secondary REMMs relevant to this CTTMP are listed in Appendix B. A cross reference is also included to indicate where the REMM is addressed in this CTTMP or other project management documents.

Table 3-2: Primary REMMs

ID	Measure/requirement	Timing	Document Reference
TT01	A Construction Transport and Traffic Management Plan (CTTMP) will be prepared as part of the CEMP in consultation with relevant local Councils, and in accordance with relevant guidelines. The CTTMP will outline:	Prior to construction	Section 1.6
	• Staging and planning of works to minimise the need to occupy roads where practicable, including identification of haulage routes		Section 5.1.1 Section 5.2
	• Safe alternative routes for pedestrians and cyclists in accordance with relevant safety and accessibility standards		Section 5.7
	• The requirements for traffic control plans to be prepared for each work area which will include details of site access and specific traffic control measures (including signage) to manage traffic movements		Section 5.1 Section 5.1.2 Section 5.1.3
	• Road safety audit requirements		Section 6.5
	• Parking arrangements for construction staff		Section 5.10
	• Identification of access arrangements at construction sites detailing vehicle access movements		Section 5.1 Section 5.1.2

ID	Measure/requirement	Timing	Document Reference
		Prior to construction	Section 5.1.3 Section 5.2
	• Measures to minimise changes to the existing road network, property access, bus stops and pedestrian/cyclist facilities where feasible		Section 5.1
	• Measures to communicate and notify of any changes in traffic conditions on roads or paths to road users, emergency services, public transport operators, and other relevant stakeholders		Section 1.6 Section 5.18
	• Measures to manage construction traffic interfaces and access arrangements with Western Sydney International Airport and Sydney Metro – Western Sydney Airport		Section 1.5.2 Section 5.18
	• Requirements for appropriate warning and signage for traffic and other road users such as cyclists and pedestrians in the vicinity of work areas and work site access, and road diversions.		Section 5.6

3.4 Environment Protection Licence

The M12 Central package is subject to an EPL as a Scheduled Activity for 'road construction'. The EPL includes clauses requiring the licensee to minimise the emission of air pollution, noise and vibration from the premises, including vehicles. The M12 Central package will be constructed so as to meet the air quality, noise and vibration requirements identified in the EPL.

3.5 TfNSW QA Specifications

The TfNSW QA Specifications set out the minimum requirements for the detailed outcomes in terms of quality or performance expected in the finished product for construction projects and are relevant to various construction activities on work sites to minimise impacts to the environment.

This CTTMP incorporates the relevant requirements to traffic management from the TfNSW QA Specifications prepared for the *M12 Motorway (Central), Construction between Badgerys Creek and the Water Tower Access Road, Cecil Hills* including:

- G1 – Job Specific Requirements for The M12 Motorway
- G10 – Traffic Management
- G36 – Environmental Protection

The specifications set out environmental protection requirements, including Hold Points and Witness Points that must be complied with during construction of the M12 Central package. A Hold Point is a point beyond which a work process must not proceed without express written authorisation from TfNSW. Witness Points are an identified point in the process where TfNSW request to, review, witness, inspect method and/or process of work. The activities, however, may proceed. For processes under the CEMP, the request for release of Hold Points and Witness Points is to be made through the TfNSW ESM (or delegate).

Details of the Hold Points and Witness Points relevant to this Plan are outlined in Section 6.4.

Cross references are included in Appendix A, to indicate where the relevant TfNSW QA specifications have been addressed in this Plan or other Project documents.

4 Construction traffic impacts

Potential traffic impacts from the construction of the M12 Central package was assessed in the Environmental Assessment Documentation, Transport and Traffic Assessment Reports, notably EIS Appendix F and Amendment Report Appendix B respectively. These assessments identified that construction of the Project, including M12 Central package, may affect the surrounding road network through:

- Construction vehicles using the surface road network, especially heavy vehicles transporting spoil
- Surface roadworks requiring temporary traffic, cyclist and/or pedestrian diversions, road occupation and temporary road closures
- Temporary changes to speed limits.

4.1 Traffic generating activities

Construction is proposed to occur from 2022 for around five years. An increase in traffic volumes is expected during construction of the M12 Central package with peak construction activity anticipated to occur in 2024 during the bulk earthworks and pavement activities. These activities will generate the most construction traffic for deliveries of spoil and pavement materials.

Table 4-1 represents the anticipated light and heavy vehicle traffic generation from each of the work sites and construction ancillary facilities for the M12 Central package, based on those presented in the Amendment Report and the Consistency Assessment – Traffic and Transport Memo for M12 Central Package Detailed Design (TfNSW, October 2021). It is noted that the values presented in Table 4-1 may fluctuate depending on the works being undertaken and will not be consistent throughout the entire construction period.

The main traffic generating construction activities comprise of:

- Construction haulage by heavy vehicles
- Light vehicle movements (vans, utility pick-ups) associated with construction staff and contractors
- Delivery of materials such as civil, concrete and paving materials
- Movements of construction equipment.

Table 4-1: Construction traffic generation (inbound and outbound)

Ancillary Facility	Work Sites[1]	Daily heavy vehicle generation	Morning peak light vehicle generation	Morning peak[2] heavy vehicle generation	Evening peak[3] light vehicle generation	Evening peak heavy vehicle generation
AF4/12	ML-10 South Creek bridge to Clifton Avenue LR-04 Clifton Avenue north of the M12 Motorway main line LR-05 Clifton Avenue south of the M12 Motorway main line	80	93	8	93	8
AF5	ML-12 Kemps Creek to Elizabeth Drive	160	93	16	93	16
AF6	ML-15 Existing utility access road to M7 interchange ramp bridges LR-06 Western Sydney Parklands Utility access road to the north LR-07 Western Sydney Parklands Utility access road to the south	160	93	16	93	16
AF13	ML-11 Clifton Avenue to Kemps Creek	160	93	16	93	16
AF15	ML-13 Elizabeth Drive to Range Road	160	93	16	93	16
AF16	ML-14 Range Road to existing utility access road	200	93	20	93	20
Total:		**920**	**558**	**92**	**558**	**92**

[1] As detailed in the AR and depicted in AR Figure 6-4 Amended Haulage Arrangements
[2] Morning peak is 0730 to 0830 hours
[3] Evening peak is 1730 to 1830 hours

4.2 Intersection performance

Traffic intersection performance analysis was undertaken to determine the impacts of construction traffic at key intersections. TfNSW uses Level of Service (LoS) as a measure of performance for all intersection types operating under prevailing traffic conditions. The LoS ranges from LoS A to LoS F which is directly related to the average intersection delays experienced by traffic travelling through the intersection.

In the 2024 'with construction' scenario, the following intersections have been modelled to perform poorly at Level of Service F:

- Elizabeth Drive / Devonshire Road – will remain at Level of Service F during the morning (368 seconds) and evening (771 seconds) peaks.

Increases in delay at these intersections are a result of the addition of construction-related heavy vehicle traffic. Additional delays would be experienced for vehicles waiting for a gap in traffic when turning right or left onto Elizabeth Drive. Due to their length, construction-related heavy vehicles require longer gaps in traffic to safely turn from minor roads at priority-controlled intersections.

Intersection performance results as identified in the Amendment Report are provided in Table 4-2.

Table 4-2: Intersection performance: 2024 Project with 'construction' scenario

Intersection	Morning peak		Evening peak	
	Average delay (secs)	Level of Service	Average delay (secs)	Level of Service
Elizabeth Drive / Cecil Road	23	B	14	A
Elizabeth Drive / Duff Road	24	B	20	B
Elizabeth Drive / Mamre Road	23	B	18	B
Elizabeth Drive / Range Road	35	C	45	D
Elizabeth Drive / Devonshire Road	368	F	771	F
Elizabeth Drive / Clifton Avenue	20	B	21	B

Detailed measures to manage potential traffic delays due to construction of the M12 Central package and associated impacts to intersection performance at Elizabeth Drive / Devonshire Road will be developed in consultation with TfNSW, and the relevant Road Authority as part of the Traffic Management Plan(s) for this location. Refer to Section 5.16 for more details.

4.3 Parking

Parking for construction personnel will be provided at ancillary facilities. It is not expected that surplus parking demand from construction activities would reduce the availability of surrounding

public parking as there is currently limited or no on-street parking in the vicinity of the M12 Central package.

4.4 Public transport

Limited public transport currently exists around the M12 Central Package. Transit Systems operates the following routes via Elizabeth Drive:

- Route 801 (Bonnyrigg to Fairfield) travels up to Badgerys Creek Road. There are no bus services or bus facilities west of Badgerys's Creek Road on Elizabeth Drive. This is local bus route that operates on weekdays only with two services in the peak direction in the morning and evening peak.
- Route 813 (Liverpool town centre to Badgerys Creek Road) runs to the east of Mamre Road on Elizabeth Drive. This is a local bus service that operates on weekdays only with 4 services a day in each direction between 9.30 am and 6.20 pm.

Two bus stops are for these routes (217193 and 217160) are located on the on Elizabeth Drive west of Mamre Road (refer to Figure 4-1).

Figure 4-1 Bus stops 217193 and 217160 on Elizabeth Drive

The following school bus services also operate along Elizabeth Drive:

- 9615 – Cecil Hills High School to Kemps Creek via Mount Vernon
- 9029 - Emmaus College to Liverpool HS via Bonnyrigg Heights PS & Freeman College
- 9071 - Gladston St before St Johns Rd to Marion PS via St Johns Park HS

During construction of the M12 Central package, the following impacts on buses and bus customers are likely:

- Reductions in speed when travelling through construction activity areas, resulting in longer travel times
- Temporary relocation of bus stops (217193 and 217160) away from construction zones and alternative access requiring some passengers to walk further, while other passengers may have a shorter distance to walk to their desired bus stop.

4.5 Pedestrian and cyclist access

Given the existing low volumes of pedestrians and cyclists using the proposed construction access routes, it is anticipated that the increase in construction vehicles will have a negligible impact on pedestrians and cyclists. Notwithstanding, construction of the M12 Central package will affect pedestrian and cyclists, who will be diverted to use temporary alternative paths.

Where footpaths are located at sites/site entrances with high volumes of construction vehicle movements, traffic controllers may be required to manage the conflict between construction vehicles and pedestrians.

Where work sites have an impact on footpaths, consideration will be given to the requirements of all pedestrians and especially users with specific requirements (e.g. elderly, strollers, disabled).

5 Traffic Management

5.1 Construction traffic management

To manage construction transport and traffic impacts, site-specific Traffic Management Plan(s) (TMP) will be developed by the Traffic Manager (or delegate), in accordance with this Plan, and conforming to AS 1742.3, the TfNSW Traffic Control at Worksites Manual (TCWS), and TfNSW QA Specification G10 (refer to TMP Section 2.3 Reference Documents). Seymour Whyte have prepared a general TMP for M12 Motorway (Central), Badgerys Creek and the Water Tower Access Road, Cecil Hills which will be implemented, and where required updated, as a separate document to this CTTMP.

TMPs will contain detailed descriptions of the construction activities and the nature of the works addressed by that TMP. TMPs must be prepared by a person(s) suitably experienced in the design and implementation of TMPs of equivalent complexity and holding qualifications acceptable to TfNSW, including as a minimum, a “Prepare a Work Zone Traffic Management Plan” qualification.

The TMP must be signed off by the Traffic Manager, Safety Manager and Construction Manager before submission to TfNSW 30 working days prior to the proposed date of submission of application for a ROL, or any shorter period agreed to by the Principal, in accordance with the TfNSW QA Specification G10 Clause 2.1 hold point. Key stakeholders including councils, WSIA, Sydney Metro – Western Sydney Airport and bus operators will also be provided a copy of the approved TMP for information.

TMPs will include the following elements, as relevant:

- Traffic Staging Plans (TSPs) including details of any traffic staging arrangements associated with each proposed construction stage, and the time periods during which each stage will be in operation (refer to Section 5.1.1)
- Traffic Guidance Scheme (TGS) including provision for cyclists and pedestrians, and any specific traffic control arrangements such as temporary signage or street lighting to associated with the conditions of approval of the ROL
- Vehicle Movement Plan (VMP) showing the mandated travel paths for vehicles to enter, leave or cross the through traffic stream (refer to Section 5.1.2)
- Signage Strategy to outline the measures to be implemented to minimise disruption and access to businesses and properties, and developed in accordance with Guide: Signposting (RTA, 2007) (refer to Section 5.6)
- Pedestrian Movement Plans (PMP) showing the allocated travel paths for workers within the Site, and for pedestrians and cyclists around or through the site, including safe and unhindered access to bus stops (refer to Section 5.7)
- Traffic Incident Management Plan (TIMP) (M12CCO-SYW-ALL-PC-PLN-000010) for dealing with unplanned traffic incidents and to define roles and responsibilities in the event of an incident (refer to Section 5.14)
- Plans showing access to local properties and side roads affected by the construction, relocated bus stops and any temporary carparking arrangements
- Plans showing temporary staff car parking at construction sites and ancillary facilities
- Plans showing approved routes to and from the site, entry and exit points from site including measures to prevent construction vehicles queuing on public roads and roads that

are be excluded from use by construction traffic i.e. roads with load limits, quiet residential streets or access/turn restricted streets

- Design drawings for any temporary roadways and detours, including alignment and surface levels, pavement widths, pavement cross-sections, lane configurations, pavement markings, signage and drainage, and approved traffic signal plans if applicable. Temporary traffic management, including any temporary roadways, will be designed to cater for oversized vehicles up to 10m wide through the worksite at all times, day and night.
- Details of Oversize Overmass (OSOM) management strategy and procedures
- Monitoring, review and amendment mechanisms
- Evidence of coordination and consultation with GSO (TMC).

Each TMP will detail for each element listed above the following, as appropriate:

- Impacts to the network i.e. base vs proposed
- Impact to the traffic, including the public transport network, in terms of queueing and delays
- Any proposed mitigation measures to be implemented to minimise changes to the existing road network, maintain traffic capacity of any road adjacent to the Site, property access, bus stops and pedestrian/cyclist facilities where feasible and restrict the duration of work under traffic management to a minimum.
- Communication strategy to be implemented.

5.1.1 Traffic Staging Plans

Traffic Staging Plans (TSPs) will be prepared as part of the TMP for the M12 Central package and may be integrated with any Construction Staging Plans. The purpose of a TSP is to show how traffic will be managed during the relevant scope of works to:

- Ensure the safety of construction site personnel, road users and pedestrians
- Manage the works to minimise the need to occupy roads wherever possible.

Th key traffic staging areas for the M12 Cantal Package are:

- Elizabeth Drive
- Clifton Avenue diversion
- Range Road
- Water Tower access road.

The TMP Section 5.2 provides a description of each of these stages and the key strategies for the traffic staging. Road design drawings of the proposed staging are included in TMP Appendix A.

TSPs will include, but not be limited to:

- Lane configurations on existing and new (temporary and permanent) pavements, indicating any departures from existing traffic lanes
- Intersection layouts and temporary traffic signals arrangements
- Pedestrian footpaths and cycleways
- Bus stop locations (where applicable) and adequately cater for bus turning movements
- Locations of work areas

- Access to local properties and side roads
- Pavement markings and signposting
- Drainage system, both temporary and permanent, including any pollution control measures
- Utilities and their impact on the traffic staging
- Street lighting, including any temporary arrangements where required
- Temporary retaining structures, where required as part of the traffic staging
- Barriers.

If removal of pavement markings is required, the TSPs must provide details of the proposed methods for removal, the estimated durations to carry out the removal, and if necessary, any proposed measures to restore the road surface.

Shared through and right turn lanes will not be permitted.

5.1.2 Traffic Guidance Schemes

Traffic Guidance Schemes (TGS, formerly referred to as Traffic Control Plans) will be prepared as part of TMPs for the M12 Central package as described in TMP Section 6.2. The TMP Appendix B provides global long term TGS for the M12 Central package. If not previously submitted as part of the TMP or where a TMP is not required, the TGS must be submitted to TfNSW at least 3 working days prior to its proposed use in accordance with the TfNSW QA Specification G10 Clause 2.4 hold point (refer to Section 6.4). Where traffic staging is applicable, an individual TGS will be submitted for each traffic stage and where a lane occupancy is required, a Road Occupancy License (ROL) will also be required (refer to Section 5.4).

The purpose of a TGS is to identify measures that will be installed to warn traffic and guide it around or past the construction work sites. TGSs may be in the form of written documents and/or diagrams. TGSs will also identify any property or business access issues related to construction.

TGSs will incorporate VMPs including the expected number of vehicle movements, sizes of vehicles, hours of operation, and PMPs (refer to Section 5.7) as relevant as described in TMP Section 6.5. The TMP Appendix B provides a global VMP which shows vehicle routes classified into the following categories:

- Elizabeth Drive eastbound and westbound traffic routes
- Local traffic including property access,
- Construction vehicle access to construction site/zones, and
- Site compounds access points, including turning area.

The VMPs will aim to minimise heavy vehicle usage on the local roads where possible by utilising internal haul roads and identify temporary parking for construction staff so as to not affect the community. Site-specific layouts and methodologies for subsequent staging shall be further developed by the Traffic Manager.

TGSs will also identify any property or business access issues related to construction, and in accordance with the Signage Strategy (refer to Section 5.6).

At least one day prior to the intended date of opening a temporary roadway to traffic, Seymour Whyte will notify TfNSW that the traffic control measures in the TGS are conforming and ready for inspection by TfNSW in accordance with TfNSW QA Specification G10 Clause 4.4.2 hold point (refer to Section 6.4). TfNSW will undertake a joint inspection with the Traffic Manager (or delegate) of the temporary roadway and detour, prior to authorising the release of the Hold Point.

5.1.3 Ancillary facility traffic management

Ancillary facilities are required to support the construction of the M12 Central package including provision of appropriate off-road construction traffic parking for workforce parking and Site visitors.

The locations and proposed accesses to these ancillary facilities will be identified in the SEMP. The ancillary facilities to be used for the M12 Central package and the associated construction access routes are identified in Table 5-1 and shown in Figure 5-3.

Traffic management for ancillary facilities will be planned to minimise traffic generated by site staff subcontractors and TfNSW personnel and the effects on existing traffic flows. All construction entry and exit gates will be designed and constructed to facilitate the safe movement of construction vehicles, whilst minimising the impact to traffic flow on adjacent roads. The design must cater for the highest posted speed environment whenever construction gates are in operation, include all-weather temporary acceleration and deceleration lanes and include for appropriate pavement life and serviceability (refer to G10, Clause 2.6.4 for more details).
Dedicated light and heavy vehicle turning areas and temporary traffic management measures, if required, will be developed and detailed in the TMP. Construction traffic must only enter and leave the road network in the traffic flow direction of the adjacent traffic lane (left in/ left out movements only) in a forward direction, unless otherwise approved by TfNSW. Construction traffic must not make U-turns across existing roads.

Table 5-1: Construction access to ancillary facilities

Ancillary facility	Access
AF4	Access from Clifton Avenue via an existing property access
AF5	Access from Elizabeth Drive to an existing driveway access in Mamre Road
AF6	Access from an existing utilities access road that connects to Elizabeth Drive near Duff Road
AF12	Access via Clifton Avenue via an existing property access
AF13	Access via Salisbury Avenue via an existing property access
AF15	Access via Range Road via an access road to be constructed and access off Elizabeth Drive.
AF16	Access via Range Road via an existing access to the carpark of the Wylde Mountain Bike Trail

5.2 Haulage Routes

Haulage routes to be used for construction of the M12 Central package are shown in Figure 5-3.

Temporary haulage routes will be provided within the worksite to minimise the impact on Elizabeth Drive as illustrated in Figure 5-1. Internal temporary haulage routes will be aligned between contracts of other concurrent stages of the M12 motorway.

Detailed planning of haulage routes and vehicle turning movements will be undertaken during the development of TMPs. The TMP has included an assessment of the number and timing of additional construction vehicle traffic movements that will be generated by the construction of the M12 Central package on the haulage routes (refer to TMP Section 5.3). This is reproduced in Figure 5-1: Alternative Internal Haul Route from Clifton to Range Road

Table 5-2.

Figure 5-1: Alternative Internal Haul Route from Clifton to Range Road

Table 5-2: Construction Traffic Generation

Ancillary facility	Daily heavy vehicle movements	Morning peak light vehicle generation	Morning peak heavy vehicle generation	Evening peak light vehicle generation	Evening peak heavy vehicle generation
AF4 / 12	80	93	8	93	8
AF5	160	93	16	93	16
AF6	160	93	16	93	16
AF15	160	93	16	93	16
AF16	200	93	20	93	20

The major earthworks road haul includes truck and dogs from Clifton Avenue (AF4 and AF12) to Range Road (opposite AF16). The total volume of earthworks material to be transported along this route is 236.000m3, resulting in over 14,000 truck movements over a period of approximately 214 days. Where possible for other areas of the project, hauls will be undertaken within site to minimise truck movements of the road network.

The TMP includes detailed maps showing the proposed haulage routes between material source locations and ancillary sites, details of the roads to be used for haulage, direction of travel, access points to ancillary facilities and construction sites, and vehicle turning routes, locations of any sensitive receivers and any limitations of the haulage route (e.g. bridge capacity or height restrictions).

Movements of haulage vehicles will be planned to minimise movements on the road network during the AM and PM peak periods where practicable. The following schools are within proximity to the M12 Central Project:

- Kemps Creek Public School - Located at 100 Cross Street, Kemps Creek.
- Christadelphian Heritage College Sydney - Located at 110 Cross Street, Kemps Creek.
- Ifran College - Located at 2089-2109 Elizabeth Dr, Cecil Park, NSW, 2178.

Both Kemps Creek Public School and Christadelpian Heritage College are not located along any haul route that will be used for construction. Both these schools are located on a local road that is not designated for construction use.

Ifran College is located along Elizabeth Drive, which is a State Road that is currently utilized by heavy vehicles. Construction traffic will utilize Elizabeth Drive however it is not anticipated that large volumes of vehicles will utilize this section of Elizabeth.

In accordance with NSW CoA A49, all heavy vehicles used for construction haulage will be clearly marked on the sides and rear with the CSSI name, the name of the Project stage, and Project community telephone number to enable immediate identification by a person viewing the heavy vehicle. Details of the CSSI identification markings have been approved by the Planning Secretary and vehicle identification must only use the approved form of signage on a heavy vehicle. Only one Project form of signage will be placed on a heavy vehicle at any one time and this will be checked as trucks enter and leave site by the Leading Hand maintaining the loading log. The approved signage is shown in Figure 5-2.

Figure 5-2 Approved signage for identification of spoil haulage vehicles on M12 Central package

The identification markings for the M12 Central package will be green, produced with retroreflective background to ensure visibility in low light conditions and at night and sized:

- Small: 296.93mm x 81.28mm
- Large: 594.11mm x 156.46mm

Signage is publicly available on the DPE website: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-9364%2120220810T022412.822%20GMT

Haulage routes will be planned to minimise movements on the road network during the AM and PM peak periods where practicable. As described in the TPM Section 5.3, Seymour Whyte will establish and utilise an internal haul road through the site where possible to reduce traffic pressures on Elizabeth Drive particularly during the AM/PM peak periods. Access to the internal haul road will be via a temporary access on Elisabeth Drive approximately 350m west of Mamre Road. This will reduce the truck volumes along Elizabeth Drive between Mamre Road and Clifton Avenue which will help alleviate the pressure around Devonshire Road intersection.

Where haulage routes pass by schools, childcare facilities and/or aged care facilities, heavy vehicle movements during operational peak hours of these facilities would also be minimised where practicable.

The locations of all heavy vehicles used for off-Site haulage must be monitored in real time and the records of monitoring be made available electronically to the Principal, TfNSW (Transport Management Centre), DPE and/or the EPA upon request for a period of no less than one year following Completion (refer to Section 6.3 and 6.6).

5.2.1 Local Roads

The Environmental Assessment Documentation identified local roads within one kilometre of work areas and ancillary facilities that may be used by heavy vehicles for spoil and fill haulage or concrete deliveries (for the purpose of the CSSI). Figure 5-3 depicts the identified haulage routes in the Environmental Assessment Documentation and one kilometre boundary around the Project.

In accordance with NSW CoA E93, the Planning Secretary's approval is required before any heavy vehicles used for spoil and fill haulage or concrete deliveries (for the purpose of the CSSI) are driven on local roads within one kilometre of the M12 Central construction ancillary facilities that are not identified in the Environmental Assessment Documentation.

In accordance with NSW CoA E94, requests to the Planning Secretary for the approval of spoil haulage and concrete delivery vehicles to use additional local roads will include a Traffic and Pedestrian Impact Assessment and be prepared in consultation with the relevant local council(s). The assessment will be undertaken by an appropriately qualified and experienced person and:

a) Include a swept path analysis if required by DPE

b) Demonstrate that the use of local roads will not compromise the safety of the public and have no more than minimal amenity impacts

c) Provide details as to the date of completion of the road dilapidation surveys for the subject local roads

d) Describe the measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and childcare facilities during peak times for operation.

The outcomes and recommendations of the Traffic and Pedestrian Impact Assessment (particularly E94(c)) will be incorporated into the SEMP and this CTTMP as relevant. At the time of the preparation of this Plan, no additional local roads are proposed for use by heavy vehicles used for spoil and fill haulage or concrete deliveries for the purpose of the CSSI.

In addition to the requirements under NSW CoA E94, Seymour Whyte will maintain current turning movements into and out of local roads during construction. Closure of local roads is not permitted unless prior approval has been obtained from the relevant Council.

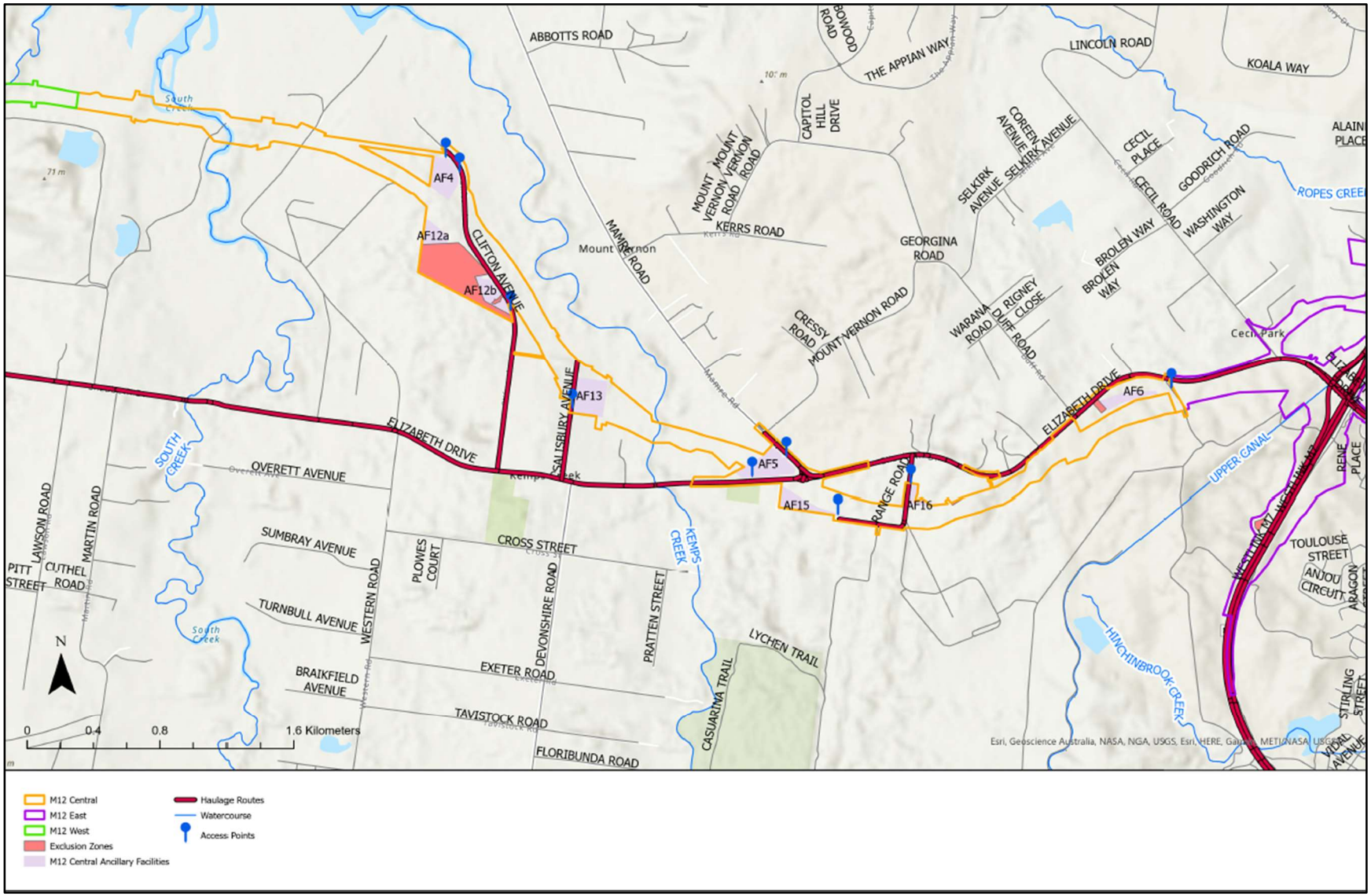

Figure 5-3 Haulage routes, local roads and ancillary facility access

5.3 Traffic control signs and devices

Traffic control devices such as signs, traffic signals, pavement markings, traffic islands, and other devices are used to regulate, warn and/or guide road users as described in the TMP Section 6.6 Erection and Removal of Signs and Devices.

Traffic control devices will include:

- Safety barriers
- Pavement markings and signs
- Portable Variable Message Sign (VMS)
- Temporary traffic signals
- Temporary roundabouts
- Traffic counts
- Radar activated speed signs
- Temporary speed zones
- Lighting towers.

Traffic signals and devices to minimise congestion and manage traffic flows during construction will be identified in TGSs and implemented in accordance with the TfNSW Traffic Control at Worksites Manual (TfNSW, 2022). This may include temporary roadways and detours with associated facilities, outside the “Limits of Work” shown on the Drawings, for traffic control zones such as advance warning area, transition area, buffer area, and termination area.

Seymour Whyte will obtain all necessary approvals for traffic control devices used on the M12 Central package.

Records will be maintained of the times when the temporary speed zoning signs are in force.

5.4 Road occupancy

Construction of the M12 Central package may require closing of shoulders and lanes on either the existing, temporary, or new roads. An ROL will be obtained by Seymour Whyte if an existing road is to be used in such a way that it affects traffic flow within the vicinity of the M12 Central package works including:

- Temporary lane closures for day activities
- Temporary lane closures for night activities
- Speed reduction
- Shoulder closures
- Any stoppages to traffic
- Any occupation of the construction Site by your labour, sub-contractors, equipment or plant that requires a traffic control plan under the provisions of this Specification
- Any other event, including utility works, that has the potential to impact traffic flows.

Road occupancies include:

- Shoulder occupancies and/or closures

- Lane occupancies and/or closures
- Road closures and detours
- Any occupation of the construction site by site personnel (including sub-contractors), equipment or plant that requires a traffic control plan
- Any other event, including utility works, that causes delays to traffic flows.

Where a temporary roadway or a detour is not provided or available, then subject to the approval TfNSW, construction under or adjacent to traffic may be permitted provided other project specific requirements (G10/A) have been observed and satisfied.

Except where a ROL, or relevant Council approval allows otherwise, the existing capacity for through traffic must be maintained for the duration of the project on all roads affected by the project.

Upon completion of the Works, temporary roadways and/or detour arrangements will be removed and the area restored to a condition equivalent to that which existed prior to the commencement of the work.

Applications for an ROL will be prepared in accordance with the TfNSW Road Occupancy Manual (TMC, 2015) and will comply with the road safety and traffic management principles, objectives and targets outlined in this CTTMP and the OCTTMP. Applications will be submitted in accordance with TfNSW QA Specification G10 Clause 2.1 hold point at least 10 working days before the planned commencement of the work activity that requires road occupancy. The submission will include a description of the work to be conducted, design drawings if relevant, a program of the works, a TGS, VMP, details of SZA submission (if applicable), and contact details of the responsible Traffic Manager (or delegate).

TMP submissions will need to be reviewed and associated network impacts endorsed by GSO (TMC) prior to ROL being issued and work activity commencing.

A forecast of the proposed road occupancies for the following week will be provided to TfNSW by 9.00am on the Thursday preceding the week being forecast. In conjunction with the weekly submission, a forecast program advising GSO (TMC) and TfNSW of all proposed major road occupancies and TMP's (i.e. full road closures, traffic detours, any lane closures during peak periods, traffic switch, long term speed reductions, etc.) for the upcoming six-week period must also be provided.

5.5 Speed management

Temporary speed zones may be implemented to assist in controlling the speed of traffic through roadwork sites. A reduced roadwork speed zone will only be implemented where it is warranted for safety and approved by TfNSW and GSO (TMC). The Traffic Manager will assess whether roadwork speed zones are necessary to assist in controlling vehicle speeds.

Roadwork speed limits, zoning in road occupancies and clearances between construction works and traffic lanes must comply with Traffic Control at Work Sites Manual (TfNSW, 2022) and the NSW Speed Zoning Guidelines (RTA, 2011). Appropriate delineation, advance warning signs and speed zoning must be provided at all times that cater for foggy conditions, glare and provide lighting if night vision is poor.

The key principles for the effective implementation of roadwork speed limits are:

- They are self-enforcing or will be enforced
- They are not used alone but with other traffic control signs and devices
- They are not used in place of more effective means of traffic controls

- They are only to be used while roadworks are in progress or there are temporary safe road conditions

Seymour Whyte will apply for a Speed Zone Authorisation (SZA) prior to implementation of temporary speed zones, as part of the ROL application process described in Section 5.4.

The Traffic Manager will retain copies of all approved SZAs on site and provide a copy to NSW Police and Liverpool City Council, Penrith City Council or Fairfield City Council, as relevant.

A record of all times when temporary speed zoning signs are in place will be maintained. The community will be informed of any SZA to be implemented via advertising and signage.

5.6 Signposting and delineation

Signposting and delineation are important aspects of road safety and traffic management. Regulatory signs control specific traffic movements, warning signs give advance notice of traffic hazards, road markings (and pavement markers) provide delineation and reinforce signage, guide signs give advance guidance and advice of routes and destinations which assist all drivers to make clear, early decisions.

Signage associated with property access, local community access and businesses will be considered during the detailed design and implementation of temporary traffic management schemes and any impacts addressed to ensure the appropriate information for road users is always effectively communicated.

Construction staging, and temporary works will efficiently manage conflicts with the existing road network and maximise spatial separation between work areas and travel lanes. Work areas are to be isolated from general traffic through the implementation of appropriate traffic and access controls.

Seymour Whyte will prepare a Signage Strategy as part of the TMPs accordance with REMM TT08, and TfNSW QA Specification G10 Clause 3.2.4, as part of the TMPs (refer to TMP Section 6.2 TGS and Section 6.9.1 Signposting). The Signage Strategy will form part of the TMP documentation to be submitted under G10 Clause 2.2.1 Hold Point 30 working days prior to the proposed date of submission of application for the ROL (refer to Section 6.4).

The Signage Strategy will be developed in consultation with affected local businesses and properties, Penrith City Council, Liverpool City Council and Fairfield City Council, and other relevant authorities.

The Signage Strategy will include:

- A review of existing signage along the M12 Central package corridor, which may include:
    - Private and commercial signage
    - Street signage
    - Visitor information signage
    - Parking, pedestrian and public transport facilities signage
- The principles to be adopted for the Signage Strategy, such as:
    - Signage design – ensuring signs are highly visible, clear and easy to understand, of appropriate size and style
    - Signage placement – positioned in accordance with relevant Australian Standards, clearly legible to motorists, pedestrians and cyclists and without causing an obstruction, positioned at eye level for motorists, minimising clutter in the roadway

- The implementation program for the strategy, which will detail the methods and timing for following steps:
    - Audit of existing signage
    - Consultation with stakeholders including the coordination of temporary or permanent signage with other developments
    - Identification of existing signage that will be obscured/no longer visible or where customers are required to use alternative access to reach the businesses
    - Identification of locations where signage will be required
    - Inclusion of signage in TSP/TGSs as required for submission to TfNSW as part of the ROL approval process
    - Liaise with local businesses, properties, the relevant local Council and TfNSW to design and arrange signage
    - Removal of existing signage, if required
    - Installation of signage, which will occur progressively in consultation with affected stakeholders and prior to any disruption from construction
- A monitoring and maintenance program for signage to ensure signs are effective and remain fit for purpose, including:
    - Development and maintenance of a database of installed signage, including sign location, type and installation date
    - Audit program of signage installed to assess its effectiveness, including consultation with affected business and property owners
    - Inspections as part of the weekly environmental inspections to check for damage or removal of signage installed
    - A process for cleaning or replacement of signage as soon as feasibly practicable where vandalism, damage or removal occurs.

The details of controls for maintaining access will be included within TGSs, to identify the types and locations for signage that will be implemented.

During construction, Seymour Whyte will maintain ongoing timely communication with affected businesses and properties on M12 Central package timing, changes to traffic conditions and access arrangements. This will include notice on timing and duration of activities and potential localised impacts. Information will be provided to, and sought from, affected business and property owners by Seymour Whyte via various methods, including letterbox drops, face-to-face meetings, community information events and meetings, and the Project website. Further details are provided in the M12 Central Communication and Stakeholder Management Plan.

5.7 Pedestrians and cyclists

In accordance with NSW CoA E99 safe pedestrian and cyclist access must be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction, an alternate route which complies with the relevant standards must be provided and signposted.

Pedestrian Movement Plans (PMPs) will be prepared as described in the TMP Section 6.10 Pedestrian and Cyclist Movement Plan and may be included in the TGSs (refer to Section 5.1.2) or as a stand-alone plan. The PMPs will consist of diagrams showing the allocated travel paths for construction site personnel and pedestrians around or through construction sites. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, an

alternate route which complies with the relevant standards will be provided and signposted. Pedestrians must not be directed to travel between any safety barrier system and live traffic. Access will be provided for pedestrians to temporary bus stop locations as required.

Where alternate routes are provided to accommodate existing, and potential, pedestrian and cyclist movements affected by your Works, they must be include:

- A fit for purpose, all weather path (including minimum 100mm thick gravel base):
- Upgraded pram-appropriate surfacing within 500m of any educational establishment or childcare facility.
- Risk assessed lighting at least equivalent to existing street lighting.
- Signage for pedestrians for any route changes. Signage details will be included in the pedestrian movement plan along with diagrams showing the allocated travel path.

The following provisions must be implemented for cyclists:

- Provide sufficient signage to inform cyclists of the changed traffic conditions and route changes.
- Provide appropriate shoulders for cyclists in front of any temporary barriers if alternative provisions are not provided.
- Ensure appropriate surface and cleanliness of shoulders in front of barriers for the safe passage of cyclists at all times.
- Install all signposting, bollards and barriers wherever necessary. Pay particular attention to signposting at intersections and in advance of changes to traffic conditions.
- Ensure appropriate cleanliness of all pedestrian and cyclist paths at all times.
- Risk assessed lighting at least equivalent to existing street lighting.

When preparing PMPs, the consideration will be given to Crime Prevention Through Environmental Design (CPTED) principles of relevant guidelines. These principles include natural surveillance, natural access control and good definition of space and ownership.

5.8 Public transport

Public transport around the M12 Central package is currently served by bus services only with very limited coverage and frequency. Transit Systems operates the following routes via Elizabeth Drive:

- Route 813 (Liverpool town centre to Badgerys Creek Road) runs to the east of Mamre Road on Elizabeth Drive. This is a local bus service that operates on weekdays only with 4 services a day in each direction between 9.30 am and 6.20 pm
- Route 801 (Bonnyrigg to Fairfield) travels up to Badgerys Creek Road. There are no bus services or bus facilities west of Badgerys's Creek Road on Elizabeth Drive. This is local bus route that operates on weekdays only with two services in the peak direction in the morning and evening peak.

Changes to bus stops will be required along Elizabeth Drive. Changes to the Bus Stops, or other construction activities that directly affect their bus routes/ stops, will be implemented in consultation with local schools, relevant councils, GSO and relevant bus operators. At least three weeks prior to such advice being released to the bus operators, Seymour Whyte must provide TfNSW with a copy of the intended correspondence for approval.

Alternate temporary bus stops must be provided in accordance with relevant safety and accessibility standards. include:

- Adequate sign posting for the bus stop.
- Adequate pedestrian facilities to enter and exit the buses.
- Adequate pedestrian access across active roadways and construction zones to bus stops.
- Signposting directing pedestrians to and from the bus stops.
- Temporary indented bus bays a minimum 15m long, 3.5m wide with tapers 20m long at each end. Ensure indented bus facilities do not affect traffic flow on adjacent roads.

All traffic staging must adequately cater for bus turning movements.

5.9 Property access

In accordance with NSW CoA E96 and REMM TT07 all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses, and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Unrestricted access for the Bowling Club to and from Elizabeth Drive will be maintained.

Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected residents, businesses and affected property owners and implemented before the disruption. Existing turn movements (including right hand turn) are to be maintained to all properties unless agreed otherwise by the property owners / residents. Any necessary arrangements to enable continuity of provision of services, such as garbage or recycling waste collection and mail delivery, must also be incorporated. Any changes to access will provide the same equivalent pre-existing level of access unless agreed to by the landowner.

Property access that is physically affected by construction must be reinstated to at least an equivalent standard, in consultation with the landowner. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption. Notification must be provided at least five working days prior to works affecting residents and businesses.

In accordance with NSW CoA E79 and REMM SLP07, construction activities will be planned to minimise intrusion and disruption to existing agricultural operations/activities in surrounding properties where feasible and reasonable (e.g. stock access, access to farm dams, etc) unless otherwise agreed by the landowner.

Any property adjustments, including replacement of agricultural infrastructure (such as fencing) and relocation of property access that impact the property will be carried out in consultation with property owners/ business managers.

5.10 Parking

VMPs will include provisions for appropriate off-road areas for construction traffic parking, including for workforce parking and site visitors. VMPs will describe access locations and safe entry and exit to and from all such parking areas.

Parking arrangements for businesses and properties are not anticipated to be impacted by the M12 Central package. However, where any specific requirements are identified during consultation with affected businesses and properties, appropriate arrangements will be implemented, including providing temporary signage, for parking.

Private parking lots will not be utilised by construction personnel unless otherwise agreed to by the stakeholder or landowner. Parking for construction personnel will be provided at ancillary facilities.

SWC will provide parking for all office personnel at the main site compound. Additional parking areas will be identified and delineated onsite at various locations, including at the site compound at Range Road and Salisbury Avenue (refer to TMP Section 6.5 Vehicle Movement Plan (VMP) and Traffic Control Works at the Worksite). The parking arrangements for the main compound is illustrated in Figure 5-4.

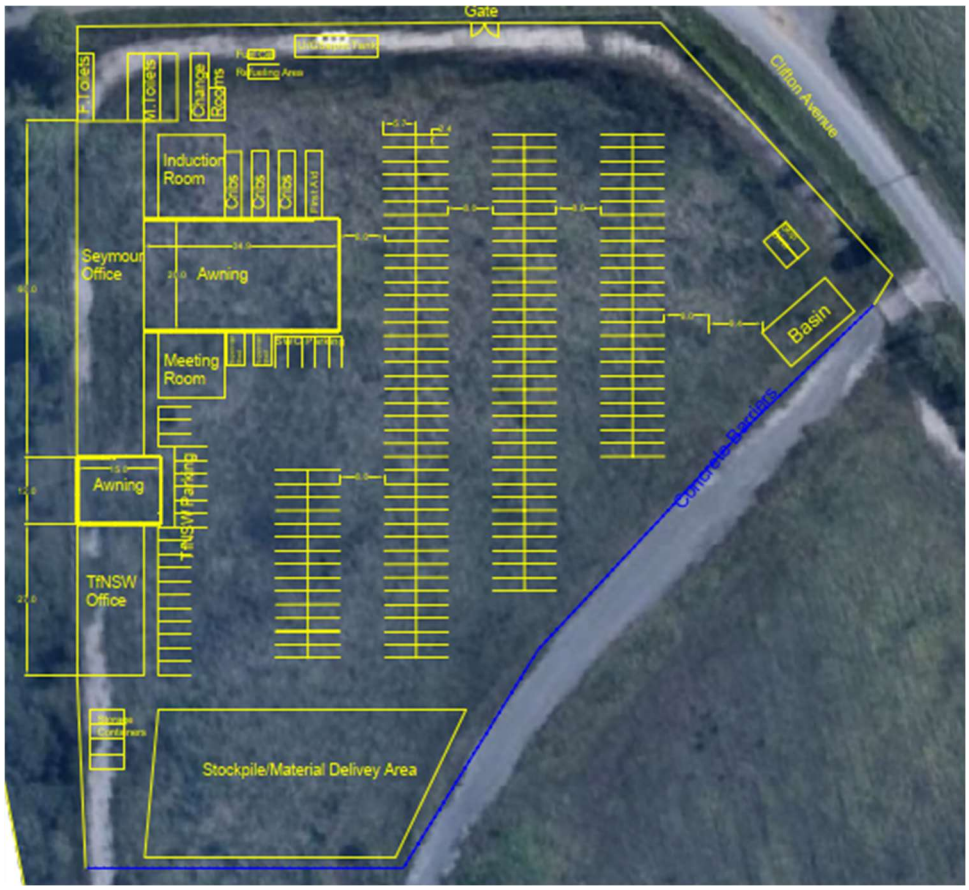

Figure 5-4 Ancillary Facility 4 Parking Arrangement

5.11 Road maintenance

Seymour Whyte will monitor and maintain all existing or temporary roads within the site (including from the first “Roadwork Ahead” sign to the last “End Road Work” sign) in addition to Range Road from Elizabeth Drive to entrance of “Ancillary Facility 15” and all of Salisbury Avenue. Maintenance activities will include repairing potholes, cleaning kerbs and gutters, clearing blockages of stormwater drains, reinstating pavement markings and signage, removing debris including animal carcasses from roadway, cleaning roadside furniture, grass mowing and trimming of vegetation.

Seymour Whyte will co-operate with TfNSW, other Project packages, relevant councils and its personnel or contractors in carrying out maintenance of existing roads outside the immediate M12 Central package construction footprint.

In accordance with CoA E95, a Road Dilapidation Report will be prepared for local roads that are proposed to be used by heavy vehicles (M7 and Elizabeth Drive are not considered local roads). A copy of the Road Dilapidation Report will be provided to the relevant road authority within three (3) weeks of completion of the survey and at least two (2) weeks before the local road is used by heavy vehicles. In accordance with REMM TT06, the Road Dilapidation Report will document the existing conditions of local roads and outline measures to repair damage to roads from heavy vehicle movements associated with the M12 Central package. In accordance with TfNSW QA

Specification G1, the Pre-construction Road Dilapidation Report must also be submitted to TfNSW for the commencement of construction activities Hold Point (refer to Section 6.4).

If damage to roads occurs as a result of construction, the damage will be rectified to restore the road to at least the condition it was pre-construction in consultation with the relevant road authority. Rectification works must be undertaken within three (3) months of the subject road no longer being used for the construction of the CSSI unless an alternative timeframe is agreed to by the relevant road authority.

5.12 Special events

A special event in traffic management terms is defined as any planned activity that is wholly or partially conducted on a road, requires multiple agency involvement, requires special traffic management arrangements and may involve large numbers of participants and/or spectators. Special events may include:

- Local festivals and celebrations
- Annual local events
- Sporting events
- Parades and marches
- Daylight savings changes
- Seasonal variations in traffic volumes
- NSW holiday periods.

Where special events are expected to generate additional vehicle or pedestrian traffic in the area affected by construction of the M12 Central package, Seymour Whyte will co-operate with the event organiser, TMC, TfNSW, local Councils and other authorities to facilitate traffic and pedestrian flows on the existing road network or adjacent to the M12 Central construction sites. Seymour Whyte will also liaise with Liverpool City Council, Penrith City Council and Fairfield City Council and Western Sydney Parklands Trust in relation to upcoming traffic generating special events when planning any traffic arrangements to avoid any conflict with construction activities.

5.13 Emergency services

Consultation with emergency services providers will continue throughout construction of the M12 Central package to minimise impacts on emergency services operations. Emergency services will be kept fully informed of all changed traffic conditions throughout construction. The Traffic Manager will arrange for representatives of the emergency services to attend traffic control and stakeholder meetings to ensure they remain informed of current or upcoming changes to traffic conditions.

The Traffic Manager (or delegate) will notify the emergency services providers when access to properties or traffic routes is expected to be impeded for any period of time. Signage will be implemented to ensure that all construction and adjusted property accesses are clearly signposted.

5.14 Incident management and response

Seymour Whyte have prepared and submitted to TfNSW a Traffic Incident Management Plan (M12CCO-SYW-ALL-PC-PLN-000010).

TfNSW is responsible for the management of unplanned traffic incidents on NSW roads in coordination with NSW Police. If requested, Seymour Whyte will provide support to TfNSW or

emergency services agencies when emergencies or unplanned incidents occur within or adjacent to the M12 Central package construction sites.

TGSs will nominate a contact person, such as the Construction Manager or Traffic Manager, to be available at all times if an emergency or disruptive unplanned incident occurs within the boundary of any construction area subject to a TGS. The nominated contact person will respond within one hour to after-hours callouts from the Transport Management Centre (TMC) or Police.

For non-emergency disruptive incidents, the Traffic Manager (or delegate) will attend the location of the traffic incident and assess if corrective actions are required to be undertaken or resources provided by the Seymour Whyte. This assessment will occur in coordination with emergency services agencies, if in attendance. A record of communications with the TMC and NSW Police and all traffic incidents attended will be maintained.

5.15 Traffic Incident Management Plan

Seymour Whyte have prepared and submitted to TfNSW a Traffic Incident Management Plan (M12CCO-SYW-ALL-PC-PLN-000010). The Traffic Incident Management Plan was developed in consultation with the TMC, Sydney Metro, WSIA, Liverpool City Council, Penrith City Council and Fairfield City Council, as relevant.

The Traffic Incident Management Plan contain, as a minimum, the following details:

- Names and contact details of nominated personnel (including the Traffic Manager if applicable) who will be responsible for dealing with traffic incidents occurring at the work site
- Contact details of the TfNSW, GSO (TMC), TMC Transport Operation Rooms, Police, emergency services, etc
- A procedure to be followed in the event of a traffic incident within and adjacent to the Site to be developed in consultation with TfNSW, GSO (TMC) or RTO, Councils, and Police, Ambulance, Fire and other emergency services
- A list of plant and personnel that will be available at all times for moving portable concrete safety barriers
- Inventory of safety barriers, signs etc. and their storage location(s) that will be available to replace damaged barriers in event of a traffic accident crash/ incident
- A procedure for carrying out investigations of traffic incidents involving members of the public or workers. This should include:
    - checking that the traffic control measures in place are in accordance with the TMP and its component plans, and ROL conditions
    - carrying out a “drive through” and video recording of the roadway, including the location where the incident has taken place; as soon as possible after the incident
- Information required for initial notification to TfNSW, and where necessary, other relevant authorities
- Format for reporting and communication of the results of traffic incident investigations, and lessons learned

5.16 Construction traffic management at Devonshire Road/ Elizabeth Drive intersection

As outlined in the Environmental Assessment Documentation and Section 4.2, traffic delays during construction are expected in the vicinity of Devonshire Road and Elizabeth Drive intersection. TfNSW have undertaken modelling and analysis of the intersection to determine what additional traffic management controls are required to be implemented to reduce delays and safely manage construction movements.

The proposed measures to manage potential traffic delays due to construction of the M12 Central package and associated impacts to intersection performance at Elizabeth Drive / Devonshire Road will consist of new roundabouts at Elizabeth Drive / Devonshire Road and Elizabeth Drive / Clifton Ave. Concept designs are being prepared and are scheduled for consultation with relevant stakeholders in July 2022. It is anticipated that construction of the measures to manage potential traffic delays can be implemented by early 2023 prior to the commencement of construction activities that will increase traffic movement of construction vehicles such as transportation of spoil off site and importation of formation aggregates.

This plan will be updated to detail these additional controls and will take into consideration the proposed traffic staging, vehicle movement considerations and overall traffic management principles for the M12 Central package.

The design phase of the proposed intersection works are anticipated to be completed in late 2022 and construction will be programmed for early 2023 following the completion of widening works around Clifton Avenue (being completed by Sydney Water).

Where the traffic management controls require intrusive work on site, a consistency assessment in accordance with TfNSW Environmental Assessment Procedure EIA-P03 would be prepared by Seymour Whyte to ensure the required work is consistent with the Approved Project.

5.17 Management of cumulative traffic impacts

Potential cumulative construction impacts may occur from the aggregated effect of other developments preparing for or starting Construction. Projects that may contribute to cumulative traffic impacts due to location, timeframe and project size include:

- WSIA
- Sydney Metro – Western Sydney Airport
- Operational M7 Motorway
- Other Project works including: M12 East; M12 West; M12 Early Works
- Sydney Water DN900 works along Elizabeth Drive.

Seymour Whyte will:

- Liaise and coordinate with other contractors undertaking these adjacent concurrent works which may involve road occupancies
- Liaise and facilitate regular meetings with TfNSW, other authorities and relevant parties including meeting at least monthly with TfNSW and Transport Management Centre (TMC)
- Liaise with TfNSW and other regulatory authorities (such as TMC), emergency services, Council(s) when planning and implementing your traffic management proposals
- Develop measures to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic caused by other developments

- Keep records of these meetings make them available to relevant personnel. Meetings may include but are not limited to Traffic Coordination Groups and Traffic and Transport Liaison Groups.

5.18 Management measures

Management actions prescribed by this CTTMP aim to minimise construction traffic impacts and are summarised in Table 5-3.

Table 5-3: Transport and traffic management and mitigation measures

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
Notification and Consultation					
TT1	Notify any changes in traffic conditions on roads or paths to road users, emergency services, public transport operators, and other relevant stakeholders	Consultation Records OCS	Prior to construction, and during construction	Traffic Manager Stakeholder and Engagement Manager	REMM TT01
TT2	Consultation will be carried out with WSIA and Sydney Metro – Western Sydney Airport for traffic and access interfaces.	Consultation Records OCS	Prior to construction, and during construction	Traffic Manager Stakeholder and Engagement Manager	REMM TT01
TT3	Consultation will be carried out with TfNSW, councils and other relevant stakeholders regarding the development of specific TMP and associated elements such TSPs, Traffic TGSs, VMPs and PMPs.	Consultation Records OCS	Prior to construction, and during construction	Traffic Manager	TfNSW QA G10
TT4	Consultation will be carried out with the operators of the M7 Motorway to develop measures to manage the potential impacts of construction within the operating M7 Motorway corridor.	Consultation Records OCS	Prior to construction, and during construction	Traffic Manager Stakeholder and Engagement Manager	REMM TT04
TT5	Notify local residents and local businesses about any new or changed construction activities which will affect access to their properties or otherwise disrupt the residents' use of their premises, at least five working days before commencing work affecting residents.	Consultation Records OCS	Prior to construction, and during construction	Traffic Manager Stakeholder and Engagement Manager	TfNSW QA G36

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT6	Coordination and liaison will be undertaken with contractors undertaking adjacent concurrent works which may involve road occupancies	Consultation Records OCS	Prior to construction, and during construction	Traffic Manager Community Stakeholder Manager	TfNSW QA G10
TT7	Consultation with affected businesses and properties where pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties cannot be maintained. In accordance with NSW CoA E96 and REMM TT07, alternative pedestrian and vehicular access, and parking arrangements will be developed in consultation with affected businesses and implemented before the disruption.	Consultation Records OCS	Prior to construction, and during construction	Traffic Manager Community Stakeholder Manager	NSW CoA E96 REMM TT07
Dilapidation report and repairs					
TT8	A Road Dilapidation Report must be prepared for local roads proposed to be used by heavy vehicles for works associated with the M12 Central package before the commencement of use by such vehicles.	Road Dilapidation Report	Prior to construction	Traffic Manager	NSW CoA E95 REMM TT06
TT9	If damage to roads occurs as a result of the construction of the M12 Central package, the damage will be rectified to restore the road to at least the condition it was in pre-construction in consultation with the relevant road authority.	Consultation Records	On identification of damage	Traffic Manager Construction Manager	NSW CoA E95
TT10	Independent Safety Audit(s) are to be undertaken by an appropriately qualified and experienced person during detailed design (audit of the plans) and prior to opening (pre-opening audit). Refer to Section 6.5.1 for further details of Construction Road Safety Audits.	Independent Safety Audit Report	Prior to the commencement of construction Prior to operations	Traffic Manager	NSW CoA E98 TfNSW QA G10
Access and Property					

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT11	Consultation will be undertaken with affected businesses and properties where pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties cannot be maintained. All reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised.	TMPs	During construction	Traffic Manager	NSW CoA E96 REMM TT07
TT12	Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected businesses and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption	Consultation Records	During construction	Traffic Manager	NSW CoA E96 REMM TT07
TT13	Safe pedestrian and cyclist access must be maintained around work sites during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, an alternate route which complies with the relevant standards must be provided and signposted. Consideration must also be given to CPTED principles when designing and implementing alternative routes.	Vehicle Movement Plans / Pedestrian Movement Plans	During construction	Traffic Manager Project engineers	NSW CoA E99 NSW CoA E63 ISCA
TT14	Active transport facilities must be designed, constructed and / or rectified in accordance with the Guide to Road Design Part 6A: Paths for Walking and Cycling and relevant AS 1428.1-2009 Design for access and mobility.	Design Report Work as Executed drawings	Detailed design Construction	Traffic Manager	NSW CoA E63
TT15	A Signage Strategy will be prepared to provide for appropriate signage for businesses where existing signage is obscured/no longer visible or where customers are required to use alternative access to reach the businesses during construction.	Signage Strategy	Prior to construction impacting properties	Traffic Manager	REMM TT08

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT16	Property adjustments, including replacement of farm infrastructure (such as fencing) and relocation of property access, prior to work that impact the property will be carried out in consultation with property owners/ business managers.	Consultation Records	Prior to construction impacting properties	Traffic Manager	REMM SLP04
TT17	Construction activities will be planned to minimise disruption to existing agricultural operations/activities in surrounding properties where feasible and reasonable (e.g. stock access, access to farm dams, etc) unless otherwise agreed by the landowner.	Consultation Records	During construction	Traffic Manager	NSW CoA E79 REMM SLP07
Traffic Management					
TT18	In consultation with TfNSW, Seymour Whyte will implement appropriate traffic management controls to mitigate the expected delays and intersection performance decline in the vicinity of Devonshire Road and Elizabeth Drive due to the M12 Central package. The traffic management controls will be detailed within a TMP(s).	TMPs	During construction	Traffic Manager	REMM TT10
TT19	When planning and carrying out traffic management, comply with the TfNSW Traffic Control at Work Sites Manual (TCWS)	TMPs	Prior to construction, and during construction	Traffic Manager	TfNSW QA G10
TT20	Site specific TMP(s) conforming to the RMS Traffic Control at Worksites manual will be developed for the works. TMPs will contain additional written details describing the nature of the works.	TMPs	Prior to construction	Traffic Manager	TfNSW QA G10
TT21	Traffic Staging Plans conforming to the TfNSW Traffic Control at Worksites manual will be developed showing how traffic will pass safely through the Site during the various construction stages.	Traffic Staging Plans	Prior to construction, and during construction	Traffic Manager	TfNSW QA G10

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT22	Traffic Control Plans conforming to the TfNSW Traffic Control at Worksites manual will be developed showing signs and devices arranged to warn traffic and to guide it around, past or if necessary, through a work site or temporary hazard.	Traffic Control Plans	Prior to construction, and during construction	Traffic Manager	TfNSW QA G10
TT23	Where applicable, Vehicle Movement Plans and Pedestrian Movement Plans will be developed and prepared with Traffic Control Plans.	Vehicle Movement Plans / Pedestrian Movement Plan	Prior to construction, and during construction	Traffic Manager	TfNSW QA G10
TT24	A Traffic Incident Management Plan will be developed and implemented. The Traffic Incident Management Plan will be developed in consultation with the Traffic Management Centre, Sydney Metro, WSIA, Liverpool City Council, Penrith City Council and Fairfield City Council, as relevant.	Traffic Incident Management Plan	Prior to construction	Traffic Manager	TfNSW QA G10
TT25	Traffic audits and monitoring inspections will be carried out in accordance with Section 6.3 and 6.5 of this CTTMP.	Monitoring and Audit Records	Prior to construction	Traffic Manager	TfNSW QA G10

ID	Management Measure	implementation	implement	for implementation	Reference or source
TT26	Construction vehicle movements (both on and offsite) will be managed to minimise noise impacts. Where feasible, this will include (but not limited to): • Establishment and use of internal haul routes, or existing major roads where this is not feasible (refer to Section 5.2) • Restriction of heavy vehicle movements to standard construction hours • Locating traffic marshalling areas away from residences to minimise noise impacts from idling vehicles (to be detailed on VMPs) • Instructing workers on the operation of heavy vehicles entering and exiting the site to minimise noise.	Site inspections TMP	During Construction	Traffic Manager	REMM NV12
TT27	Maintain the existing streetlighting illumination along existing roads or the intersecting local roads during construction, unless otherwise approved by TfNSW through the lighting plans provided in TMPs. In some instances, with the establishment of new traffic controls, additional temporary street lighting may be required to enhance overall road safety conditions.	Site inspections TMP	During Construction	Traffic Manager	TfNSW QA G10

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT28	During school holidays (and adjacent days) - no closures, stoppages or reduction in capacity at work sites along Elizabeth Drive, Mamre Road, Clifton Avenue, Salisbury Avenue or Range Road must be programmed during the following times: • From 6.00am on the Friday prior to the commencement of a State School holiday period until 6.00am on the first Monday of the State School holiday period; • From 6.00am on the last Friday of a State School holiday period until 6.00am on the first day of the new State School term; • From 6.00am on the day prior to a public holiday to 6.00pm on the day following the public holiday; • From 6.00am on the Friday prior to a public holiday Monday, to 6.00am on the Tuesday following the public holiday; and • From 6.00am on the Thursday prior to a public holiday Friday to 6.00am on the Monday following the public holiday.	Site inspections TMP ROL	School Holidays	Traffic Manager	TfNSW QA G10

TT29	Road occupancy will not be granted by the GSO (TMC) for peak period lane closures during the following time periods:
	• Single lane closures in 2 lane carriageways (Stop/Slow with Contra flow):
	  ◦ Monday to Friday (except Holidays)
	  • 5.00 am to 10.00 am (the morning peak) and
	  • 2:30 pm and 8 pm (the evening peak)
	  ◦ Saturday (except Holidays)
	  • 10.00am to 1.00pm
	  ◦ Sunday (except Holidays)
	  • 10.00am to 1.00pm
	• Full carriageway closure (in a single direction or both directions):
	  ◦ Not permitted at any time.
	During the above time periods, you must not obstruct any of the through or turning lanes on Elizabeth Drive or the intersecting side streets.
	Unless the GSO and TfNSW approves otherwise, this requirement applies to all lanes existing at that time, including any additional lanes which may have been constructed by you as Work Under the Contract and have been opened for use by the public.
	Advise the GSO (TMC) on 1300 725 886 when closing and reopening traffic lanes, quoting the relevant Road Occupancy Licence number. All ROLs must be activated with GSO Transport Operations Room prior to commencing work and deactivated at completion of each shift, in line with ROL conditions.
	Outside the hours and days specified above, road occupancy may be permitted, in accordance with Clause 2.1.
		Site inspections
		TMP
		ROL
			School Holidays	Traffic Manager	TfNSW QA G10

Public Transport					

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT30	Changes to bus stops will be required along Elizabeth Drive and implemented in consultation with TfNSW, relevant councils, and relevant bus operators. Alternate temporary bus stops will be provided with appropriate signage to direct commuters. Safe access will be provided in accordance with relevant safety and accessibility standards.	Consultation Records	During construction	Traffic Manager	REMM TT02
Spoil Haulage					
TT31	All heavy vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and CSSI name (or where the CSSI is staged, the name of that stage) with signage approved by DPE to enable immediate identification by a person viewing the heavy vehicle.	Site inspections	During construction	Traffic Manager	NSW CoA A49
TT32	Only one CSSI form of signage must be placed on a heavy vehicle at any one time. This will be checked upon heavy vehicle entry and exit from site	Site inspections	During construction	Traffic Manager	NSW CoA A49
TT33	Heavy vehicles used for spoil haulage and concrete deliveries associated with the M12 Central package are not permitted to use local roads within one (1) kilometre of construction area, unless approved by the Planning Secretary. This includes movements associated with waiting to access construction ancillary facilities and work areas. All local roads approved for use by the Planning Secretary must be identified in the Traffic and Transport CEMP Sub-plan.	Site inspections	During construction	Traffic Manager	NSW CoA E93 NSW CoA E94
TT34	Movements of haulage vehicles will be planned to minimise movements on the road network during the AM and PM peak periods where practicable. Where haulage routes pass schools, childcare facilities and/or aged care facilities, heavy vehicle movements during operational peak hours of these facilities will also be minimised where practicable.	TMPs	Prior to construction and during construction	Traffic Manager	REMM TT03
Design					

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT35	If temporary new roadways and detours, or adjustments to existing lane configurations and road geometry, are required as part of traffic staging, they must be designed in accordance with the relevant design standards (refer to Section 3.1.2).	Design Report TMPs	Detailed design	Road designer	TfNSW QA G10
TT36	Traffic signals must be coordinated to minimise congestion and manage traffic flows.	Design Report TMPs	Detailed design	Road designer	REMM TT09
TT37	Shared through and right turn lanes will not be permitted.	TMPs	Temporary design	Road designer	TfNSW QA G10
Transportation					
TT38	Transport all hazardous goods in accordance with the Dangerous Goods (Road and Rail Transport) Act 2008 (NSW) and the Dangerous Goods (Road and Rail Transport) Regulation 2014 (NSW).	Site inspections TMP	During construction	Traffic Manager	TfNSW QA G36
TT39	Seymour Whyte will request evidence from suppliers responsible for the management of dangerous goods transport that drivers: • have been sufficiently trained to be able to perform the task safely and lawfully. • are instructed on what they are expected to do, and • will be appropriately supervised when doing the task. This will include requesting evidence that drivers and vehicles hold current dangerous goods driver licence and dangerous goods vehicle licence where required to do so (refer to **Error! Reference source not found.**).	Correspondence with suppliers	Prior to transportation of dangerous goods	ESR	Dangerous Goods Act 2008 Dangerous Goods Regulation 2014

ID	Management Measure	Evidence of implementation	When to implement	Responsibility for implementation	Reference or source
TT40	A dangerous goods driver licence AND dangerous goods vehicle licence. is required if the vehicle; • is carrying any quantity of dangerous goods in a receptacle with a capacity of more than 500 litres; or • is carrying any receptacle containing more than 500 kilograms of dangerous goods. Note: a receptacle is a container that holds the dangerous goods substance or article and is in contact with the substance or article. A dangerous goods driver licence or vehicle licence is not required if the dangerous goods are in IBCs; and the total capacity of the IBCs on the vehicle is no more than 3000 litres; and no IBC is filled or emptied while on the vehicle.	Evidence of dangerous goods vehicle licence	Prior to transportation of dangerous goods	ESR	Dangerous Goods Act 2008 Dangerous Goods Regulation 2014

5.19 Traffic management risk assessment workshop

A Traffic Management Risk Assessment Workshop will be undertaken to identify and address the risks associated with traffic management, road safety and other road network issues specific to the M12 Central package.

The workshop will be attended by the Traffic Manager, road designers, TfNSW personnel involved in reviewing the TMP, the TfNSW ESM (or delegate) and representatives from Penrith City Council, Liverpool City Council and Fairfield City Council. Where appropriate, representatives of nearby schools, emergency services, affected bus companies, local businesses, and utility owners will be invited.

The outcomes of the workshop will be documented in the M12 Central package Risk Register including in Appendix A2 of the CEMP. The identified risks will be managed through the implementation of Traffic Control Plans and other measures outlined in the TMPs.

6 Compliance management

6.1 Roles and responsibilities

The organisational structure for the M12 Central package and overall roles and responsibilities are outlined in Section 5.1 of the CEMP. Specific responsibilities for the implementation of traffic management are detailed in Section 5 of this Plan.

6.1.1 Traffic Manager

Nino Boifava is the dedicated full time Traffic Manager for the M12 Central Package. Nino holds a current “Prepare Work Zone Traffic Management Plan” qualification and will be responsible for the overall management of traffic and road safety for the M12 Central package. The Traffic Manager must also have significant experience (10 years) in traffic capacity and intersection analysis of temporary traffic arrangements for road construction projects.

The Traffic Manager’s responsibilities include:

- Ensuring that the approved traffic management measures are implemented and maintained in accordance with the approved plans
- Carrying out regular inspections of the traffic control measures to ensure that they are effective
- Amending and updating the plans, as required, to ensure that they remain current as the work progresses
- Identifying situations where traffic congestion, or unsafe conditions for vehicles, cyclists, pedestrians and workers, are occurring and providing recommendations for improvement
- Maintaining current copies of the CTTMP and its various component plans, lane occupancy licences and speed zone authorisations, and their controlled distribution
- Keeping records of the Traffic Controllers’ qualifications and ensuring that they are current
- Liaising and facilitating regular meetings with TfNSW, other authorities and relevant parties on traffic management matters for the site, maintaining records of these meetings and making them available to the relevant persons
- Providing a single point of contact within your for dealing with all issues arising from applications to GSO (TMC) and for all enquiries from the TfNSW and Council(s) regarding any traffic management issues relating to the project
- Liaising with WSIA and Sydney Metro – Western Sydney Airport on traffic and access interfaces with the aim of minimising cumulative impacts where possible
- In conjunction with your Community Relations Manager, undertaking consultations with local businesses and residents
- Providing induction on traffic management measures to site personnel
- Recording and reporting on all traffic incidents. Nino Boifava (mob. 0428 540 002) is the nominated person in the TMP to be available at all times if an emergency or disruptive unplanned incident occurs within the boundary of any construction area subject to a TCP.
- Preparing monthly reports on traffic management matters

- Developing TMP's and TGS's and obtaining required approvals from the TfNSW and relevant authorities of all traffic management measures on site
- Arranging traffic control audits and implementing audit close outs
- Regularly monitoring the traffic flow to ensure compliance with the Contract
- Updating the M12 Central package monthly report on all traffic related measures (recording and reporting on all traffic crash/ incident)
- Weekly reporting compliance and noncompliance with ROL conditions, speed management and queue management
- Consultation on traffic matters with local businesses and residents
- Arranging the design and certification of site entry and exit facilities to ensure compliance with the nominated main line speed requirements both within and outside ROL licence time periods
- Providing GSO (TMC) and TfNSW with look ahead programs
- Undertaking traffic-based risk assessments
- Stopping work on any activity where it is considered to be necessary to prevent traffic accidents or to comply with the directions of the TfNSW and other authorities.

6.1.2 Traffic Controllers

Traffic controllers will be appointed solely for the purposes of the M12 Central package to provide for the safe movement of traffic around, past or through the work site. Traffic Controllers controlling and directing traffic will hold a current "Traffic Controller" qualification.

When directing traffic, Traffic Controllers must wear high visibility fluorescent clothing or safety vests complying with AS/NZS 4602, clearly bearing the words "Authorised Traffic Controller".

During poor light conditions or at night, Traffic Controllers will also be equipped with illuminated wands to supplement the STOP / SLOW bat.

6.1.3 Road Designer

If temporary new roadways and detours, or adjustments to existing lane configurations and road geometry, are required as part of traffic staging, they will be designed in accordance with the relevant design standards, engineering and safety guidelines by a suitably qualified and experienced road designer.

Table 6-1: Specific road design standards

Item	Local Road	State Road
Design travel speed	60 km/hr	80 km/hr
Through Lanes	3.5 m (1) (minimum) 3.3 m (2) (absolute minimum)	3.5 m (1) (minimum) 3.3 m (2) (absolute minimum)
Turn Lanes	3.2m (1) minimum and as required, subject to a vehicle swept path analysis.	3.2m (1) minimum and as required, subject to a vehicle swept path analysis.

Item	Local Road	State Road
Shoulder widths	1.5 m (1) (minimum) 1.2 m (2) (absolute minimum suitable for cyclists) 0.6 m (1) (minimum if alternative cycle provisions are made)	2.0 m (1) (minimum suitable for cyclists) 0.6 m (1) (minimum if alternative cycle provisions are made)

Note:
(1) Values stated in tables are minimum requirements.
(2) Use of the "absolute minimum" values will only be considered by the Principal in areas that are tightly constrained and where you can demonstrate to the Principal's satisfaction that there is no alternative. Complete a risk assessment and provide to the Principal where you propose the use of the "absolute minimum" values. Use of the "absolute minimum(s)" is wholly at the Principal's discretion and cannot be used without the express permission of the Principal.

6.2 Training

To ensure that this Plan is effectively implemented, all site personnel (including sub-contractors) will undergo site induction training that includes transport and traffic management issues prior to construction commencing. The induction training will address elements related to transport and traffic management, including:

- Existence and requirements of the OCTTMP, this CTTMP and the plans and procedures prepared under the CTTMPs relevant to the M12 Central package
- Relevant legislation, regulations, licences, EPL conditions and permit requirements
- Incident response, management and reporting
- Road safety
- Road occupancy
- Construction hours
- Complaints response and reporting
- Roles and responsibilities for traffic management
- Temporary and interim traffic arrangements
- Response procedure for dealing with traffic incidents.

Targeted training in the form of toolbox talks or specific training will be provided to staff with a key role in transport and traffic management or those carrying out an activity with a high risk of environmental impact. Site personnel will undergo refresher training at six monthly intervals.

The ER will review and approve the induction and training program prior to the commencement of construction and monitor implementation.

Daily pre-start meetings conducted by the Foreman / Site Supervisor (or delegate) will inform the site workforce of any environmental issues relevant to traffic that could potentially be impacted by, or impact on, the day's activities.

Further details regarding staff induction and training are provided in Section 5.3 of the CEMP.

All personnel involved in work associated with the ROL must be inducted in and made familiar with the ROL terms, conditions and requirements prior to the implementation of the road occupancy or their deployment in this element of your Work and regularly re-trained on the ROL terms, conditions and requirements throughout the period of the road occupancy.

6.3 Monitoring and inspections

Inspection and monitoring requirements relevant to transport and traffic are provided in Table 6-2. Specific requirements for inspection of traffic management will be carried out in accordance with the TCWS Manual (TfNSW, 2020). Inspections of temporary traffic controls during construction will focus on monitoring compliance against TGS/VMP and identifying safety hazards to enable implementation of corrective solutions.

Table 6-2: Inspections and monitoring relevant to transport and traffic

Inspection / monitoring	Frequency	Responsibility	Reference
Traffic control plan inspection Ensure all traffic control signs and devices are functioning and implemented in the correct location as shown in the TGS	Commencement and conclusion of each day's work	Traffic Manager	TfNSW QA Specification G10 Traffic Control at Work Sites Manual (2022) Appendix E
Traffic management risk assessment checklist	Daily	Traffic Manager	TfNSW QA Specification G10 Traffic Control at Work Sites Manual (2022) Appendix E
Traffic control safety inspection with TfNSW Ensure Traffic Control Plans implemented are approved and Construction sites are operating safely	Monthly	Traffic Manager	TfNSW QA Specification G10 Traffic Control at Work Sites Manual (2022) Appendix E
Traffic Control Plan inspection Ensure that the pavement markings, road signs and other traffic control devices have been installed in accordance with the TGS.	Prior to opening the temporary roadways to traffic	Traffic Manager	TfNSW QA Specification G10
ROL compliance monitoring	Weekly or as required for traffic switches	Traffic Manager	TfNSW QA Specification G10
Road dilapidation inspection	Pre-Construction and prior to Completion	Traffic Manager	NSW CoA E95 REMM TT06
Real time monitoring of the locations all heavy vehicles used for off-Site haulage	All times when off-Site haulage occurring	Traffic Manager	TfNSW QA Specification G1 TfNSW QA Specification G36
Records will be maintained of the times when the temporary speed zoning signs are in force	When temporary speed zoning signs are in force	Traffic Manager	TfNSW QA Specification G10

Requirements and responsibilities in relation to monitoring and inspections are documented in Section 7.1 and Section 7.2 of the CEMP.

6.4 Hold Points

Hold Points relevant to this Plan are outlined in Table 6-3. There are no witness points relevant to this Plan.

Table 6-3: Hold Points applicable to this Plan

TfNSW QA spec	Clause	Type	Description	Plan reference
G1	28	Hold Point	Pre-construction Road Dilapidation Report	Section 5.11
G10	1.7.4	Hold Point	Submission of traffic control personnel details	Section 6.1.2
G10	2.1	Hold Point	Submission of ROL	Section 5.4
G10	2.2.1	Hold Point Hold Point	Submission of Traffic Management Plan (TMP) and associated documents	Section 5.1
G10	2.4.1	Hold Point	Submission of Traffic Guidance Scheme (TGS), where submitted separately from TMP Include the Vehicle Movement Plan and Pedestrian Movement Plan, Road Safety Audit Report (closed out), and copies of any associated ROL and SZA obtained.	Section 5.1
G10	4.4.2	Hold Point	Opening of temporary roadway or detour to traffic	Section 5.1.2

6.5 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this sub plan, CoA and other relevant approvals, licenses and guidelines. Audit requirements are further detailed in Section 7.4 of the CEMP.

6.5.1 Construction road safety audits

Prior to its initial implementation and whenever significant changes are made to a TMP, a road safety audit will be carried out in accordance with the requirements in the NSW Centre for Road Safety publication Guidelines for Road Safety Audit Practices and AGRS06 Austroads Guide to Road Safety Part 6: Implementing Road Safety Audits and QA Specification G10.

The audit team carrying out the audit must comprise, as a minimum, a lead auditor registered at Level 3 certification and a second team member registered at Level 2 certification or higher, both of whom must be listed on the NSW Centre for Road Safety's Register of Road Safety Auditors.

The road safety audit report must be provided to TfNSW within five working days of the audit including any corrective actions arising from the audit findings, and any subsequent correspondence between Seymour Whyte and the road safety audit team.

If a road safety audit of a TMP has been undertaken, then within 24 hours of a traffic switch on to temporary roadways or detours, a road safety audit of the implemented traffic control measures at both daytime and night-time must be conducted.

6.5.2 Independent road safety audit prior to opening

In accordance with NSW CoA E98, independent road safety audit(s) will be undertaken by an appropriately qualified and experienced person during detailed design (audit of the plans) and prior to opening (pre-opening audit) to assess the safety performance of new or modified roads (road safety audit), parking, pedestrian and cycle infrastructure provided as part of the M12 Central package (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management.

The audit findings and recommendations of the detailed design plans (audit of the plans) will be actioned prior to construction of the relevant infrastructure. The pre-opening audit findings and recommendations will be actioned prior to the relevant infrastructure being made available for use. All audit findings must be made available to the Planning Secretary on request, within the timeframe stated in the request. The Independent Auditor will be appointed by TfNSW.

6.5.3 Opening of traffic upon Completion

TfNSW will be notified in writing at least 10 working days prior to the date of opening of the whole of the Works or part of the Works to traffic. All relevant permanent signposting, pavement markings, safety barriers and traffic signals required under the Contract must be completed prior to opening of the whole of the Works or any part of the Works to traffic.

A TMP must be prepared and submitted to TfNSW and the GSO for the opening of traffic upon Completion. The TMP for Completion is to include overarching opening strategy for the project, details of final wearing courses (if any), a line marking implementation program, consultation with stakeholders, communication plan, transport integration plan, risk management plan in addition to other requirements of the TMP as outlined in Section 5.1. The procedure for opening will be determined through consultation between Seymour Whyte, TfNSW and the Police.

A pre-opening road safety audit is to be completed and all issues raised in the road safety audit addressed to the satisfaction of the TfNSW at least 24 hours prior to opening.

Remove all temporary traffic control devices no longer required for the safety of traffic, when the whole of the Works or part of the Works are opened to traffic.

6.6 Reporting

Reporting requirements relevant to transport and traffic are summarised in Table 6-4. Requirements and responsibilities for reporting are further described in Section 7.5 of the CEMP.

Accurate records will be maintained substantiating all construction activities associated with the M12 Central package or relevant to the conditions of approval, including measures taken to implement this CTTMP. Records will be made available to the DPE and Commonwealth Department of Agriculture, Water and the Environment (DAWE) upon request, within the timeframe nominated in the request

Table 6-4: Reporting requirements relevant to traffic management

Report	Frequency	Recipient	Responsibility	Timing	Reference
Road Dilapidation Report (local roads)	Within three weeks of completing the surveys and at least two weeks before the use of the local roads by heavy vehicles.	Penrith, Liverpool, Fairfield City Council(s)	Traffic Manager	Prior to construction	NSW CoA E95 REMM TT06
Traffic Management Performance Report include, as a minimum, the following: (a) summary of daily inspections of traffic control measures; (b) compliance with the TMP and its component plans, and ROL conditions; (c) compliance with specified travel times, and delays to traffic or queue lengths exceeding allowable limits; (d) where applicable, analysis of trends as applied to traffic management and safety measures.	Monthly	TfNSW	Traffic Manager	Prior to construction	TfNSW QA Specification G10
Traffic Incident Reporting	Following a traffic incident	TfNSW	Traffic Manager	Where required	TfNSW QA Specification G10
Construction Road Safety Audit	Prior to TMP implementation, when there are significant changes to TMP, within 24 hours of a traffic switch	TfNSW	Traffic Manager	Where required	TfNSW QA Specification G10

Report	Frequency	Recipient	Responsibility	Timing	Reference
Independent Road Safety Audit	During design development (audit of the plans) and prior to opening (pre-opening audit)	Audit findings must be made available to Planning Secretary on request, within the timeframe stated in the request	Traffic Manager	Prior to operation	NSW CoA E98
Real time monitoring of the locations all heavy vehicles used for off-Site haulage	All times when off-Site haulage occurring	TfNSW (Transport Management Centre), DPIE and/or the EPA upon request	Traffic Manager	Records to be maintained for a period of no less than one year following Completion.	TfNSW QA Specification G1 TfNSW QA Specification G36

7 Review and improvement

7.1 Continuous improvement

Continuous improvement of this CTTMP will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of traffic management
- Identify environmental risks not already included in the risk register
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets.

The Environmental Site Representative is responsible for ensuring project environmental risks are identified and included in the M12 Central package risk register and appropriate mitigation measures implemented throughout the construction of the M12 Central package as part of the continuous improvement process. The process for ongoing risk identification and management during construction is outlined in Section 4.1.2 of the CEMP.

7.2 CTTMP update and amendment

The processes described in Section 7.7 of the CEMP may result in the need to update or revise this CTTMP. This will occur as needed. Any revisions to this CTTMP will be in accordance with the process outlined in Section 1.12 of the CEMP.

A copy of the updated CTTMP and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure (refer to Section 7.6.2 of the CEMP).

Construction Transport and Traffic Management Sub-plan

Appendix A – Secondary CoA, Secondary REMMs and TfNSW QA specifications

M12 Motorway - Central

January 2025

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Appendix A – Secondary CoA, Secondary REMMs and TfNSW QA Specifications

Secondary requirements that are related, but not specific to, the development of this Plan are outlined in this appendix. Cross references are provided to indicate where the requirements are addressed in this Plan or other Project management documents. This includes:

- Secondary NSW Conditions of Approval (CoA) which are listed in Table A1
- Secondary Revised Environmental Management Measures (REMMs) which are listed in Table A2
- Relevant requirements of the TfNSW QA Specifications which are listed in Table A3.

Table A1: Secondary NSW CoA

CoA No.	Condition Requirements	Document Reference
A5	Where the terms of this approval require a document or monitoring program to be prepared or a review to be undertaken and submitted to the Planning Secretary, and the terms of this approval require the document, monitoring program or review to be prepared/undertaken in consultation with identified parties, evidence of the consultation must be submitted to the Planning Secretary with the relevant document, monitoring program or review. The evidence must include:	OCTTMP Section 1.6
	(a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval;	
	(b) a log of the dates of engagement or attempted engagement with the identified party;	
	(c) documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations;	
	(d) outline of the issues raised by the identified party and how they have been addressed; and	
A7	References in the terms of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval.	Section 3

CoA No.	Condition Requirements	Document Reference
A49	All heavy vehicles used for construction spoil haulage must be clearly marked on the sides and rear with the CSSI name (or where the CSSI is staged, the name of that stage) to enable immediate identification by a person viewing the heavy vehicle. Details of the CSSI identification markings must be submitted to the Planning Secretary for approval and approved prior to the heavy vehicles being used for construction spoil haulage. There must only be one CSSI form of signage on a heavy vehicle at any one time.	Section 5.2
E63	Active transport facilities must be designed, constructed and/or rectified in accordance with the *Guide to Road Design Part 6A: Paths for Walking and Cycling* (Austroads, 2017) and relevant Australian Standards (AS) such as *AS 1428.1-2009 Design for access and mobility*. The active transport links must also incorporate relevant Crime Prevention Through Environmental Design principles.	Section 5.7
E79	The CSSI must be delivered in a manner that minimises intrusion, as far as reasonably practicable, and disruption to agricultural operations/activities in surrounding properties (e.g. stock access, access to farm dams, etc.), unless otherwise agreed by the landowner	Section 5.9
E93	The Planning Secretary's approval is required before any heavy vehicles used for spoil and fill haulage or concrete deliveries (for the purpose of the CSSI) are driven on local roads within one (1) kilometre of early works, construction and construction ancillary facilities and that are not identified for use by heavy vehicles in the documents listed in Condition A1. The local roads must be identified in the Early Works Environment Management Plan and Traffic Management CEMP Sub-plan.	Section 5.2

CoA No.	Condition Requirements	Document Reference
E94	All requests to the Planning Secretary for approval to use local roads in accordance with Condition E93, must include a traffic and pedestrian impact assessment and be prepared in consultation with the relevant local council(s). The assessment must be undertaken by an appropriately qualified and experienced person and must include a swept path analysis if required by the Department. The traffic and pedestrian impact assessment must: (a) demonstrate that the use of local roads will not compromise the safety of the public and have no more than minimal amenity impacts; (b) provide details as to the date of completion of the road dilapidation surveys for the subject local roads; and (c) describe the measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and childcare facilities during peak times for operation. The outcomes and recommendations of the traffic and pedestrian impact assessment must be incorporated into the Site Establishment Management Plan or Traffic Management CEMP Sub-plan as relevant.	Section 5.2.1
E95	Before any local road is used by a heavy vehicle for the purposes of the CSSI, a Road Dilapidation Report must be prepared for the road unless otherwise agreed by the relevant road authority. A copy of the Road Dilapidation Report must be provided to the relevant road authority within three (3) weeks of completion of the survey and at least two (2) weeks before the road is used by heavy vehicles associated with the construction of the CSSI. If damage to roads occurs as a result of the construction of the CSSI, the Proponent must rectify the damage to restore the road to at least the condition it was in pre-construction in consultation with the relevant road authority. Rectification works must be undertaken within three (3) months of the subject road no longer being used for the construction of the CSSI unless an alternative timeframe is agreed to by the relevant road authority.	Section 5.11
E96	During construction, all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, residences, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access, and parking arrangements must be developed in consultation with affected residents, businesses and affected property owners and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	Section 5.6 Section 5.7

CoA No.	Condition Requirements	Document Reference
E97	The CSSI (including new or modified local roads, parking, pedestrian and cycle infrastructure) must be designed to meet relevant design, engineering and safety guidelines, including the Austroads Guide to Traffic Management.	Section 6.1.3
E98	An independent Road Safety Audit is to be undertaken by an appropriately qualified and experienced person during design development (audit of the plans) and prior to opening (pre- opening audit) to assess the safety performance of new or modified roads (road safety audit), parking, pedestrian and cycle infrastructure provided as part of the CSSI (including ancillary facilities) to ensure that they meet the requirements of relevant design, engineering and safety guidelines, including *Austroads Guide to Traffic Management*. Audit findings and recommendations of the detailed design plans (audit of the plans) must be actioned before construction of the relevant infrastructure. The pre-opening audit findings and recommendations must be actioned prior to the relevant infrastructure being made available for use. All audit findings must be made available to the Planning Secretary on request, within the timeframe stated in the request.	Section 6.5
E99	Safe pedestrian and cyclist access must be maintained around work sites during Work. In circumstances where pedestrian and cyclist access is restricted or removed due to Work, an alternate route which complies with the relevant standards must be provided and signposted	Section 5.7

Table A2: Secondary REMMs

ID	Revised environmental management measure	Timing	Document Reference
TT02	Changes to bus stops will be implemented in consultation with TfNSW, relevant councils, and relevant bus operators. Alternate temporary bus stops will be provided with appropriate signage to direct commuters. Safe access will be provided in accordance with relevant safety and accessibility standards.	Prior to construction, during construction and after construction	Section 5.8
TT03	Movements of haulage vehicles will be planned to minimise movements on the road network during the AM and PM peak periods where practicable.	Prior to construction and during construction	Section 5.2
TT04	Consultation will be carried out with the operators of the M7 Motorway to develop measures to manage the potential impacts of construction within the operating M7 Motorway corridor.	Detailed design prior to construction, and during construction	Section 1.6 Section 5.17 Section 5.18
TT06	A road dilapidation report will be prepared before impacts on local roads in consultation with relevant councils and other relevant stakeholders. The report will document the existing conditions of local roads and outline measures to repair damage to roads from heavy vehicle movements associated with the project.	Prior to construction	Section 5.11
TT07	Existing property access would be maintained at all times. Any changes to access arrangements or alternative access that are necessary during construction will be done with consultation with the landowner. Any changes to access will provide the same equivalent pre-existing level of access unless agreed to by the land owner. Property access that is physically affected by the project will be reinstated to at least an equivalent standard, in consultation with the landowner.	Detailed design prior to construction, and during construction	Section 1.6 Section 5.9

ID	Revised environmental management measure	Timing	Document Reference
TT08	A signage strategy will be prepared as part of the CTTMP to provide for appropriate signage for businesses where existing signage is obscured/no longer visible or where customers are required to use alternative access to reach the businesses during construction.	Prior to construction	Section 5.6
TT09	Traffic signals will be coordinated to minimise congestion and manage traffic flows.	Detailed design	Section 5.3
TT10	Investigate and develop an appropriate traffic solution to manage the expected traffic delays during construction in the vicinity of Devonshire Road. The options considered and the preferred solution will be documented in a memo and then implemented through the CTTMP for the project.	Prior to construction	Section 5.16
SLP04	Property adjustments, including replacement of farm infrastructure (such as fencing) and relocation of property access, prior to work that impact the property will be carried out in consultation with property owners/ business managers.	Prior to implementing property adjustments	Section 5.9
SLP07	Construction activities will be planned to minimise disruption to existing agricultural operations/activities in surrounding properties where feasible and reasonable (e.g. stock access, access to farm dams, etc) unless otherwise agreed by the landowner.	Prior to construction	Section 5.9
NV12	Construction vehicle movements (both on and offsite) will be managed to minimise noise impacts. Where feasible, this will include (but not be limited to): • Establishment and use of internal haul routes, or existing major roads where this is not feasible • Restriction of heavy vehicle movements to standard construction hours • Locating traffic marshalling areas away from residences to minimise noise impacts from idling vehicles • Instructing workers on the operation of heavy vehicles entering and exiting the site to minimise noise.	During construction	Section 5.18 Construction Noise and Vibration Management Plan

Table A3: TfNSW QA specifications

Specification	Measure/requirement	CTTMP Reference
G10 1.4.1	Plan your work to cause the least possible disruption to the traffic flow. Liaise with the Principal and other regulatory authorities (such as GSO (TMC), emergency services, Council(s)) when planning and implementing your traffic management proposals. Notwithstanding any acceptance of your Traffic Management Plan by the Principal, it remains your responsibility to implement a safe and effective traffic management scheme.	Section 5.1
G10 1.4.2	Throughout the duration of the Contract, liaise continually and consult with property owners/occupiers and business operators impacted by the construction work, on all traffic and access issues, and resolve any issues raised. Advise stakeholders of approved traffic and pedestrian management arrangements in accordance with TfNSW G36 Clause 3.7.2.	Section 1.6
G10 1.4.3	At all times, maintain safe access for vehicles, cyclists, pedestrians and livestock to local properties and side roads affected by the road construction. Make any necessary arrangements to enable continuity of provision of services, such as garbage or recycling waste collection and mail delivery. Do not commence any work affecting access to local properties (including for arming/cattle operations) and use of side roads without providing alternative access which is acceptable to the Principal and affected owners/residents and business operators. Consult with the operators of the M7 Motorway to develop measures to manage the potential impacts of construction within the operating M7 Motorway corridor.	Section 5.7 Section 5.9 Section 5.17
G10 1.4.4	Liaise and coordinate your traffic control measures with those of adjoining contracts undertaken concurrently by others. Major property developments and other construction contracts are underway adjacent to the Site which are likely to increase/ change traffic volumes/ types/ times during construction. Undertake early and ongoing consultation and communication with adjoining property developers / construction contractors to identify potential impacts of your proposed traffic management arrangements on adjoining property	Section 5.9 Section 5.17

Specification	Measure/requirement	CTTMP Reference
	developers and impacts of their traffic management on your construction works. Develop, and implement management strategies to avoid or mitigate these impacts.	
G10 1.4.5	Comply with the directions of the Principal and other authorities such as GSO (Transport Management Centre (TMC)) or TfNSW Regional Operations (RO), Police, Fire Brigade and State Emergency Services. Such directions may include requiring you to temporarily cease work and re-open any closed lane or shoulder in the event of a traffic incident within or adjacent to the Site. Cooperate with TfNSW and other authorities to facilitate traffic flows on the roadway through the Site.	Section 5.14
G10 1.4.6	Following a traffic crash/ incident on a roadway within or adjacent to the Site, the Police, or the Principal may request you to assist with the removal of any debris from the accident crash/ incident left on the roadway, removal or repositioning where necessary of traffic control and safety devices and rectification of any damage caused to them, to make the roadway safe and trafficable again.	Section 5.14
G10 1.4.7	Design and construct suitable intersections for vehicles entering or leaving your work sites, areas provided for local road works, and at junctions where the traffic volumes are changed as a result of the Work Under the Contract. Maintain the capacities of all intersections with the existing roads and any replacement or new intersections that are a part of temporary works being used by existing road traffic, as a minimum, at the levels that existed at the original intersection prior to the commencement of construction for the duration of the works. Design and construct all construction entry and exit gates to facilitate the safe movement of construction vehicles, whilst minimising the impact to traffic flow on adjacent road. The design must cater for the highest posted speed environment whenever construction gates are in operation, include all-weather temporary acceleration and deceleration lanes and include for appropriate pavement life and serviceability (refer to Clause 2.6.4). Construction traffic must only enter and leave the road network in the traffic flow direction of the adjacent traffic lane (left in/ left out movements only) in a forward direction, unless otherwise approved by the Principal. Construction traffic must not make U-turns across existing roads.	Section 5.1 Section 5.16

Specification	Measure/requirement	CTTMP Reference
G10 1.5	Make allowance for any necessity to install traffic control measures including temporary roadways and detours with associated facilities, outside the “Limits of Work” shown on the Drawings, for traffic control zones such as advance warning area, transition area, buffer area, and termination area.	Section 5.3
G10 1.7.4	Prior to the commencement of any work at the Site involving controlling and directing traffic, submit to the Principal the names of your proposed Traffic Controllers, and evidence of the currency of their qualifications. Submission of these details constitutes a Hold Point.	Section 6.4
G10 1.7.5	When directing traffic, your Traffic Controllers must wear high visibility fluorescent clothing or safety vests complying with AS/NZS 4602, clearly bearing the words “Authorised Traffic Controller”. During poor light conditions or at night, equip your Traffic Controllers with illuminated wands to supplement the STOP/SLOW bat.	Section 6.4
G10 1.8.1	Where specified in Annexure G10/A1, nominate in your Traffic Management Plan (TMP) a member of your site management team dedicated full time as your Traffic Manager.	Section 6.1.1
G10 1.8.2	The Traffic Manager must hold a current “Prepare Work Zone Traffic Management Plan” qualification (refer Section 2.4.1 of TCWS), and have a minimum of 10 years of recent experience in traffic management on road construction sites of equivalent complexity to the current Contract. The Traffic Manager must also have significant experience in traffic capacity and intersection analysis of temporary traffic arrangements for road construction projects.	Section 6.1.1
G10 1.8.3	Detail in the TMP the roles and responsibilities of the Traffic Manager, which include (but not limited to): (a) ensuring that the approved traffic management measures are implemented and maintained in accordance with the approved plans; (b) carrying out regular inspections of the traffic control measures to ensure that they are effective; (c) amending and updating the plans, as required, to ensure that they remain current as the work progresses; (d) identifying situations where traffic congestion, or unsafe conditions for vehicles, cyclists, pedestrians and workers, are occurring and providing recommendations for improvement;	Section 6.1.1

Specification	Measure/requirement	CTTMP Reference
	(e) maintaining current copies of the Traffic Management Plan and its various component plans, lane road occupancy licences and speed zone authorisations, and their controlled distribution; (f) keeping records of the Traffic Controllers' qualifications and ensuring that they are current; (g) liaising and facilitating regular meetings with the Principal, other authorities and relevant parties (including meeting at least monthly with the Principal and GSO (TMC) together) on traffic management matters for the Site, maintaining records of these meetings and making them available to the relevant persons. Meetings include but are not limited to Traffic Coordination Groups (TCG's) and Traffic and Transport Liaison Groups (TTLG's)i; (h) in conjunction with your Community Relations Manager, undertaking consultations with local businesses and residents; (i) providing induction on traffic management measures to site personnel; (j) recording and reporting on all traffic incidents; (k) preparing monthly reports on traffic management matters (refer Clause 4.7.2); (l) developing TMP's and TGS's and obtaining required approvals from the Principal and relevant authorities of all traffic management measures on site; (m) arranging traffic control audits and implementing audit close outs; (n) regularly monitoring the traffic flow to ensure compliance with the Contract; (o) updating the project monthly report on all traffic related measures (recording and reporting on all traffic crash/ incident); (p) weekly reporting compliance and noncompliance with ROL conditions, speed management and queue management; (q) consultation on traffic matters with local businesses and residents; (r) arranging the design and certification of site entry and exit facilities to ensure compliance with the nominated main line speed requirements both within and outside ROL licence time periods; (s) providing GSO (TMC) and the Principal with look ahead programs; and, (t) undertaking traffic-based risk assessments of the Works Under the Contract.	

Specification	Measure/requirement	CTTMP Reference
G10 2.1.1	When your planned activity requires an existing road to be used in such a way that affects traffic flow, obtain a Road Occupancy Licence (ROL). The terms of the Contract are not amended or waived by the conditions of the ROL. Obtain a ROL for the following: • Temporary lane closures for day activities; • Temporary lane closures for night activities; • Speed reduction; • Shoulder closures; • Any stoppages to traffic; • Any occupation of the construction Site by your labour, sub-contractors, equipment or plant that requires a traffic control plan under the provisions of this Specification; and • Any other event, including utility works, that has the potential to impact traffic flows. If the relevant authority requires submission of an approved Traffic Management Plan, the Hold Point in Clause 2.2.1 must be released before your ROL application is submitted. If the relevant authority requests additional information, amendments or clarification, the ROL application assessment period will again apply from the date of submission of the requested further details.	Section 5.4 Section 6.4
G10 2.1.3	In conjunction with your ROL application, you may apply for a temporary Speed Zone Authorisation (SZA) to alter the speed limit of section(s) of the road. Temporary speed zoning and speed limit selection must comply with the TCWS. Undertake roadwork speed limits and zoning in lane occupancies in consultation with the GSO Representative. Speed zones must be justifiable and self-enforcing.	Section 5.5
G10 2.1.4	Provide the Principal every week with a forecast of the proposed road occupancies for the following week. The forecast must be in the form of a schedule running from Monday to the following Sunday and contain full details on the locations	Section 5.4

Specification	Measure/requirement	CTTMP Reference
	and timing of all proposed road occupancies. The forecast must be provided to the Principal by 9.00am on the Thursday preceding the week being forecast. All your personnel involved in work associated with the ROL must be: (i) inducted in and made familiar with the ROL terms, conditions and requirements prior to the implementation of the road occupancy or their deployment in this element of your Work; and (ii) regularly re-trained on the ROL terms, conditions and requirements throughout the period of the road occupancy. In conjunction with your weekly submission above, you must also include a forecast program advising GSO (TMC) and the Principal of all your major road occupancies and TMP's (i.e. full road closures, traffic detours, any lane closures during peak periods, traffic switch, long term speed reductions, etc.) for the upcoming 6 week period.	
G10 2.2	At least 20 30 working days prior to the submission of your application for an ROL (refer Clause 2.1), submit for the Principal's acceptance your Traffic Management Plan (TMP) for the Works. Any revisions to the TMP will require a new submission. The Principal may agree to a reduced lead time for submission of the TMP if the proposed traffic management measures do not require construction of temporary roadways and detours involving pavement or drainage works.	Section 6.4
G10 2.2	TMP submissions will need to be reviewed and associated network impacts endorsed by GSO (TMC) prior to ROL being issued and work activity commencing.	Section 5.4
G10 2.2.2	The TMP and associated documentation must be prepared by person(s) suitably experienced in the design and implementation of traffic management plans of equivalent complexity to those required in the Contract and holding qualifications acceptable to the Principal, including as a minimum, a "Prepare a Work Zone Traffic Management Plan" qualification. Consult with all relevant stakeholders, including TMC (GSO), Councils and local bus companies, when preparing the TMP.	Section 5.1

Specification	Measure/requirement	CTTMP Reference
	The TMP must be approved by your Traffic Manager (if the person preparing the TMP is not your Traffic Manager), your Site Safety Representative, and your Construction Manager prior to submission to the Principal in accordance with Clause 2.2.1. Include any comments made during the review with the submission.	
G10 2.2.3	The TMP must include, as a minimum and where appropriate, the following elements: (a) Details of any traffic staging arrangements associated with each proposed construction stage, including Traffic Staging Plans (refer Clause 2.3), and the time periods during which each stage will be in operation. (b) Traffic Control Plans (refer Clause 2.4), including provision for cyclists and pedestrians, and any specific traffic control arrangements associated with the conditions of approval of the ROL. (c) Vehicle Movement Plans (refer Clause 2.5.1) showing the mandated travel paths for vehicles to enter, leave or cross the through traffic stream including details of haul routes to be used and identification of access arrangements at construction sites detailing vehicle access movements. (d) Pedestrian and Cyclist Movement Plans (refer Clause 2.5.2) showing the allocated travel paths for workers within the Site, and for pedestrians around or through the Site, including safe and unhindered access to bus stops. (e) Plans showing access to local properties and side roads affected by the construction (refer Clause 1.4.3), relocated bus stops and any temporary carparking arrangements. (f) Design drawings for any temporary roadways and detours, including alignment and surface levels, pavement widths, pavement cross-sections, lane configurations, pavement markings, signage and drainage (refer Clause 2.6), and approved traffic signal plans if applicable. (g) Traffic Incident Management Plan, for dealing with unplanned traffic incidents (refer Clause 2.7). (h) A signage strategy to provide appropriate signage for businesses where existing signage is obscured or no longer visible or where customers are required to use alternative access to reach the businesses during construction. See Clause 3.2.4. (i) Evidence of your coordination and consultation process with GSO (TMC), refer Clause 1.8.3;	Section 5.1

Specification	Measure/requirement	CTTMP Reference
	(j) Provision for the temporary relocation of bus stops (whether formal or informal) and provision of safe passage and standing area for pedestrians and parked cars (whether formal or informal) at the temporary bus stop. Ensure the design, construction and operation of temporary bus stops will not impact traffic flow on the roads. (k) Requirements and methods to consult and inform the local community of impacts on the local road network and traffic (also refer TfNSW GWS61); (l) Measures to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic caused by other developments; (m) Details of routes to and from Site and entry and exit points from Site; (n) Details of roads that are be excluded from use by construction traffic i.e. roads with load limits, quiet residential streets or access/turn restricted streets; (o) Monitoring, review and amendment mechanisms; (p) Provision of temporary street lighting for road deviations and introduction of other traffic control measures; (q) Access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads; and (r) Details of Oversize Overmass (OSOM) management strategy and procedures for managing oversized vehicles travelling through the Works including use of layover areas, signage, UHF radio procedures and response procedures for each of the traffic stages – refer Clause 2.9 Your TMP must detail for each element listed (a) to (r) above the following as appropriate: • Impacts to the network i.e. base vs proposed; • Impact to the traffic, including the public transport network, in terms of queueing and delays; • Any proposed mitigation measures to be implemented; and • Communication strategy to be implemented. Ensure that the TMP is consistent with this specification, including Annexure G10/A, TCWS and AS1742.3.	

Specification	Measure/requirement	CTTMP Reference
G10 2.2.4	Undertake a risk assessment and address any risks identified in the TMP in accordance with the Road Occupancy Manual. Where a Traffic Management Risk Assessment Workshop is required (refer Clause 2.8), the risk assessment may be done as part of the workshop.	Section 5.19
G10 2.2.5	Review the effectiveness of the TMP at least once a month, and when new risks which have not been previously identified are encountered. Revise the TMP or its component plans and implement more appropriate measures if the original measures prove not to be fully effective. Submit a copy of any revised component plan of the TMP to the Principal.	Section 5.1
G10 2.3.1	Where so specified in Annexure G10/A1, provide Traffic Staging Plans (TSP) showing how traffic will pass safely through the Site during the various construction stages. Traffic Staging Plans may be integrated with any Construction Staging Plans prepared by you.	Section 5.1.1
	The Traffic Staging Plans must show (including dimensions and set out) for each stage, the following details: (a) Lane configurations on existing and new (temporary and permanent) pavements, indicating any departures from existing traffic lanes. (b) Intersection layouts and temporary traffic signals arrangements. (c) Pedestrian footpaths and cycleways. (d) Bus stop locations, where applicable. (e) Work areas. (f) Access to local properties and side roads. (g) Pavement markings and signposting. (h) Drainage system, both temporary and permanent, including any pollution control measures. (i) Utilities and their impact on the traffic staging.	Section 5.1.1

Specification	Measure/requirement	CTTMP Reference
	(j) Street lighting, including any temporary arrangements where required. (k) Temporary retaining structures, where required as part of the traffic staging. (l) Barriers. If removal of pavement markings is required (refer Clause 3.2), the Traffic Staging Plans must provide details of the proposed methods for removal, the estimated durations to carry out the removal, and if necessary any proposed measures to restore the road surface.	
G10 2.4.1	If not previously submitted as part of the TMP or where a TMP is not required, at least 3 working days prior to its proposed use, submit for the Principal's acceptance your Traffic Control Plan (TGS) for the particular section of the Site. If traffic staging is applicable, submit individual TGS for each traffic stage. If lane occupancy is required, comply with the requirements of Clause 2.1 for obtaining the ROL. Include in the TGS for set out details for horizontal and vertical alignment of traffic lanes.	Section 6.4
G10 2.5.1	Where applicable, submit together with your TGS, Vehicle Movement Plans (VMP) showing the preferred travel paths for construction, workers/visitors and delivery vehicles entering, leaving or crossing the through traffic stream. Such traffic must only enter and leave the road network in the direction of the traffic flow. Alternatively, where this is not practicable, implement additional controls such as installing temporary traffic signals or using Traffic Controllers. Show on the VMP the vehicle entry and exit points into the work areas, and indicate clearly that these are the only points where interface with the through traffic is permitted. The VMP must include details regarding expected number of vehicle movements, sizes of vehicles and hours of operation. Locate the entry and exit points at such locations which will facilitate the safe movement of construction vehicles, and minimise any impact to the through traffic flow. A VMP may be combined with or superimposed on a TGS. Minimise any use of local roads by heavy construction or delivery vehicles to access the work area.	Section 5.1.2

Specification	Measure/requirement	CTTMP Reference
	The movement of construction materials (haulage and deliveries) must be scheduled to minimise number of haulage and movements of delivery vehicles during peak periods and weekends.	
G10 2.6.1	Where applicable, submit together with your TGS, Pedestrian Movement Plans (PMP) showing the allocated travel paths for workers, cyclists or pedestrians around or through the Site, including all signs and devices used to guide the workers, cyclists or pedestrians. Provide safe and unhindered access for pedestrians to bus stops.	Section 5.1 Section 5.7
G10 2.6.1	If temporary new roadways and detours, or adjustments to existing lane configurations and road geometry, are required as part of your traffic staging, they must be designed in accordance with the relevant design standards. These design standards also apply where existing or previously unused roadways, including road shoulders, are proposed as temporary roadways. Engage a road designer, approved by the Principal, with at least 5 years of recent experience in designing roads to TfNSW standards, to prepare the temporary roadway design drawings. Apply design control procedures in accordance with TfNSW Q.	Table 5-3, TT33 Section 6.1.3
G10 2.7	Where so specified in Annexure G10/A1, submit a Traffic Incident Management Plan containing as a minimum the following details: (a) Names and contact details of nominated personnel (including the Traffic Manager if applicable) who will be responsible for dealing with traffic incidents occurring at the work site. (b) Contact details of the Principal, GSO (TMC) TMC Transport Operation Rooms, Police, emergency services, etc. (c) Procedure to be followed in the event of a traffic incident within and adjacent to the Site. (d) List of plant and personnel that will be available at all times for moving portable concrete safety barriers. (e) Inventory of safety barriers, signs etc. and their storage location(s) that will be available to replace damaged barriers in event of a traffic accident crash/ incident. (f) Procedure for carrying out investigations of traffic incidents involving members of the public or workers. This should include:	Section 5.15

Specification	Measure/requirement	CTTMP Reference
	(i) checking that the traffic control measures in place are in accordance with the TMP and its component plans, and ROL conditions; (ii) carrying out a “drive through” and video recording of the roadway, including the location where the incident has taken place; as soon as possible after the incident. (g) Information required for initial notification to the Principal, and where necessary, other relevant authorities. (h) Format for reporting and communication of the results of traffic incident investigations, and lessons learned. Develop the procedure under item (c) above in consultation with TfNSW, GSO (TMC) or RTO, Councils, and Police, Ambulance, Fire and other emergency services.	
G10 2.8.1	If specified in Annexure G10/A1, undertake (including preparing, facilitating, recording and reporting) a 1 day Traffic Management Risk Assessment Workshop to identify and address the risks associated with traffic management, road safety and other road network issues specific to the Site.	Section 5.19
G10 2.9	Your traffic management including any temporary roadways constructed by you must cater for oversized vehicles up to 10m wide through the worksite at all times, day and night.	Section 5.1
G10 3.2.3	Keep records of the times when the temporary speed zoning signs are in force.	Section 5.3 Section 6.3
G10 4.4.2	Prior to opening the temporary roadways to traffic, carry out an inspection to verify that the pavement markings, road signs and other traffic control devices have been installed in accordance with the TGS. The person carrying out the inspection must hold either the “Implement Traffic Management Plan” or “Prepare a Work Zone Traffic Management Plan” qualification.	Section 5.1.2 Section 6.4
G10 4.5	If a road safety audit of the TMP has been undertaken (refer Clause 4.2), then within 24 hours of the traffic switch on to the temporary roadways or detours, carry out a road safety audit of the implemented traffic control measures at both daytime and night time.	Section 6.5.1

Specification	Measure/requirement	CTTMP Reference
	Comply with the requirements stated in Clause 4.2 for the carrying out of the road safety audit and the composition of the audit team. If the measures implemented are found to be deficient, then based on the initial report submitted and in consultation with the audit team and the Principal, develop corrective actions and implement the revised measures without delay. Submit a copy of the road safety audit report to the Principal within 5 working days of the audit. The report must include details of any corrective actions developed and implemented.	
G10 4.6	Upon completion of the Works, remove the temporary roadways and/or detour arrangements and restore the area to a condition equivalent to that which existed prior to the commencement of the work.	Section 5.4
G10 5	Working Adjacent to Traffic - Where a temporary roadway or a detour is not provided or available, then subject to the approval of the Principal, construction under or adjacent to traffic may be permitted provided the requirements of Annexure G10/A are observed	Section 5.4
G10 4.7.1	As a minimum, check at the commencement and conclusion of each day's work that all required traffic control measures and signs are in place as shown on the TGS for each stage. The person conducting this check must hold either the "Implement Traffic Management Plan" or "Prepare a Work Zone Traffic Management Plan" qualification. Keep records of the results of the inspection checks and make them available to the Principal upon request.	Section 6.3
G10 4.7.2	Provide to the Principal a monthly report on the performance of your traffic management. The report must include, as a minimum, the following: (a) summary of daily inspections of traffic control measures; (b) compliance with the TMP and its component plans, and ROL conditions; (c) compliance with specified travel times, and delays to traffic or queue lengths exceeding allowable limits; (d) where applicable, analysis of trends as applied to traffic management and safety measures.4.7.2	Section 6.6

Specification	Measure/requirement	CTTMP Reference
G10 4.8	Following a traffic incident, carry out an investigation in accordance with your Traffic Incident Management Plan, and submit a report to the Principal detailing the results of the investigation. If necessary, liaise with emergency services to obtain further information. The report must, as a minimum, include the following details: (a) names of the persons and registration number(s) of the vehicle(s) involved; (b) location where the incident took place; (c) date and time of the incident, and prevailing environmental conditions; (d) sketch map and photos of the incident location; (e) sight distance details; (f) potential contributing factors, and likely or confirmed root cause for the incident; (g) corrective actions.	Section 6.6
G36 3.2	Planning - Regularly consult with nearby/ adjoining projects/ developers and key stakeholders prior to and during construction to review potential cumulative impacts and to co-ordinate, plan and integrate construction methodologies/ activities (including traffic impacts and dust and noise management), as far as practicable to minimise cumulative impacts. This will include the coordination of respite between the various construction projects where nearby Sensitive Receivers are likely to experience concurrent construction impacts where feasible.	Section 5.17
G36 4.17.1	Transport all hazardous goods in accordance with the Dangerous Goods (Road and Rail Transport) Act 2008 (NSW) and the Dangerous Goods (Road and Rail Transport) Regulation 2014 (NSW).	Section 5.18, TT38
G36 4.17.2	Heavy Vehicles Refer to TfNSW G1.	Section 5.2 Section 6.3 Section 6.6
G10	Complete all relevant permanent signposting, pavement markings, safety barriers and traffic signals required under the Contract, prior to opening of the whole of the Works or any part of the Works to traffic.	Section 6.5.3

Specification	Measure/requirement	CTTMP Reference
7	Submit a TMP (see Clause 2.2) to the Principal and GSO for opening to traffic upon Completion. Include overarching opening strategy for the project, details of final wearing courses (if any), a line marking implementation program, consultation with stakeholders, communication plan, transport integration plan, risk management plan, etc. Undertake a pre-opening road safety audit. Address issues raised in the road safety audit to the satisfaction of the Principal at least 24 hours prior to opening. Remove all temporary traffic control devices no longer required for the safety of traffic, when the whole of the Works or part of the Works are opened to traffic. Give the Principal at least 10 working days written notice of the date of opening the whole of the Works or part of the Works to traffic. Determine the procedure for opening through consultation between you, the Principal and the Police.	
G10 A2.1 (a)	Do not reduce the traffic capacity of any road adjacent to the Site, below that existing at the date of the Letter of Award, except as provided under this Annexure G10/A.	Section 5.1
G10 A2.1 (b)	Notify each of the emergency services such as police, ambulance and fire when access may be significantly impeded for any period of time. Subject to their requirements you may need to provide alternate access.	Section 1.6
G10 A2.1 (c)	Except where a ROL, or relevant Council approval allows otherwise, you must maintain existing capacity for through traffic for the duration of the project on all roads affected by the project.	Section 5.4
G10 A2.1 (d)	Make appropriate off-road provision for construction traffic parking, including for workforce parking and Site visitors. Include for the provision for safe entry and exit to and from all such parking areas.	Section 5.10
G10 A2.1 (e)	Without limiting Clause 1.4.4, liaise with other contractors/ authorities undertaking adjacent concurrent works which may involve road occupancies. This includes, but is not limited to: a. Western Sydney Airport; b. Sydney Metro works; c. Sydney Water works; d. Other works being undertaken as part of the M12 Motorway project including West and East	Section 5.17

Specification	Measure/requirement	CTTMP Reference
	sections as required; e. Adjacent property and land developers.	
G10 A2.1 (f)	Maintain the existing streetlighting illumination along existing roads or the intersecting local roads during construction, unless otherwise approved by the Principal. In some instances, with the establishment of new traffic controls, additional temporary street lighting may be required to enhance overall road safety conditions.	Table 5-3, TT27
G10 A2.1 (g)	The existing sign posted speed limit to be retained unless otherwise approved by the Principal and GSO (TMC). Short term speed restriction may be applied at individual work sites (subject to GSO (TMC) approval) wherever temporary traffic conditions require speed reduction for safety. Clearances between construction works and traffic lanes must comply with the TfNSW Traffic Control at Work Sites Manual.	Section 5.5
G10 A2.1 (h)	Provide appropriate delineation, advance warning signs and speed zoning at all times. Cater for foggy conditions, glare and provide lighting if night vision is poor.	Section 5.5
G10 A2.1 (i)	You are responsible for the safe passage of pedestrian, cyclist and vehicular traffic through and around the Works Under the Contract.	Section 5.5
G10 A2.1 (j)	Shared through and right turn lanes will not be permitted.	Section 5.1.1
G10 A2.1 (k)	Plan all aspects of traffic management in coordination and consultation with the GSO (TMC). Nominate a single point of contact within your Site management team (Traffic Manager) for dealing with all issues arising from applications to GSO (TMC) and for all enquiries from the TfNSW and Council(s) regarding any traffic management issues relating to the project.	Section 6.1.1
G10 A2.1 (l)	Plan and implement work to restrict the duration of work under traffic to a minimum	Section 5.1

Specification	Measure/requirement	CTTMP Reference
G10 A2.1 (m)	Provide temporary haulage routes within worksites to minimise the impact on Elizabeth Drive. Align temporary haulage routes between all contracts.	Section 5.2
G10 A2.1 (n)	Plan and implement work to allow for oversizes and/or overmass vehicles.	Section 5.1
G10 A2.1 (o)	During school holidays (and adjacent days) - no closures, stoppages or reduction in capacity at work sites along Elizabeth Drive, Mamre Road, Clifton Avenue, Salisbury Avenue or Range Road must be programmed during the following times: • From 6.00am on the Friday prior to the commencement of a State School holiday period until 6.00am on the first Monday of the State School holiday period; From 6.00am on the last Friday of a State School holiday period until 6.00am on the first day of the new State School term; • o From 6.00am on the day prior to a public holiday to 6.00pm on the day following the public holiday; • From 6.00am on the Friday prior to a public holiday Monday, to 6.00am on the Tuesday following the public holiday; and • From 6.00am on the Thursday prior to a public holiday Friday to 6.00am on the Monday following the public holiday.	Table 5-3, TT28TT27
G10 A2.2	(a) Road occupancy will not be granted by the GSO (TMC) for peak period lane closures during the following time periods: • Single lane closures in 2 lane carriageway (Stop/Slow with Contra flow): ◦ Monday to Friday (except Holidays) • 5.00 am to 10.00 am (the morning peak) and • 2:30 pm and 8 pm (the evening peak) ◦ Saturday (except Holidays) • 10.00am to 1.00pm	Table 5-3, TT29

Specification	Measure/requirement	CTTMP Reference
	◦ Sunday (except Holidays) • 10.00am to 1.00pm • Full carriageway closure (in a single direction or both directions): ◦ Not permitted at any time. (b) During the above time periods, you must not obstruct any of the through or turning lanes on Elizabeth Drive or the intersecting side streets. Unless the GSO and the Principal approves otherwise, this requirement applies to all lanes existing at that time, including any additional lanes which may have been constructed by you as Work Under the Contract and have been opened for use by the public. (c) Advise the GSO (TMC) on 1300 725 886 when closing and reopening traffic lanes, quoting the relevant Road Occupancy Licence number. All ROLs must be activated with GSO Transport Operations Room prior to commencing work and deactivated at completion of each shift, in line with ROL conditions. (d) Outside the hours and days specified above, road occupancy may be permitted, in accordance with Clause 2.1.	
G10 A2.3	The following specific requirements for control of traffic on local roads apply for this Contract: (a) Maintain current turning movements into and out of local roads during construction. (b) Closure of local roads is not permitted unless prior approval has been obtained from the relevant Council.	Section 5.2.1
G10 A2.4	Advise GSO and the relevant bus operators of construction activities that will directly affect their bus routes/ stops. Prior to such advice being released, provide for the Principal's approval a copy, at least three weeks prior to release, of any intended correspondence to the bus operators. Liaise with local schools, Councils and bus operators to ensure that appropriate facilities are made available for buses to stop, particularly for school children during school terms. Facilities must include the following: (a) Adequate sign posting for the bus stop. (b) Adequate pedestrian facilities to enter and exit the buses. (c) Adequate pedestrian access across active roadways and construction zones to bus stops.	Section 5.1.1 Section 5.8

Specification	Measure/requirement	CTTMP Reference
	(d) Signposting directing pedestrians to and from the bus stops. (e) Temporary indented bus bays a minimum 15m long, 3.5m wide with tapers 20m long at each end. Ensure indented bus facilities do not affect traffic flow on adjacent roads. Ensure that all traffic staging can adequately cater for bus turning movements.	
G10 A2.5	Include provisions for cyclists and pedestrians in your TMP, TSP and TGSs; Ensure that adequate provision is made to accommodate existing, and potential, pedestrian and cyclist movements affected by your Works. As a minimum you must provide at each location: (a) A fit for purpose, all weather path (including minimum 100mm thick gravel base): (b) Upgraded pram-appropriate surfacing within 500m of any educational establishment. (c) Risk assessed lighting at least equivalent to existing street lighting. (d) Signage for pedestrians for any route changes Pedestrians must not be directed to travel between any safety barrier system and live traffic. Implement the following provisions for cyclists: (a) Provide sufficient signage to inform cyclists of the changed traffic conditions; (b) Provide appropriate shoulders for cyclists in front of any temporary barriers if alternative provisions are not provided. (c) Ensure appropriate surface and cleanliness of shoulders in front of barriers for the safe passage of cyclists at all times. (d) Install all signposting, bollards and barriers wherever necessary. Pay particular attention to signposting at intersections and in advance of changes to traffic conditions.	Section 5.7
G10 A2.6	Maintain unrestricted access for the Bowling Club to and from Elizabeth Drive.	Section 5.9

Specification	Measure/requirement	CTTMP Reference
G10 A2.8	Not used	
G10 A2.9	Make every effort to minimise traffic generated by site staff and your subcontractors, including the Principal's personnel.	Section 5.1.3
G10 A4	Outlines Temporary roadway requirements	Section 6.1.3
G36 A2	A2 Environmental Management Plans and Sub-plans 4.17 Traffic Management (Sub-)Plan (refer to G10) Yes	This Plan