OPERATIONAL TRAFFIC AND ACCESS MANAGEMENT PLAN

Moorebank Logistics Park – East Precinct

15 MAY 2020

MOOREBANK INTERMODAL TERMINAL ALLIANCE

Moorebank Logistics Park – East Precinct

Operation Traffic and Access Management Plan

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REVISIONS

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001	25/03/2019	Draft – Issued for client review	DP/NV	KP
002	02/04/2019	Draft - Addressing client comments	DP	HT
003	09/04/2019	Draft - Addressing client comments	DP	HT
004	01/05/2019	Draft - Addressing ER comments	DP	HT
005	29/05/2019	Update to address ER comments and stakeholder comments	HT	NV
006	15/08/2019	Update to address RMS consultation comments	NV	JC
007	21/08/2019	Updated to address DotEE comments	NV	AL
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010	13/11/2019	Updated to address DPIE comments on Rev 6	AC	AL
011	27/02/2020	Updated to address DPIE Conditional Approval comments and include Area 2 as an operational area	ZQ	JC
012	26/03/2020	Updated to address ER comments for ER endorsement and Mod 2	ZQ/HT	JC
013	15/05/2020	Updated to close out ER comment on manoeuvrability as identified in the DPIE letter of approval dated 28/4/2020	HT	KP

ACRONYMS AND DEFINITIONS

Acronym / Term	Meaning
BTODR	Biannual Trip Origin Destination Report
CCC	Campbelltown City Council
CCS	Community Communication Strategy
CMCC	Cargo Movement Coordination Centre
CoA	Conditions of Approval
CoC	Conditions of Consent
DJLU	Defence Joint Logistics Unit
DotEE	Commonwealth Department of the Environment and Energy
DP&E	Department of Planning and Environment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	NSW Environment Protection Authority
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
ERP	Emergency Response Plan
Facility	The MPE Concept (MP10_0193), MPE Stage 1 (SSD 6766) and MPE Stage 2 (SSD 7628) Project, including the operation of the IMEX terminal, warehousing and distribution facilities. A rail link is included as part MPE Stage 1 (SSD 6766) and connects the Facility to the SSFL.
FCMMs	Final Compilation of Mitigation Measures
GFA	Gross floor area
GTA	GTA Consultants
IMEX	Import Export Terminal. Includes the following key components: • Truck processing, holding and loading areas with entrance and exit from Moorebank Avenue • Rail loading and adjacent container storage areas serviced by container handling equipment • Administration facility and associated car parking with light vehicle access from Moorebank Avenue
LCC	Liverpool City Council
LMARI	Liverpool Moorebank Arterial Road Investigations
LOS	Level of Service
MIC	Moorebank Intermodal Company
MLP	Refers to the whole Moorebank intermodal precinct, i.e. Moorebank Precinct East (MPE) and the Moorebank Precinct West (MPW)

Acronym / Term	Meaning
MLP Approvals	• *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Approval (No. 2011/6229), March 2014 • MPE Concept Approval received 29 September 2014 (MP10_0193). • MPE Stage 1 approved 12 December 2016 (SSD 6766) • MPE Stage 2 approved 31 January 2018 (SSD 7628) • MPE Stage 2 Modification 2 approved 31 January 2020 (SSD 7628 Mod 2) • MPW Concept and Stage 1 approved 3 June 2016 (SSD 5066) • MPW Stage 2 approved 11 November 2019 (SSD 7099)
MLP East Precinct, or the Facility	The term referred to the operations of MPE Stage 1 and MPE Stage 2 Projects under the MPE Concept Approval (MP 10_0193) including the operation of RALP, IMEX and warehousing and distribution facilities
MLP Owner	Qube Holdings (Qube)
Movement	A heavy vehicle (HV) or light vehicle (LV) travelling to/from the site
OEMP	Operational Environmental Management Plan
OTAMP	Operational Traffic and Access Management Plan
OWTP	Operational Workplace Travel Plan
Operational area / Operational footprint	Extent of operational activities for the operation of the MLP – East Precinct
PCA	Project Certifying Authority
POPD	Program for Operational Phase Documentation
POTMP	Preliminary Operational Traffic Management Plan
PUD	Pick-up and delivery vehicles
Operational personnel	All persons listed in Section 3.3 including sub-contractors and tenants working on the MLP East Precinct site.
Rail link	Part of MPE Stage 1 (SSD 6766), connecting the MPE site to the SSFL. The Rail link is to be utilised for the operation of the Facility.
RFID	Radio Frequency Identification
RMS	Roads and Maritime Services
RtS	Response to Submissions
SHEMS	Safety Health and Environmental Management System
SSD	State significant development
SSFL	Southern Sydney Freight Line
TCD	Traffic Control Devices
TEU	Twenty-foot Equivalent Unit
TfNSW	Transport for New South Wales
VBS	Vehicle Booking System
WOEMP	Warehouse Operational Environmental Management Plan

CONTENTS

REVISIONS ..... **II**
ACRONYMS AND DEFINITIONS ..... **III**
1 INTRODUCTION **1**
1.1 Background 1
1.2 Purpose and Application 2
1.3 Proposed Staged / Progressive Application of the OEMP 2
1.3.1 Relationship of Stages 4
1.3.2 Triggers 4
1.4 Structure of the OTAMP 4
1.5 Objectives and Targets 4
1.6 Consultation 5
2 STATUTORY REQUIREMENTS **7**
2.1 Legal and Other Obligations 7
2.2 Development Consent 7
2.2.1 EPBC Act Approval 7
2.2.2 EP&A Act Approval 10
2.3 Roles and Responsibilities 20
3 IMPLEMENTATION **22**
3.1 Background Studies 22
3.1.1 Reference Traffic Study, Data and Modelling 22
3.1.2 Trip Generation 23
3.1.3 Employee Traffic Generation Profile 24
3.1.4 Traffic Distribution 24
3.1.5 Daily Traffic Volumes 25
3.1.6 Peak Hour Traffic Volumes 28
3.1.7 Assumed Road Network Upgrades 30
3.1.8 Impact on Intersection Performance – 2019 and 2029 31
3.1.9 Cumulative Traffic Impact During Operations 35
3.2 Operational Traffic Management Measures 38
3.2.1 Operational Hours 38
3.2.2 Heavy Vehicle Access Routes 38
3.2.3 Operational Site Access 38
3.2.4 Vehicle Booking System 40
3.2.5 IMEX Heavy Vehicle Access and Egress 40
3.2.6 Heavy Vehicle Accommodation 43
3.2.7 Vehicle Movement Plan 45
3.2.8 Staff and Visitor Access 49
3.2.9 Congestion Management on Moorebank Avenue 49
3.2.10 Road User Delay Management 50

3.2.11 Driver's Code of Conduct 50
3.2.12 Safety and Amenity of Road Users and Public 50
3.2.13 Dangerous Goods 50
3.2.14 Information Signage, Distance Information and Advance Warning 51
3.2.15 Training 51
3.2.16 Traffic Control and Parking Management 52
3.2.17 Traffic Signals 52
3.2.18 Road Maintenance after Operation 52
3.2.19 Required Infrastructure Upgrades 53
3.2.20 Management Measures 53
4 MONITORING AND REVIEW 59
4.1 Monitoring Requirements 59
4.1.1 Methodology for Monitoring Activities 59
4.1.2 Monitoring Framework 61
4.2 Reporting 65
4.3 Review and Improvement 65
4.4 Incidents 65
4.5 Complaints 66
4.6 Non-Compliance, Non-Conformances and Corrective Actions 66

APPENDICES

APPENDIX A SUPPLEMENTARY CONSULTATION INFORMATION
APPENDIX B DRIVER'S CODE OF CONDUCT
APPENDIX C WORKPLACE TRAVEL PLAN
APPENDIX D SWEPT PATHS

LIST OF TABLES

Table 1-1: Progression of the MLP East Precinct Operation 2
Table 1-2: Objectives and Targets 4
Table 1-3: Consultation Summary 5
Table 2-1: EPBC Act CoA 8
Table 2-2: CoCs of SSD 6766 (MPE Stage 1) 11
Table 2-3: CoCs of SSD 7628 (MPE Stage 2) 12
Table 2-4: Final Compilation of Mitigation Measures (MPE Stage 1) 18
Table 2-5: Revised Mitigation Measures (MPE Stage 2) 19
Table 2-6: Roles and Responsibilities 20
Table 3-1: LOS Criteria for Intersection Capacity Analysis 22
Table 3-2: MLP East Precinct Trip Generation Assumptions 23
Table 3-3: MLP East Precinct Parameters 24
Table 3-4: Daily Traffic Volumes and Heavy Vehicle Volumes in 2019 (Opening Year) 26

Table 3-5: Daily Traffic Volumes and Heavy Vehicle Volumes in 2029 (10-Year Horizon) 27
Table 3-6: Traffic Increase Attributed to the Proposal in 2019 and 2029 28
Table 3-7: Assumed Road Network Upgrades 30
Table 3-8: Assumed Do-Minimum Network Improvements 31
Table 3-9: Intersection Level of Service with and without the MLP East Precinct - 2019 33
Table 3-10: Intersection Level of Service with and without the MLP East Precinct – 2029 34
Table 3-11: Intersection Level of Service with and without Cumulative Development Scenario – 2019 36
Table 3-12: Intersection Level of Service with and without Cumulative Development Scenario - 2029 37
Table 3-13: Operational Vehicle Access and Egress 38
Table 3-14: IMEX Heavy Vehicle Access and Egress Procedure 40
Table 3-15: Warehouse Heavy Vehicle Parking Arrangements 43
Table 3-16: Required Upgrades and Specified Timing Requirements 53
Table 3-17: Traffic and Access Management Measures 55
Table 4-1: Monitoring Activity Methodology 59
Table 4-2: Monitoring Requirements 62
Table 4-3: Traffic and Access Reporting Requirements 65

LIST OF FIGURES

Figure 1-1 Site Location 1
Figure 1-2: Proposed Staged/ Progressive Staging of the MLP East Precinct 3
Figure 3-1: Key Intersections and Road Links in the Core Area 29
Figure 3-2: Heavy Vehicle Access Routes to MLP East Precinct 39
Figure 3-3: IMEX Heavy Vehicle Access and Egress Route 42
Figure 3-4: Heavy Vehicle Rejection Route 44
Figure 3-5 Current operational internal road network 46
Figure 3-6 Light/Heavy vehicle segregation (IMEX) 47
Figure 3-7 Internal road access for Warehouse 1 47
Figure 3-8 Internal road access for Warehouse 3 48
Figure 3-9 Internal road access for Warehouse 4 48
Figure 3-10 Internal road access for Warehouse 5 49

1 INTRODUCTION

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stages 1 and 2 of the Moorebank Precinct East (MPE) Project (SSD 6766, SSD 7628 and SSD 7628 Mod 2, respectively), aswell as the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) approval (EPBC2011/6229), which together comprise the two stages of development under the MPE Concept Approval(MP10_0193). This Operational Traffic and Access Management Plan (OTAMP) has been developed tomanage traffic and access impacts during operations of the MPE, hereafter referred to as the "MoorebankLogistics Park (MLP) East Precinct", or the Facility.

This OTAMP addresses the relevant requirements of the Project Approvals, including the Environmental Impact Statement (EIS), Response to Submissions (RtS) and Minister's Conditions of Consent (CoCs), Commonwealth Conditions of Approval (CoA) and all applicable guidelines and standards specific to the management of traffic and access during operations of the MLP East Precinct.

1.1 Background

The MLP is an integral component of the Freight, Ports and Transport strategies of both the NSW and Commonwealth governments to help manage the challenges of an expected tripling of freight volumes at Port Botany by 2031.

The MLP aims to streamline the freight logistics supply chain from port to store, deliver savings to businesses and consumers, and help service the rapidly growing demand for imported goods in south-west Sydney. It is located approximately 27 kilometres (km) south-west of the Sydney Central Business District and approximately 26 km west of Port Botany within the Liverpool Local Government Area. The MLP is divided into an East Precinct and a West Precinct, located east and west of Moorebank Avenue respectively (Figure 1-1). The MLP East Precinct is operational and is managed under an approved Operation Environmental Management Plan (OEMP), while the MLP West Precinct is currently under construction.

The main features of the MLP East Precinct include:

- An Import Export (IMEX) Terminal. The IMEX Terminal comprises:
  - Truck processing, holding and loading areas with an entrance and exit from Moorebank Avenue
  - Rail loading and container storage areas serviced by container handling equipment
  - An Administration facility and associated car parking with light vehicle access from Moorebank Avenue
- A Rail Link connecting the IMEX terminal and the Southern Sydney Freight Line (SSFL) traversing Moorebank Avenue, Anzac Creek, Georges River and Glenfield Waste Facility
- Associated ancillary infrastructure including signage, lighting, landscaping, water management
- Warehouse and distribution facilities including warehousing up to 21 m in height, typically ranging in size from 20,000 m^2 to 62,000 m^2, including:
  - Office and administration facilities
  - Amenities
  - Car parking
  - Truck loading/unloading docks
  - Internal parking for pick-up and delivery vehicles (PUD)
  - Specialised sortation and conveyor equipment
  - Hardstand areas that provide trailer parking spaces, external PUD parking spaces, vehicle manoeuvring areas and access to the main internal site road
  - Signage for business identification purposes, including backlit illuminated signage on each warehouse
  - Internal fit-out, comprising racking and storage.

- A freight village including a mix of retail, commercial and light industrial spaces typically up 15 metres in height and varying in size and design
- An internal road network to enable efficient movement of vehicles, dispatch of freight from the warehouses and transport of containers between the IMEX Terminal and warehouse and distribution facilities.

The location of the area/s of the MLP East Precinct to which this plan applies is shown in Figure 1-1 as the 'MLP East Precinct operational area'.

LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Operational rail link
- Existing railway
- Watercourse

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Coordinate System: GDA 1994 MGA Zone 56
Aerial imagery supplied by nearmap (Sep, 2019)

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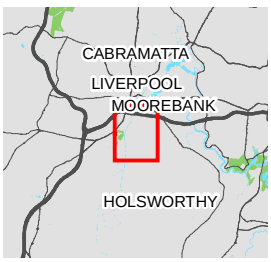


Figure 1-1: Site Location

1.2 Purpose and Application

This OTAMP has been developed to address the requirements of both MPE Stage 1 CoC F6 (SSD 6766) and MPE Stage 2 CoC B26 (SSD 7628) which require the preparation of an OTAMP, to the satisfaction of the Secretary of the Department of Planning and Environment (DP&E) prior to the commencement of operation. In addition to this, the EPBC Act approval (EPBC 2011/6229) required the preparation of a Traffic Management Plan, which has also been addressed in this OTAMP.

This OTAMP has been prepared in accordance with:

- MPE Concept Plan Approval (Application No. MP10_0193)
- Department of the Environment and Energy (DotEE) Approval (EPBC 2011/6229)
- MPE Stage 1 Minister's Conditions of Consent (CoC) and Development Consent SSD 6766
- Final Compilation of Mitigation Measures (FCMM) from the MPE Stage 1 RtS
- MPE Stage 2 Minister's CoC and Development Consent SSD 7628, including CoC C7
- FCMM from the MPE Stage 2 RtS
- DRAFT Post Approval Guideline – Environmental Management Plan, 2018, Department of Planning and Environment.

This OTAMP identifies the operational traffic management measures that will be applied to routine operations and activities undertaken across the MLP East Precinct to manage identified operational traffic risks. The specific CoCs and FCMMs relevant to the development of this plan are identified in Section 2.2.

The most recent, approved version of this plan will be implemented to manage the facility activities.

1.3 Proposed Staged / Progressive Application of the OEMP

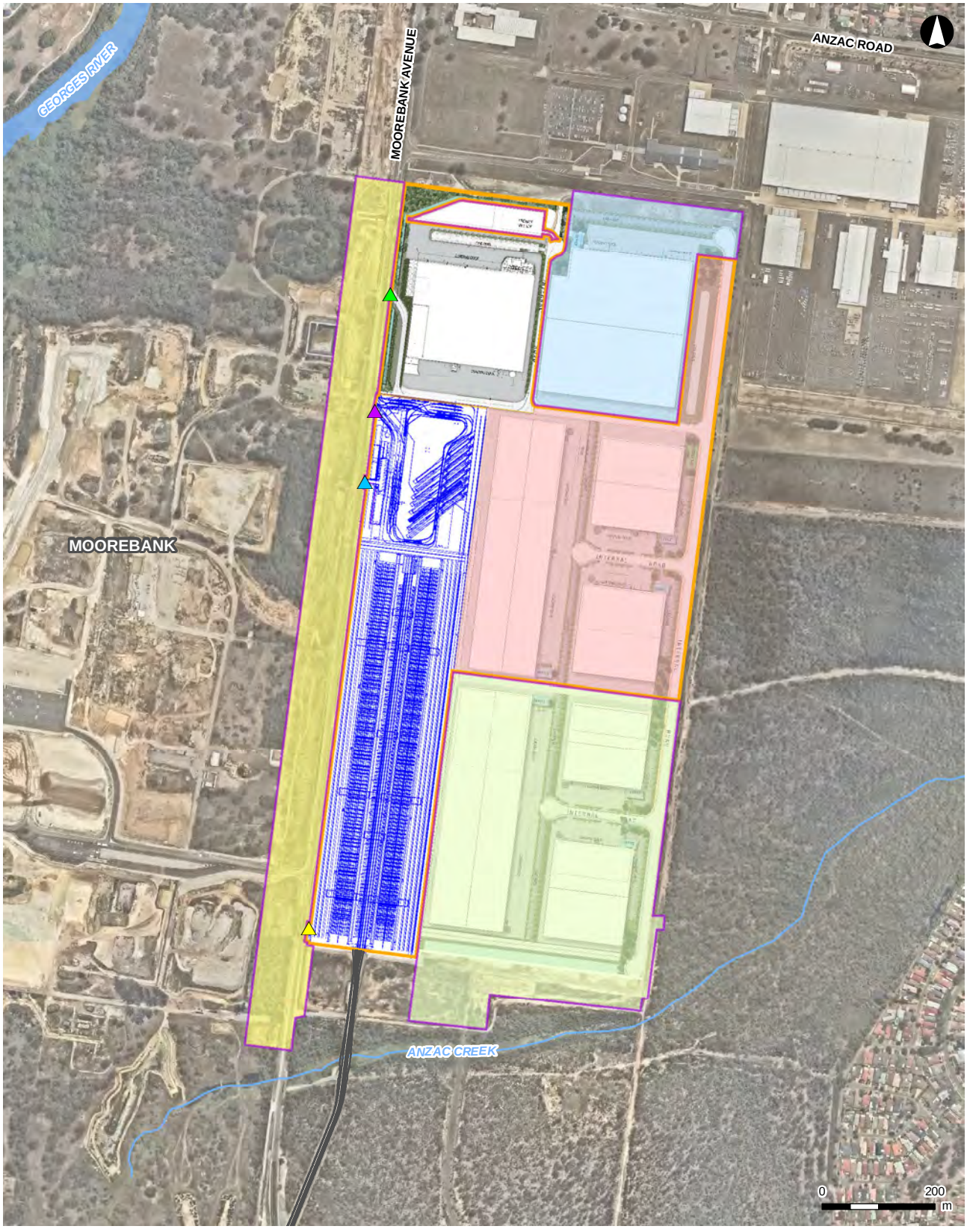
The OEMP and sub-plans are applicable to the entire MLP East Precinct. However, as operational areas will come online incrementally as warehouses are constructed and tenanted, the OEMP and sub-plans will be progressively applied to those operational areas. The proposed staged/progressive application of the OEMP and sub-plans is described in the Program for Operational Phase Documentation (POPD), which was approved by the Secretary on 21 May 2019

The proposed staged/progressive application of the OEMP, as described in the POPD, is shown on Figure 1-2, with estimated dates of operation detailed in Table 1-1. Note that these dates are estimates and are subject to change. Area 1 and Area 2 are currently operational.

Table 1-1: Progression of the MLP East Precinct Operation

Area	Approximate Dates	Operation
Area 1	Q3 2019	IMEX, Rail Link and Warehouse 1
Area 2	Q4 2019	Warehouse 3, 4 and 5
Area 3	Q2 2020	Warehouse 6, 7 and 8
Area 4	Q4 2020	Freight village
Area 5	Q4 2021	Warehouse 2
Area 6	Q2 2020	Moorebank Avenue upgrade

In accordance with CoC C6 (SSD 7628) each warehouse tenant will also prepare a Warehouse OEMP (WOEMP) prior to occupation of the warehouse based on the requirements of the OEMP and sub-plans. The Secretary will be notified one month prior to commencement of operation of each new warehouse in accordance with CoC A18 (SSD 7628). The WOEMP will be submitted to the Secretary for approval prior to commencement of operation of the warehouse.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Watercourse
- Operational rail link
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access

Operational staging:

- Area 1
- Area 2
- Area 3
- Area 5
- Area 6

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Figure 1-2: Proposed staged/progressive staging of the MLP East Precinct

1.3.1 Relationship of Stages

The OEMP and sub-plans are applicable to the entire MLP East Precinct. However, as areas become operational incrementally, construction areas will be rescinded and will continue to be managed in accordance with CEMP and sub-plans; conversely, operational areas will be managed in accordance with the OEMP and sub-plans. Operation of the site will only commence once the OEMP and sub-plans have been approved by the Secretary and Minister (or delegate) of the Minister responsible for administering the EPBC Act.

The Environmental Representative (ER), under CoC C24(d) (SSD 7628), is required to review the CEMP and OEMP to ensure they are *"consistent with requirements of the consent."* The ER will continue to review and endorse any proposed changes to the CEMP and subplans until such time construction is complete and the MLP East Precinct site is fully operational. The ER will also review and endorse the updated figures for all operational documentation to ensure parity between construction and operational documentation. The operational figures will then be submitted to DP&E for approval as described in Section 1.3.2.

Until the entire MLP East Precinct is operational, all construction zones will be fenced off to provide clear distinction between construction zones and the operational facility.

1.3.2 Triggers

As required by CoC A18 (SSD 7628) the Secretary will be notified one month prior to commencement of operation of each new area shown in Table 1-1 and Figure 1-2. The notification will include updated figures detailing the new areas of operation which will fall under the remit of the OEMP as well as the reduced construction areas. As described in Section 1.3.1, the updated areas will have been endorsed by the ER prior to submission to the Secretary for approval.

Following notification, the OEMP and each sub-plan will be updated and approved with the new operational site layout, while the CEMP and applicable sub-plans will be revised to show the reduced area of construction.

1.4 Structure of the OTAMP

Combining strategies, plans and programs is permitted by CoC A16 and CoC A17, subject to the approval of the Secretary. Qube has elected to combine the requirements of both SSD 6766 and SSD 7628 which relate to the management of traffic into one plan.

Approval to combine the requirements of both SSD 6766 and SSD 7628 was sought from the Secretary on the 25 March 2019. The OTAMP addresses the relevant conditions and FCMMs from both consents (See Table 2-2 to Table 2-5).

1.5 Objectives and Targets

Table 1-2 outlines the objectives and targets set out for the MLP East Precinct for the management of traffic and access during operation. These objectives and targets were developed by the Principal's Representative based on collective industry experience and best practice. They reflect the requirements of the EIA and CoC and have been endorsed by the project's Environmental Representative.

Table 1-2: Objectives and Targets

Objective	Target	Timeframe	Accountability
Provide a safe environment for road users through implementation of the management measures identified in this plan, appropriate traffic controls, and signage that comply with best practice, RMS	No death or injury to staff, visitors or the public as a result of traffic incidents	Operations	Site Safety, Health, Environment and Quality (SHEQ) Manager / advisor (Site SHEQ Manager/Advisor) Road Operators and drivers Area Managers: • IMEX

Objective	Target	Timeframe	Accountability
requirements/ guides and the Australian Standards			• Rail Link • Estate Manager All staff.
Minimise disruption to traffic operation and all road users (including pedestrians and cyclists) and access to adjoining properties (private and public) through the implementation of the management measures identified in this plan	No traffic related infringements or penalties	Operations	Site SHEQ Manager/advisor Road Operators and drivers Area Managers: • IMEX • Rail Link • Estate Manager All staff.
Minimise traffic related complaints by implementation of the management measures in this plan	Response to traffic related complaints within 48 hours	Operations	Area Managers: • IMEX • Rail Link • Estate Manager Community Engagement Representative

1.6 Consultation

As required by CoC F6 (SSD 6766) and CoC B26 (SSD 7628), this OTAMP will be prepared in consultation with Campbelltown City Council (CCC), Liverpool City Council (LCC), Transport for New South Wales (TfNSW), Roads and Maritime Services (RMS) and the Cargo Movement Coordination Centre (CMCC) as outlined in Table 1-3. Table 1-3 will be updated as consultation with the agencies progresses. Evidence of Consultation is included in Appendix A.

Table 1-3: Consultation Summary

Agency	Date	Person contacted	Comment	Status
Liverpool City Council (LCC)	15/04/19	LCC representative	Meeting to discuss OEMP and subplans	Open
	18/04/19	LCC representative	Email follow up of meeting held on 15/4/2019	Open
	10/05/19	LCC representative	Email providing response to comments received	Open
	13/05/19	MLP representative	Email providing further comments	Open
	16/05/19	LCC representative	Email providing response to comments received	Open
	26/05/19	LCC representative	Internal LCC correspondence requesting confirmation of comments	Open
	26/05/19	MLP representative	Email to confirm progress of review	Open
	03/06/19	LCC representative	Email to follow up progress of review	Open
	06/06/19	MLP representative	Email with further comments	Open
	07/06/19	LCC representative	Email to confirm closeout of consultation	Closed

Agency	Date	Person contacted	Comment	Status
Transport for NSW (TfNSW)	11/04/19	RMS representative	Draft plan emailed for review and comment	Open
	16/05/19	MLP representative	Letter stating that comments on the OTAMP have been deferred to RMS	Closed
Roads and Maritime Services (RMS)	April 2019	RMS representative	Draft plan emailed for review and comment	Open
	15/05/19	MLP representative	Comments on OTAMP received	Open
	26/05/19	RMS representative	Email to provide response to comments	Open
	17/07/19	RMS representative	Meeting with RMS representatives to discuss construction and operational traffic issues.	Open
	13/09/19	RMS representative	Email to provide responses to comments	Open
	12/11/19	RMS representative	Meeting with RMS representative.	Open
	14/11/2019	MLP representative	Emailed comments table that confirmed close out of consultation.	Closed
Cargo Movement Coordination Centre (CMCC)	09/05/19	CMCC representative	Meeting to discuss MLP operations	Open
	13/05/19	CMCC representative	Follow-up email from meeting and comments received	Open
	14/05/19	MLP representative	Email confirming receipt of comments and additional advice provided	Open
	24/05/19	CMCC representative	Follow-up email addressing further comments received	Open
	03/06/19	CMCC representative	Follow-up email to confirm close out of comments	Open
	03/06/19	MLP representative	Additional comments added to action list	Open
	07/06/19	CMCC representative	Follow-up email addressing further comments received	Open
	07/06/19	MLP representative	Additional comments added to action list	Open
	07/06/19	CMCC representative	Follow-up telephone discussion to close out comment	Open
	08/06/19	CMCC representative	Email confirming to close out of consultation	Closed
Campbelltown City Council (CCC)	April 2019	CCC representative	Draft plan emailed for review and comment	Open
	03/05/19	MLP representative	Email confirming no comments on the OTAMP	Closed

2 STATUTORY REQUIREMENTS

2.1 Legal and Other Obligations

The legislation, planning instruments and guidelines considered during development of this plan are listed below with specific details provided in the Legislation Register within Appendix B of the OEMP.

- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning and Assessment Regulation 2000*
- *Environment Protection and Biodiversity (EPBC) Act 1999*
- *Dangerous Goods (Road and Rail Transport) Act 2008*
- *Roads Act 1993*
- *Road Transport (Safety and Traffic Management) Act 1999.*

Additional standards and guidelines relating to the management of traffic and access include:

- Australian Standard *AS1742.1:2014 Manual of uniform traffic control devices - General introduction and index of signs*
- Australian Standard *AS 1742.13:2009 Manual of uniform traffic control devices - Local area traffic management*
- Australian Standard *AS1743:2016 Road Signs – Specification*
- Australian Standard *AS1744:2015 Standard alphabets for road signs.*

2.2 Development Consent

The operation of the MLP East Precinct was approved under both the *Environmental Planning and Assessment Act* 1979 (EP&A) Act) and the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act). Both these approvals have environmental conditions relevant to the operational works for the MLP East Precinct, which are discussed below.

The operational traffic and access management requirements for the facility, including consultation, impact mitigation and management, is documented in the following suite of documents:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Approval (EPBC 2011/6229), March 2014
- MPE Concept Approval (MP 10_0193), 29 September 2014
- Moorebank Precinct East – Concept Plan – Response to Submissions (RtS) (Urbis, December 2013)
- State Significant Development (SSD) Consent SSD 6766, 13 March 2018 (superseding initial approval 12 December 2016)
- Moorebank Precinct East – Stage 1 – Environmental Impact Statement (Arcadis Australia Pacific Pty Limited, May 2015)
- Moorebank Precinct East – Stage 1 – Response to Submissions (Arcadis Australia Pacific Pty Limited, September 2015), including Final Compilation of Mitigation Measures (FCMMs)
- State Significant Development (SSD) Consent SSD 7628, 31 January 2018
- State Significant Development (SSD) Consent SSD 7628 Modification 2, 31 January 2020
- Moorebank Precinct East – Stage 2 – Environmental Impact Statement (Arcadis Australia Pacific Pty Limited, December 2016)
- Moorebank Precinct East – Stage 2 – Response to Submissions (Arcadis Australia Pacific Pty Limited, July 2017), including FCMMs.

2.2.1 EPBC Act Approval

The EPBC Act approval for the MPE Concept was granted by the Federal Minister for the Environment in March 2014 (EPBC 2011/6229). Approval was required due to impacts on listed threatened species and

communities (Sections 18 and 18A of the EPBC Act) and Commonwealth land (Sections 26 and 27A of the EPBC Act).

The operation of the MLP East Precinct has been designed to be consistent with the EPBC Act Conditions of Approval. EPBC Act Approval conditions include specific traffic and access conditions and commitments that are required to be addressed in this plan. These conditions are identified within Table 2-1.

Table 2-1: EPBC Act CoA

Commonwealth	Requirement	Sections or documents where requirements addressed
	For the better protection of Commonwealth land, the person taking the action must engage a suitably qualified expert(s) to prepare an Operation Environment Management Plan (OEMP) for the approval of the Minister. The OEMP must include in relation to operation of the proposed facility:	The OEMP [PREC-QPMS-EN-PLN-0001] and relevant sub-plans, including this OTAMP
	a) identification and quantification of all potential impacts associated with noise, vibration, air quality, traffic and light spill (including cumulative impacts associated with the separately approved but related and adjacent intermodal terminal facility project, EPBC approval 2011/6086) upon Commonwealth land. Consideration must be given to people and communities at SME, DNSDC, Defence housing, and the environment more generally in neighbouring bushland areas. Of note, the air quality assessment must quantify all emissions of carbon monoxide, nitrogen dioxide, $PM_{2.5}$ and PM_{10} arising from project related sources identified in the EIS	Section 3.1
8	b) refined details (including implementation timeframes) for the mitigation measures outlined in the EIS (sections 7.4.2, 7.4.6, 7.4.7, 7.4.8 and 7.4.9) and summarised at Annexure A	Section 3.2.3 Section 3.2.5; Table 3-14 Section 3.2.6 Section 1.1.1 Section 3.2.9 Section 3.2.20; Table 3-17; TA-3, TA-4, TA-5 Refer to Workplace Travel Plan (WTP)
	c) refined details of how heavy vehicles entering and exiting the site will be processed, including information on access and circulation both into, and within, the intermodal facility grounds	Section 3.2.3 Section 3.2.5; Table 3-14 Section 3.2.6 Section 3.2.9
	d) measures to ensure no heavy vehicles entering or exiting the intermodal facility park, or wait, on Moorebank Avenue	Section 3.2.6 Section 3.2.9 Design documents were submitted to and approved by PCA (Project Certifying Authority)
8	e) identification of the trigger values and criteria for all matters mentioned in condition 8(b) (excluding light spill) that will be adopted for monitoring and managing potential impacts to those Commonwealth land	Section 4.1.1; Table 4-1

Commonwealth	Requirement	Sections or documents where requirements addressed
	f) details of a comprehensive monitoring program (including locations, frequency and duration) for:	Section 4.1
	i) validating the anticipated impacts associated with condition 8(b)	Section 4.2 Section 4.3
	ii) determining the effectiveness of mitigation/ management measures (including the success of public transport incentives)	Section 4.2 Section 4.3
	g) provisions to revise the approved OEMP in response to monitoring associated with condition 8(f) including, details of response / contingency mechanisms to address any exceedances of the relevant trigger values	Section 4.1.1; Table 4 1 Section 4.2 Section 4.3 OEMP Section 6.2.1
Annexure A – Summary of Mitigation Measures		
Traffic	Operation Operation of the SIMTA proposal would be subject to an approved Traffic Management Plan which would include a Vehicle Booking System to regulate and manage truck arrivals to the SIMTA site and to prevent trucks queuing and waiting on Moorebank Avenue.	This OTAMP Section 3.2.3 Section 3.2.5; Table 3-14
	The Traffic Management Plan will be developed to manage traffic flows in and around the SIMTA proposal and will include the following:	This OTAMP
	Management measures to control entry to the SIMTA site for the security of freight, and staff. This would include strategies to minimise unauthorised access to the SIMTA site	Section 3.2.3 Section 3.2.5; Table 3-14 Section 3.2.8 Section 3.2.20; Table 3-17; TA-4
	Traffic management measures (e.g. a Vehicle Booking System) to control the arrival of authorized vehicles so that queuing is minimised and vehicles are directed to the correct location within the terminal	Section 3.2.3 Section 3.2.5; Table 3-14 Section 3.2.6 Section 3.2.9 Section 3.2.20; Table 3-17; TA-3
	Measures to control access of staff and visitors so as to maintain safety and appropriate security, particularly for bonded or quarantined material	Section 3.2.8 Section 3.2.20; Table 3-17; TA-4
	Measures such as short-range radios, GPS and wireless communications would be recommended to maximise the efficiency of access and circulation of vehicles, goods and staff within the SIMTA site	Section 3.2.20; Table 3-17; TA-5

Commonwealth	Requirement	Sections or documents where requirements addressed
Traffic	In addition to the stated Traffic Management Plan, all reasonable steps would be taken to encourage staff to use public transport, walk and cycle to reduce the dependence on travel to / from the SIMTA site by private motor vehicle. SIMTA would assess the feasibility of the provision of a peak-hour express shuttle bus service to and from Liverpool Station via Moorebank Avenue and Newbridge Roads, with a potential expansion to this route over time to include Holsworthy Railway Station. The combined impact of the bus and rail focused measures would be to achieve specific public transport usage increases as a result of the SIMTA proposal, above those applying across the Liverpool LGA at the present time. If a reasonable proportion of employees live within the region, then substantial trip reduction benefits could be achieved. A SIMTA employee public transport mode share of about 30 per cent is currently considered feasible, with a significant proportion of employees living locally. This would manifest through a 2-3 per cent increase in the walk mode share. In summary, measures to reduce private motor vehicle trips would include: • Development and implementation of a travel behaviour change program • Reduce on-site car parking supply over-time (dependant on proportion of employees living locally and accessibility of public transport). • Consideration of the establishment of Holsworthy Station Express bus services • Consideration of the establishment of Glenfield Station to Liverpool Station express bus • Installation of a bus interchange and waiting area • Bus priority works (establishment of designated bus lanes). • Design and construction of walking and cycleways • Consideration of the extension of Bus Route 901 • Promote the establishment of Route 870, 871, and 872 bus • Road Network Upgrades.	Refer to WTP Section 3.1.7

2.2.2 EP&A Act Approval

The MLP East Precinct was approved under Part 4, Division 4.7 (previously Division 4.1 prior to 1 March 2018) of the EP&A Act. Approval for MPE Stage 1 was originally received on 12 December 2016 (SSD 6766) and subject to appeal, with revised CoC issued from the Land and Environment Court on 13 March 2018; approval for MPE Stage 2 was received on 31 January 2018 (SSD 7628).

The CoCs include requirements to be addressed in this plan and delivered during operation of the facility. These requirements, and how they are addressed are provided within Table 2-2 for CoC relating to SSD 6766 and Table 2-3 for CoC relating to SSD 7628.

In the compliance tables, Primary Conditions are specific to the development of this management plan, while Secondary Conditions are conditions which are related to other traffic and access aspects associated with the plan.

Table 2-2: CoCs of SSD 6766 (MPE Stage 1)

CoC	Requirement	Sections or documents where requirements addressed
Primary Condition		
F6	The Applicant shall prepare and implement (following approval) an Operational Traffic Management Plan for the proposed vehicle booking system. The plan shall be prepared in consultation with the Cargo Movement Coordination Centre and include details on container turnaround times and interoperable technology (such as Port Botany RFID tags). The Plan shall be submitted for the approval of the Secretary no later than one month prior to the commencement of operation, or as otherwise agreed by the Secretary	This OTAMP Section 1.5 Appendix A Section 3.2.3 Section 3.2.5; Table 3-14
Secondary Conditions		
B5	The Applicant shall ensure that: … (c) the layout of the site shall be designed to ensure heavy vehicles associated with the operation of the intermodal terminal can be accommodated on site in the event of an incident blocking access to the M5 Motorway/ Moorebank Avenue to avoid queuing on public roads	Section 3.1
	(d) the layout of the site shall be designed to minimise heavy vehicles reversing are not required to select reverse gear	Section 3.2.6 Appendix B details the Driver's Code of Conduct which stipulates the minimisation of reversing within site except when accessing loading dock bays.
	(e) heavy vehicles and bins associated with the SSD do not park or stand on local roads or footpaths in the vicinity of the site	Section 3.2.20 (TA-17)
	(f) all vehicles are wholly contained on site before being required to stop	Section 3.2.20 (TA-16)
	(g) all loading and unloading of materials is carried out on site	Section 3.2.20 (TA-9)
	(h) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times	Section 3.2.20 (TA-14)
B8	The SSD shall be designed to ensure a bus stop on Moorebank Avenue (including direct pedestrian access from the terminal site to the bus stop), and associated turnaround facility suitable for a 14.5 metre long non-rear steer bus is not precluded.	Refer to WTP
F7	The Applicant shall undertake signal decommissioning (where required) in consultation with RMS prior to the commencement of operation. The Applicant shall bear the full cost associated with the decommissioning/ removal/disposal of the traffic signals and associated equipment	Section 3.2.17

CoC	Requirement	Sections or documents where requirements addressed
F8	The Applicant shall create an easement within the site at the traffic signals to allow RMS to maintain traffic signal components, if required by the design and condition C25. If no easement is required, access to signals should be maintained for maintenance purposes at all times	Section 3.2.17
G1	Within 6 weeks of commencement of operation, unless otherwise agreed by the Secretary, the Applicant shall undertake road pavement deflection testing of the truck routes as defined by Condition E34(a). If the deflection tests show an increase in defection as a result of the truck routes associated with construction, the Applicant shall undertake pavement rehabilitation of the affected road pavements to achieve the pavement deflection that existing prior to the commencement of works.	Section 3.2.18
G2	Within 3 months of commencement of operation, unless otherwise agreed by the Secretary, the Applicant shall carry out rectification work to the extent of the damage resulting from the construction works at the Applicant's expense and to the reasonable requirements of the owners	Section 3.2.18
G5	The quantities of Dangerous Goods present at any time at the facility or transported from and to the facility shall be kept below the screening threshold quantities listed in the Hazardous and Offensive Development Guidelines Applying SEPP 33, (DP&E 2011). The screening threshold quantities for each Dangerous Goods shall be defined in accordance with Table 1: Screening Methods of Applying SEPP 33	Section 3.2.13 Section 3.2.20; Table 3-17; TA-11 Appendix B

Table 2-3: CoCs of SSD 7628 (MPE Stage 2)

CoC	Requirement	Sections or documents where requirements addressed
Primary Condition		
C3	Before the commencement of operations, a Precinct Operational Environmental Management Plan (OEMP) must be prepared to the satisfaction of the Secretary. The OEMP must: … (g) include the management plans required under this approval, including: (i) Operational Traffic and Access Management Plan …	This OTAMP
C7	The Applicant must ensure that the environmental management plans required under this consent are prepared in accordance with any relevant guidelines, and include:	
	a) detailed baseline data;	Section 3.1
	b) a description of: i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 2.2; Table 2-1; Table 2-2; Table 2-3; Table 2-4 and Table 2-5

CoC	Requirement	Sections or documents where requirements addressed
	ii) any relevant limits or performance measures/criteria; and	Section 4.1 and Table 4-2
	iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 4.1 and Table 4-2
	c) a description of the management measures to be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;	Section 3.2 and Table 3-17
	d) a program to monitor and report on the: i) impacts and environmental performance of the development; and	Section 4.1
	ii) effectiveness of any management measures (see (c) above);	Section 4.1
	e) contingency plan to manage any unpredicted impacts and their consequences;	Specific emergency procedures relating to or involving traffic management are detailed in the Operations Emergency Response Plan. Incident notification is addressed in Section 4.4 and Section 4.6
	f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Section 4.3
C8	At least one month prior to the commencement of a new phase of the development, the CEMP or OEMP and applicable subplans must be reviewed and submitted to the Secretary for approval	Section 1.2
B26	The Applicant must prepare an Operational Traffic and Access Management Plan to the satisfaction of the Secretary. The Plan is to be developed in consultation with the relevant Council, TfNSW and RMS. The plan must be approved by the Secretary prior to the commencement of operation. The Plan must be prepared by a suitably qualified and experienced person(s), and must:	This OTAMP Section 1.5 Refer to Author Details on Page (i)
	a) demonstrate how the development will be managed during operation to meet the requirements of this development consent	Section 3.2
	b) detail numbers and frequency of truck movements, sizes of trucks, vehicle routes and hours of operation	Section 3.1.2 Section 3.1.4.1 Section 3.2.1 Section 3.2.3 Section 3.2.8

CoC	Requirement	Sections or documents where requirements addressed
	c) detail access arrangements for the site to ensure road and site safety, and demonstrate there will be no queuing on the road network	Section 3.2.3 Section 3.2.5; Table 3-14 Section 3.2.9 Section 3.2.10 Section 3.2.11 Section 3.2.20; Table 3-17; TA-5, TA-6
	d) detail measures to ensure turning areas and internal access roads are kept clear of any obstacles, including parked cars, at all times	Section 3.2.20; Table 3-17; TA-14 Section 4.1; Table 4-2
	e) set out procedures for collecting the information required to prepare the Biannual Trip Origin and Destination Report required under condition B28	Section 4.1, Table 4-2
	f) incorporate the Workplace Travel Plan as required under condition B29	Refer to WTP in Appendix C
	g) include a driver's code of conduct that requires: i. compliance with specified travelling speeds ii. drivers to adhere to specified transport routes including no access from Cambridge Avenue, and iii. drivers to implement safe driving practices.	Section 3.2.11 Section 3.2.20; Table 3-17; TA-2, TA-5, TA-6 Appendix B
	h) include a program to monitor the effectiveness of these measures	Section 4 Section 4.1, Table 4-2 Section 3.2.11 Appendix B
B27	The Operational Traffic and Access Management Plan required by condition B26 must be implemented by the Applicant for the duration of operations	Noted
B28	The Applicant is to prepare a Biannual Trip Origin and Destination Report each six months following commencement of any operation (in a format agreed with TfNSW and RMS) that advises:	Refer to Biannual Trip Origin and Destination Report (BTODR)
	a) the number of actual and standard twenty foot equivalent shipping containers despatched and received during the period;	
	b) the number of days in the period that the truck gate was open for despatching trucks 24 hours a day, 7 days a week and detail any exceptions to this and advise actual hours of operation;	
	c) records of vehicle numbers accessing the site; and	
	d) representative vehicle origins and destinations, based on a cordon in the surrounding network.	

CoC	Requirement	Sections or documents where requirements addressed
	A framework for recording and reporting on the data required for the report, prepared to the satisfaction of TfNSW and RMS, is to be submitted to the Secretary three months prior to the commencement of operation. The report is to be submitted within one month of its preparation throughout operation of the project, starting six months from the commencement of operation, unless otherwise agreed by the Secretary, TfNSW and RMS. The cordon count at (d) above will: • apply to all classes of vehicles; and • cover the intermodal terminal, the warehousing facility and any other uses such as the freight village.	
A19	Where conditions of this consent require a document to be prepared in consultation with an identified party, the Applicant must: a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; b) provide evidence that at least two weeks was provided for the relevant party to comment on the document; and c) Include in the document: (i) details of the consultation undertaken (ii) a description of how matters raised by those consulted have been resolved to the satisfaction of both the Applicant; and the party consulted; and (iii) details of any disagreement remaining between the patty consulted and the Applicant and how the Applicant has addressed the matters not resolved.	Section 1.6 Appendix A
Secondary Conditions		
B7	All vehicles are to enter and leave the site in a forward direction	Section 3.2.20; Table 3-17; TA-7
B8	All trucks entering or leaving the site with loads must have their loads covered and must not track dirt onto any public road	Section 3.2.20; Table 3-17; TA-8
B10	The swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, must be in accordance with Austroads requirements Prior to commencement of construction on permanent infrastructure a plan must be submitted to the Secretary and RMS for approval, which shows that the proposed development complies with this requirement.	Design documents were submitted to and approved by PCA. Swept paths have been provided to RMS during consultation which is now closed out. Appendix D includes a swept path analysis of the longest vehicle entering and exiting at each site access point.
B11	The layout of the proposed car parking areas associated with the subject development (including driveways, grades, turn paths, sight distance requirements in relation to landscaping and/or fencing, aisle widths, aisle lengths, and parking bay dimensions) must be in accordance with AS2890.1-2004 Parking facilities Off-street car parking, AS2890.6-2009 Parking facilities Off-street parking for people with disabilities and AS2890.2-2002 Parking facilities Off-street commercial vehicle facilities for heavy vehicle usage	Design documents were submitted to and approved by PCA. As detailed in Section 3.2.15 parking areas have been prepared in accordance with the relevant standards.

CoC	Requirement	Sections or documents where requirements addressed
B12	The development is to be designed so that: a) all vehicles are wholly contained on site before being required to stop	Design documents were submitted to and approved by PCA. Section 3.2.6
	b) adequate parking for heavy vehicles is provided on-site to accommodate any potential delays in schedule time	Section 3.2.8 Section 3.2.5
	c) all loading and unloading of materials is carried out on-site	Section 3.2.20; Table 3-17; TA-9
	d) site roads accommodate buses, bus infrastructure and cyclist use for employees	Section 4 of the WTP at Appendix C details public transport facilities Section 5 of the WTP at Appendix C details provisions for pedestrian and cyclist access to the site and facilities.
B13	The Applicant is to undertake the following upgrades, in accordance with the specified timing requirements, as set out in Table 1 …	Section 3.2.19
B25	The applicant must ensure: a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the development are constructed and maintained in accordance with the latest version of AS 2890.1:2004 Parking facilities Off-street car parking (Standards Australia, 2004) and AS 2890.2:2002 Parking facilities Off-street commercial vehicle facilities (Standards Australia, 2002);	Parking areas were designed in accordance with the relevant standards during detailed design. This is clarified in Section 3.2.16.
	b) the final configuration of the internal road network is established and available for use prior to occupation of the freight village or any warehousing	The final configuration of the internal road network has been established as part of the detailed design and was submitted to and approved by PCA and will progressively become operational in accordance with the proposed stages identified in Section 1.3; Table 1-1. Details of the interim arrangements have been sent to the Department for information.

CoC	Requirement	Sections or documents where requirements addressed
B25	c) the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant Austroads guidelines	Swept Paths have been designed in accordance with the relevant Austroads guidelines and were submitted to, and approved by PCA. Drawings include: Area 1 Warehouse 1: • Dwg 17189-GA-101-P2-MASTER SITE PLAN • Dwg 17189-GA-101-S-MASTER SITE PLAN Area 1 IMEX: • Dwg IMEX-ARC-CV-DWG-9370 • Dwg IMEX-ARC-CV-DWG-6301 • Dwg IMEX-ARC-CV-DWG-8401 • Dwg IMEX-ARC-CV-DWG-8402 Area 2 Warehouse 3 and 4: • Drawing No. AG - 01 to 07 Area 2 Warehouse 5: • WHP5-RCG-AR-DWG-A1001-O (Sketch 2-6) Appendix D includes a swept path analysis of the longest vehicle entering and exiting at each site access point.
	d) the development does not result in any vehicles queuing on the public road network	Section 3.2.3 Design documents were submitted to and approved by PCA
	e) heavy vehicles and bins associated with the development are not parked on local roads or footpaths in the vicinity of the site	Section 3.2.5 Section 3.2.15
	f) all vehicles are wholly contained on site before being required to stop	Design documents were submitted to and approved by PCA
	g) all loading and unloading of materials is carried out on-site	Section 3.2.20; Table 3-17; TA-9
	h) all trucks entering or leaving the site with loads have their loads covered and do not track dirt onto any public road	Section 3.2.20; Table 3-17; TA-8
	i) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times	Section 3.2.15 Section 3.2.20; Table 3-17; TA-14 Section 4.1 and Table 4-2
B29	Prior to the issue of any Occupation Certificate, the Applicant must prepare a Workplace Travel Plan to the satisfaction of the Secretary. The Workplace Travel Plan must form part of the Operational Traffic and Access Management Plan required by condition C3, and must: (a) be prepared in consultation with TfNSW	Refer to WTP in Appendix C

CoC	Requirement	Sections or documents where requirements addressed
	(b) outline facilities and measures to promote public transport usage, such as car share schemes and employee incentives …	
B114	The quantities of Dangerous Goods present at any time within each premises or transported from and to the development must be kept below the screening threshold quantities listed in the Department's Hazardous and Offensive Development Guidelines Application Guidelines Applying SEPP 33 (January 2011)	Section 3.2.13

The Final traffic and access management related Compilation of Mitigation Measures (FCMM) are presented within the MPE Stage 1 RtS (Arcadis, September 2015), and the MPE Stage 2 RtS (Arcadis, July 2017) documents. A list of Revised Traffic and Access Management Mitigation Measures as relevant to the Facility operations and how they have been complied within this plan are provided in Table 2-4 and Table 2-5.

Table 2-4: Final Compilation of Mitigation Measures (MPE Stage 1)

FCMM	Requirement	Sections or documents where requirements addressed
Traffic and Transport		
1C	An Operational Traffic Management Plan (OTMP) (or equivalent) will be developed for the operational phase of the Proposal, in accordance with the Preliminary Operational Traffic Management Plan (POTMP). The OTMP will include the following measures to manage potential traffic impacts, at a minimum:	This OTAMP
	• Use of short-range radios, GPS and/ or wireless communications to maximise the efficiency of access and circulation of vehicles within the Stage 1 site	Section 3.2.20; Table 3-17; TA-5.1
	• Provision of adequate truck holding capacity within the Stage 1 site	Section 3.2.6 Design documents were submitted to and approved by PCA.
	• Provision of an information dissemination system to exchange information with truck drivers on live traffic conditions on the external network.	Section 3.2.9.1
	• A driver code of conduct will be included to inform drivers of permissible access and egress routes to and from the Stage 1 site	Section 3.2.11 Appendix B
	• A survey of truck trip generated will be undertaken after 24 months of commencement of operation of the Proposal.	Section 4.3 Table 4-3 Section 3.2.20; Table 3-17; TA-15
Best Practice Review		
4.1A	The following control measures will be progressively implemented during operation of the IMT:	Section 3.2.3

FCMM	Requirement	Sections or documents where requirements addressed
	• A vehicle booking system, truck marshalling lanes and rejection of trucks that arrive early will be implemented / provided to minimise wait times and queuing. This system will be implemented on commencement of operation	
	• An electrified locomotive shifter will be installed to reduce the need for excessive locomotive idling. This control will be implemented on commencement of operation	Section 3.2.20; Table 3-17; TA-18
	• Where new reach stackers are procured, these would be selected to achieve best practice emissions performance to meet US EPA Tier 3/ Euro Stage IIIA standards	Section 3.2.20; Table 3-17; TA-19
	• Electric gantry cranes to reduce use of diesel powered equipment. This control will be implemented within seven years of commencement of operation of the Proposal or on the Proposal achieving an annual throughput of 250,000 TEU, whichever is the latter.	Section 3.2.20; Table 3-17; TA-20
Hazard and Risk		
12E	• The transport of dangerous goods by road and rail will comply with the Dangerous Goods (Road and Rail Transport) Act 2008 and the Dangerous Goods (Road and Rail Transport) Regulation 2014. Storage and handling of Dangerous Goods on the Stage 1 site will be in accordance with the requirements of the Australian Dangerous Goods code.	Section 3.2.14

Table 2-5: Revised Mitigation Measures (MPE Stage 2)

FCMM	Requirement	Sections or documents where requirements addressed
0C	The Operational Environmental Management Plan (OEMP), or equivalent, for the Amended Proposal would be based on the following preliminary management plans: • Preliminary Operational Traffic Management Plan (POTMP) (Appendix K of the EIS) As a minimum the OEMP would include the following sub-plans: • Operational Traffic Management Plan (OTMP)	This OTAMP
0D	The construction and/or operation of the Amended Proposal may be delivered in a number of stages. If construction and/or operation is to be delivered in stages a Staging Report would be provided to the Secretary prior to commencement of the initial stage of construction and updated prior to the commencement of each stage as that stage is identified.	Section 1.3
1D	It is intended that the Preliminary Operational Traffic Management Plan (POTMP) would be further progressed and integrated into the OEMP for the Amended Proposal. Specifically, the following key aspects would be addressed in the OTAMP:	This OTAMP
	• Heavy vehicle route management	Section 3.1.4
	• Safety and amenity of road users and public	Section 3.2.12
	• Congestion management on Moorebank Avenue	Section 3.2.9

FCMM	Requirement	Sections or documents where requirements addressed
	• Road user delay management	Section 3.2.10
	• Information signage, distance information and advance warning	Section 3.2.14
	• Driver code of conduct	Section 3.2.11 Section 3.2.20; Table 3-17; TA-2, TA-5, TA-6 Appendix B
	• Incident management	Section 4.4 Refer to Emergency Response Plan (ERP)
	• Traffic monitoring	Section 4.1 Refer to BTODR
1E	Bicycle and end of trip facilities would be provided in accordance with the City of Sydney Section 3 – General Provisions	Refer to WTP
1F	Consultation would be undertaken with relevant bus provider(s) regarding the potential to extend the 901 bus service (or equivalent) and additional regular service bus stops with the aim of maximising public transport accessibility to, from and within the Amended operational area.	Refer to WTP

2.3 Roles and Responsibilities

Key traffic and access management roles and responsibilities applicable to this OTAMP are presented in Table 2-6.

Table 2-6: Roles and Responsibilities

Roles	Responsibilities
Operations Manager	• Accountable for the environmental performance of the MLP East Precinct • Provides sufficient resources to implement, develop and maintain the OTAMP throughout the operating life of the MLP East Precinct • Implement stop work procedures where they believe a work activity to be an actual or potential cause of pollution to the environment anywhere within the MLP East Precinct • Reviews and approves changes to the OTAMP.
Area Managers: • **IMEX** • **Rail Link** • **Estate Manager**	• Communicates the requirements of the OTAMP and environmental obligations to operational team • Has the authority to stop work processes within the area of responsibility to prevent traffic non-conformances from occurring or continuing • Monitors operations against the requirements of the OTAMP and CoC and takes action to resolve issues where required • Where required, implements changes to activities to manage ongoing compliance • Reports incidents to Operations Manager in accordance with the OEMP • Induct and train staff on the requirements of this OTAMP • Undertake the monitoring requirements of this OTAMP

Roles	Responsibilities
	• Notified immediately of any material that is deposited on the road.
Site SHEQ Manager/Advisor	• Reviews and implements this OTAMP • Monitors operations against this OTAMP through regular site inspections to evaluate compliance with the CoC, • Has the authority to implement reasonable steps to avoid or minimise unintended or adverse traffic impacts, including to direct that relevant actions be ceased immediately should adverse impacts be likely to occur • Reports traffic and access incidents to Area Manager and Operations Manager where required, in accordance with the Incident reporting system outlined in the OEMP • Acts as the 24-hour EPA contact • Facilitates the inductions and training program for relevant persons involved with IMEX, Rail Link and Estate operations • Maintains the register of traffic and access incidents, potential; incidents and complaints and implements subsequent remedial action • Monitoring the implementation of this OTAMP, including compliance with relevant CoCs. • Undertake the monitoring and reporting requirements of this OTAMP.
All other personnel (including Road Operators, tenants and drivers)	• Comply fully with applicable requirements of this OTAMP • Read and endorse the Driver's Code of Conduct
Community Engagement Representative	• Monitoring, responding to and triaging calls and emails relating to traffic and access of the MLP East Precinct.
Facility Security **(Blue Star Security)**	• Undertake monitoring requirements of this OTAMP.

3 IMPLEMENTATION

This section addresses the key traffic and access risks associated with operation of the MLP East Precinct and the related controls established to manage key risks. The risks identified are based on previous traffic studies and operational modelling. No additional traffic modelling has been carried out to inform the preparation of this OTAMP.

3.1 Background Studies

3.1.1 Reference Traffic Study, Data and Modelling

A traffic study[1] was undertaken by Arcadis for Qube Property Management Services Pty Ltd. Future traffic growth and modelling data was sourced from RMS's wider Liverpool Moorebank Arterial Road Investigations (LMARI) model built in AIMSUN modelling software version 8.0.9 (R35843).

The LMARI AIMSUN traffic model was developed, calibrated and validated by Jacobs[2] and subsequently updated by GTA Consultants[3] (GTA). RMS provided the 2026 and 2036 future base model ('do minimum')[4] on 20 June 2016. For the purpose of the operational traffic modelling undertaken for the facility, the AIMSUN traffic model provided by RMS dated 20 June 2016 was used. Arcadis supplemented this assessment with additional intersection traffic modelling using SIDRA Network, version 7.

The performance of the study intersections was assessed based on the level of service (LOS). The adopted standard for LOS is the NSW Level of Service criteria for intersection performance, as shown in Table 3-1.

Table 3-1: LOS Criteria for Intersection Capacity Analysis

Level of Service	Average Delay per Vehicle (secs/ veh)	Traffic Signals, Roundabout	Give Way and Stop Signs
A	<14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals, incidents will cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	>70	Unsatisfactory with excessive queueing	Unsatisfactory with excessive queueing

Source: RMS Guide to Traffic Generating Developments, October 2002.

Appropriate data from traffic reports previously prepared for the Moorebank Precinct includes the following:

[1] The traffic study area is identified in Section 2.1 of Appendix Kb Operational Traffic and Transport Impact Assessment from the MPE Stage 2 EIS

[2] Liverpool Moorebank Arterial Road Investigations, MITRA Base Model Calibration and Validation Report, Final Revision B.0, Jacobs, 12 October 2015

[3] Moorebank Intermodal Terminal AIMSUN Existing Conditions Model – Modelling Review Summary, Memorandum, GTA Consultants, 26 November 2015

[4] Further details about the future base model 'do minimum' are available from Section 1.11 and Table 1-9 in Appendix Kb Operational Traffic and Transport Impact Assessment from the MPE Stage 2 EIS

- Moorebank Precinct East Project (MPE) Project – The Intermodal terminal facility on the MPE site as approved by the MPE Concept Plan Approval (MP 10_0913) and included the MPE Stage 1 Proposal (6766). This report references previous Transport and Accessibility Impact Assessment reports (Arcadis, previously Hyder Consulting, 2013 and 2015) prepared for both Concept Plan Approval and Stage 1 proposals.
- Moorebank Precinct West (MPW) Concept Plan Approval - MPW Concept Plan and Early Works Approval (SSD 5066) granted on 3 June 2016 for the development of the MPW intermodal terminal facility at Moorebank and the undertaking of the Early Works. This report references previous Traffic and Transport Impact Assessment traffic reports (WSP, previously Parsons Brinkerhoff, 2015) prepared for both the MPW Concept Plan Approval and MPW Stage 1 proposals.
- Moorebank Intermodal Terminal Precinct – Traffic Generation and Underlying Assumptions, Memorandum (WSP, September 2016). This memo documents the revised assumptions relating to traffic generation for operation of Stage 1, Stage 2 and Stage 3 of the Moorebank Intermodal Terminal.

In addition to the above, WSP on behalf of Moorebank Intermodal Company (MIC) carried out traffic modelling, utilising the June 2016 "Do Minimum" AIMSUN (LMARI) model provided by RMS to assess the impacts on the surrounding road network arising as a result of the ultimate full-build scenario for the entire Moorebank Intermodal Precinct (i.e. the MPW and MPE projects), referred to as the Precinct model. The outcomes of the model identified appropriate network upgrades to mitigate the facility's impacts on the road network to a "no-worse than without development" state and determined staging of the proposed upgrades. Arcadis actively coordinated with MIC (and WSP) to inform the modelling inputs for the Precinct modelling to ensure consistency between the two modelling exercises.

3.1.2 Trip Generation

Table 3-2 summarises the trip generation assumptions for the MLP East Precinct.

Table 3-2: MLP East Precinct Trip Generation Assumptions

Components	Assumptions
Warehouse Facilities	• The warehouses will operate 52 weeks of year, seven days a week and 24 hours a day • Containers will arrive every day of the year. In a typical week, 95% of containers will be processed on weekdays (Monday to Friday), with the remaining 5% being processed on Saturday and Sunday • Containers are loaded onto either B-doubles, semi-trailers or rigid trucks[5] • Approximately 65% of deliveries will be made by semi-trailers, 30% will be made by rigid trucks and 5% will be made by B-doubles.
IMEX	• The IMEX will operate 52 weeks per year, seven days a week and 24 hours a day • Containers arriving by road will arrive every day of the year. In a typical week, 85% of containers will be processed on weekdays (Monday to Friday), with the remaining 15% being processed on Saturday and Sunday • The containers arriving by rail will be transferred on to trucks for transport on-site and off-site. In some instances, containers will be unloaded from trains into the container storage area (i.e. stacked) and then transferred onto trucks • Containers are loaded onto either B-doubles or semi-trailers • About 80% of container deliveries will be made by semi-trailers and 20% by B-doubles.
Staff	• Three, eight-hour staff shifts per 24-hour period.

[5] On average a semi-trailer is equivalent to 1.6 TEUs, a B-double equivalent to 2.4 TEUs, and a rigid truck is equivalent to 0.8 TEUs

Table 3-3 summarises the MLP East Precinct parameters, the resultant trip generation from the combination of these parameters, and the trip generation assumptions.

The MLP East Precinct is expected to generate approximately 1,234 truck movements and 4,073 car movement to and from the facility site each weekday. In the cumulative development scenario with the addition of traffic from MPW Stage 2, approximately 2,540 truck movements and 6,808 car movements are estimated to and from the facility each week day.

The majority of deliveries to warehouses will be made by semi-trailers and rigid truck, which are anticipated to be scheduled during the middle of the day, while the majority of deliveries made by B-doubles are anticipated outside the general network AM and PM peak hours.

Table 3-3: MLP East Precinct Parameters

Trip Generation Assumptions	Development Scenarios		
	MLP East Precinct		Cumulative Scenario
	IMEX Terminal	Warehouses	MLP East Precinct + MPW Stage 2
	Development Parameters		
Total Intermodal Terminal Capacity	250,000 Twenty-foot Equivalent Unit (TEU)	Warehouses do not include terminal facilities	750,000 TEU per annum (250,000 TEU attributed to IMEX and 500,000 TEU attributed to MPW Stage 2)
Total Warehousing Gross Floor Area (GFA)	IMEX Terminal does not include warehousing facilities	300,000 m^2	515,000 m^2 (300,000 m^2 for MLP East Precinct and 215,000 m^2 for MPW Stage 2)
	Trip Generation		
Daily Truck Movements (to and from, 24 hours)	670 truck movements/ day	564 truck movements/ day	2,540 truck movements/ day
Daily Car Movements (to and from, 24 hours)	80 car movements/ day	3,993 car movements/ day	6,808 car movements/ day

3.1.3 Employee Traffic Generation Profile

In the opening year in 2019, the MLP East Precinct will operate with three shifts per day with AM and PM peak hour vehicle movements occurring between 5am to 6am and 9pm to 10pm with an inter-peak period occurring at 1pm to 2pm. During the employee AM and PM peak hour, employee vehicle movements represent about 9% and 10% of total daily car movements, respectively.

3.1.4 Traffic Distribution

The distribution of additional traffic (both heavy and light vehicles) generated by the MLP East Precinct is a key factor in determining the impact of the facility on roads and intersections in the study area.

3.1.4.1 Heavy Vehicles

Approximately 56% of heavy vehicle (including semi-trailers, B-doubles and rigid trucks) movements generated by the facility would travel to the MLP East Precinct via the M5 Motorway from the west. The remaining 44% of traffic travelling to the MLP East Precinct is broken down as follows, 2% via the M5 Motorway from the east, 17% via the Hume Highway and 25% via Moorebank Avenue from the north of the M5 Motorway. Of the 25% travelling from the north, 12% would originate from Newbridge Road East and 5% from Newbridge Road West. In general, all trucks would travel via Moorebank Avenue to the north of the

MLP East Precinct. No container trucks would travel to the MLP East Precinct via Anzac Road (east of Yulong Close) or Cambridge Avenue. The design of the IMEX Terminal and Warehouse access points precludes heavy vehicles turning right into the MLP East Precinct, or left onto Moorebank Avenue.

The traffic distribution in the PM peak (outbound movement) is assumed to be similar to AM peak inbound trip distribution.

3.1.4.2 Light vehicles

Over 50% of light vehicle movements related to the MLP East Precinct are forecast to travel to the facility via the M5 Motorway. The remainder of movements would travel via the Hume Highway from the west and Moorebank Avenue from the north during the AM peak. Minor employee car traffic is expected to travel to the Facility via Anzac Road (8%) and Cambridge Avenue (3%).

The traffic distribution in the PM peak (outbound movement) is assumed to be similar to AM peak inbound trip distribution.

3.1.5 Daily Traffic Volumes

Operation of the MLP East Precinct would increase traffic movements within the vicinity of the facility, particularly on Moorebank Avenue to the south of the M5 interchange. The M5 interchange is the MLP East Precinct's primary point of access to the south-western Sydney freight catchment, which is located to the west of the M5 interchange. These increased local traffic movements would be a result of heavy vehicle movements for freight distribution to and from the facility and for light vehicle movements for employees and visitors accessing the facility. However, the MLP East Precinct would contribute to reducing the existing and potential future increase in regional freight traffic movements along the M5 Motorway between Port Botany and Moorebank Avenue, primarily by facilitating a mode transfer from road to rail.

The potential increase in traffic generated by the MLP East Precinct on the road network was assessed by comparing forecast 2019 (opening year) and 2029 (10-year horizon) daily traffic volumes on Moorebank Avenue, Anzac Road and Cambridge Avenue with and without the facility as shown in Table 3-4 and Table 3-5, respectively.

The results show that increased total traffic volumes (numbers of vehicles) from the operation of the MLP East Precinct would be the greatest along Moorebank Avenue (to the south of Anzac Road, with traffic volume increases of 23% in 2019 and 19% in 2029. The MLP East Precinct would also increase the total traffic volumes along Moorebank Avenue north of Anzac Road with an increase of 18% in 2019 and 15% in 2029. Some low increases in traffic volumes would also be experienced to the east of Moorebank Avenue along Anzac Road and along Cambridge Avenue, west of Moorebank Avenue in 2019 and 2029.

Table 3-4: Daily Traffic Volumes and Heavy Vehicle Volumes in 2019 (Opening Year)

Location	2019 without the MLP East Precinct			2019 with the MLP East Precinct			Traffic Increase Contributed by the MLP East Precinct in 2019 (Opening Year)	
	All Vehicles	Heavy Vehicles		All Vehicles	Heavy Vehicles			
		No of Heavy Vehicles.	% of All Vehicles		No of Heavy Vehicles.	% of All Vehicles	All Vehicles	% Increase in total traffic*
Moorebank Avenue, north of Anzac Road	23,200	1,200	5	27,320	1,760	6	4,120	18
Moorebank Avenue, south of Anzac Road	19,000	980	5	23,440	1540	7	4,440	23
Anzac Road, east of Moorebank Avenue	11,100	510	5	11,420	510	4	320	3
Moorebank Avenue, north of Cambridge Avenue	19,000	1,050	6	19,120	1,050	5	120	0.6
Cambridge Avenue, west of Moorebank Avenue	17,900	630	4	18,020	630	3	120	0.7

*Traffic increase contributed by the MLP East Precinct equals to facility traffic generation divided by background traffic.

Table 3-5: Daily Traffic Volumes and Heavy Vehicle Volumes in 2029 (10-Year Horizon)

Location	2029 without the MLP East Precinct			2029 with the MLP East Precinct			Traffic Increase Contributed by the MLP East Precinct in 2029 (Opening Year)	
	All Vehicles	Heavy Vehicles		All Vehicles	Heavy Vehicles			
		No of Heavy Vehicles.	% of All Vehicles		No of Heavy Vehicles.	% of All Vehicles	All Vehicles	% Increase in total traffic*
Moorebank Avenue, north of Anzac Road	28,000	1,450	5	32,120	2,010	6	4,120	15
Moorebank Avenue, south of Anzac Road	23,500	1,220	5	27,940	1,780	6	4,440	19
Anzac Road, east of Moorebank Avenue	12,800	590	5	13,120	590	4	320	3
Moorebank Avenue, north of Cambridge Avenue	23,600	1,310	6	23,720	1,310	6	1200	0.5
Cambridge Avenue, west of Moorebank Avenue	22,300	780	3	22,420	780	3	1200	0.5

*Traffic increase contributed by the MLP East Precinct equals to facility traffic generation divided by background traffic.

3.1.6 Peak Hour Traffic Volumes

An assessment of the potential increase in traffic generated by the fully operational MLP East Precinct at key intersections within the study area was conducted for 2019 and 2029 as shown in Table 3-6 and Figure 3-1.

The highest traffic increase attributable to the MLP East Precinct in the peak hour is predicted at the Moorebank Avenue/ Defence Joint Logistics Unit (DJLU) Access and Moorebank Avenue/ Warehouse Access intersections with increases of approximately 10% in 2019 and reducing to approximately 8% by 2029. The facility would increase traffic at Moorebank Avenue/ Anzac Road intersection by 7% in 2019 and reduce to 6% by 2029.

The proportion of the MLP East Precinct's traffic in 2029 is less than in 2019 at key intersections within the study area due to a growth in background traffic with facility traffic remaining constant from year of opening.

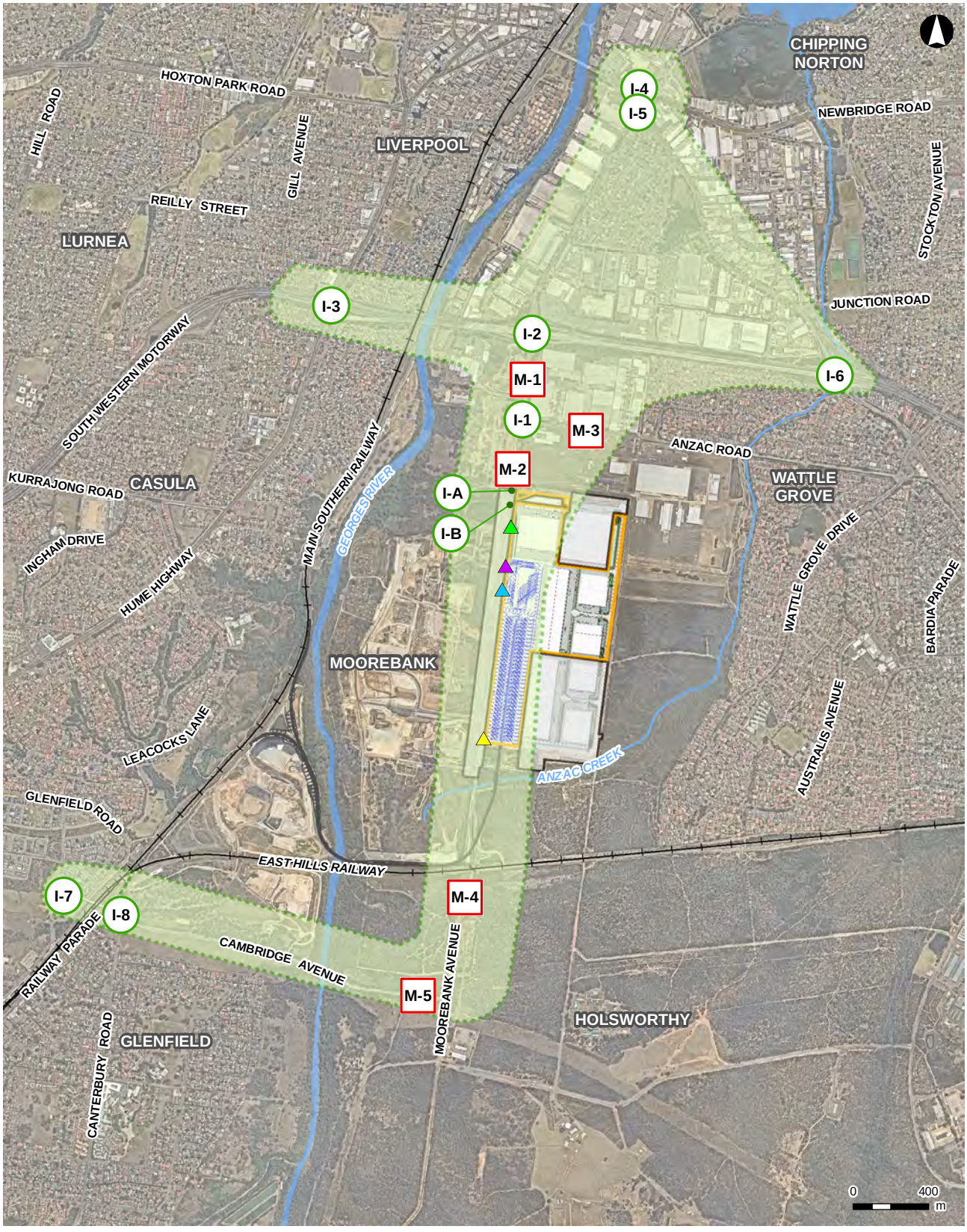
Operation of the MLP East Precinct is also predicted to increase traffic at M5 Motorway/ Moorebank Avenue intersection by 4% in 2019, reducing to 3.5% by 2029. Increases in traffic due to the facility at the M5 Motorway/ Hume Highway are less than 0.5% of total traffic movements in 2019 and 2029.

To the north of the M5 Motorway, the analysis found that likely traffic increase attributable to the MLP East Precinct at Moorebank Avenue/ Newbridge Road and Moorebank Avenue/ Heathcote Road intersections would be minor (less than 1%). To the east, likely traffic increases at the M5 Motorway/ Heathcote Road would be marginal (less than 0.7%). Similarly, to the south on Cambridge Avenue, likely traffic increase at two assessed roundabouts would be marginal (less than 0.2%).

As noted in Appendix Kb Operational Traffic and Transport Impact Assessment of the MPE Stage 2 EIS, the predicted increase in traffic generated by the MLP East Precinct is less than 5% of current traffic volumes. This is within the variation limits in day to day traffic volumes, and as such, their impacts are considered to be marginal.

Table 3-6: Traffic Increase Attributed to the Proposal in 2019 and 2029

ID	Intersections	2019 Opening Year (% of Background Traffic)		2029 Horizon Year (% of Background Traffic)	
		AM Peak	PM Peak	AM Peak	PM Peak
I-1	Moorebank Avenue/ Anzac Road	7.0%	3.7%	6.0%	3.0%
I-2	M5 Motorway/ Moorebank Avenue	4.0%	2.0%	3.5%	1.7%
I-3	M5 Motorway/ Hume Highway	0.4%	0.2%	0.4%	0.2%
I-4	Moorebank Avenue/ Newbridge Road	0.5%	0.2%	0.4%	0.2%
I-5	Moorebank Avenue/ Heathcote Road	0.8%	0.4%	0.7%	0.3%
I-6	M5 Motorway/ Heathcote Road	0.6%	0.3%	0.1%	0.1%
I-7	Cambridge Avenue/ Glenfield Road	0.1%	0.01%	0.1%	0.1%
I-8	Cambridge Avenue/ Canterbury Road	0.1%	0.07%	0.1%	0.1%
I-A	Moorebank Avenue/ DJLU Access	9.5%	5.4%	7.8%	4.3%
I-B	Moorebank Avenue/ Warehouse Access	9.9%	5.5%	8.2%	4.4%



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Intersection location
- Midblock
- Existing railway
- Watercourse
- Operational rail link

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Coordinate System: GDA 1994 MGA Zone 56
Aerial imagery supplied by nearmap (Sep, 2019)

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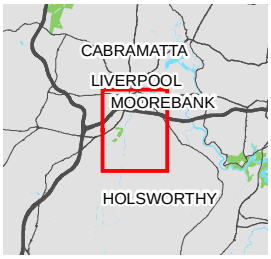


Figure 3-1: Key Intersections and Road Links in the Core Area

3.1.7 Assumed Road Network Upgrades

The broader road network in the study area needs to be upgraded to provide increased capacity to cater for the forecast increases in traffic volumes which will result from the general growth in background traffic and cumulative development, including the MLP East Precinct. For the purpose of the traffic and transport impact assessment the upgrades outlined in Table 3-7 were assumed, however are not nominated for delivery for the Project. This information has been obtained from Appendix Kb Operational Traffic and Transport Impact Assessment of the MPE Stage 2 EIS.

Table 3-7: Assumed Road Network Upgrades

ID	Intersection	Recommendations	Indicative Timing
I-1	Moorebank Avenue / Anzac Road	1. Upgrade Moorebank Avenue/Anzac Road signalised intersection to include lane capacity improvements on the northern and southern approaches. The current configuration on Anzac Road (eastern approach) will be retained. 2. Implement vehicle actuated signals 3. Upgraded intersection to comply with relevant RMS design standards	2019
I-2	M5 Motorway / Moorebank Avenue	1. Provide additional capacity on M5 westbound on-ramp. 2. Provide additional capacity on M5 eastbound off-ramp 3. Increase the storage lengths of the existing (two-lane) right turn bay on Moorebank Avenue northern approach 4. Widen Moorebank Avenue to four lanes between the M5 Motorway/Moorebank Avenue intersection and Moorebank Avenue /Anzac Road intersection 5. Change the signal to vehicle actuated to improve west and north approaches 6. Upgraded intersection to comply with relevant RMS design standards	Staged upgrading starting from 2019
I-3	M5 Motorway / Hume Highway	Change the signal to vehicle actuation in the PM peak to improve traffic signal operations	2019
I-4	Moorebank Avenue / Heathcote Road	1. Extend right turn lane from Moorebank Avenue south approach and change the signal to vehicle actuation in the PM peak to improve traffic signal operations. 2. Upgraded intersection to comply with relevant RMS design standards	2019
I-5	Moorebank Avenue / Newbridge Road	1. Extend right turn lane from Moorebank Avenue south approach and change the signal to vehicle actuation in the PM peak to improve traffic signal operations. 2. Upgraded intersection to comply with relevant RMS design standards	2019
I-6	M5 Motorway / Heathcote Road	Change the signal to vehicle actuated in PM peak to improve traffic signal operations	2019
I-A	Moorebank Avenue / DJLU Access	Upgrade intersection capacity on north and south approaches	2019

3.1.8 Impact on Intersection Performance – 2019 and 2029

The impact of traffic attributable to the MLP East Precinct on the network operation has been undertaken for the study intersections in 2019 and 2029. Table 3-9 and Table 3-10 show the predicted intersection LOS without and with the addition of facility traffic in 2019 and 2029, respectively.

In determining the required intersection improvements to mitigate the impact of MLP East Precinct traffic on the road network, a "no-worsening of the without MLP East Precinct intersection performance" approach has been adopted as this identifies improvements directly attributable to the facility i.e. not due to growth in background traffic.

The performance of the proposed road network upgrades attributable to the MLP East Precinct has been compared with the "Do-Minimum scenario", a series of planned and committed network improvements to meet the growth in future demand on the road network, as identified by RMS[6]. The "Do-Minimum scenario" has been adopted as the base case for traffic modelling for the operation of the MLP East Precinct. The assumed "Do-Minimum scenario" network improvements are outlined in Table 3-8. The proposed upgrades to mitigate the traffic impacts of the Facility and cumulative traffic are identified in Section 3.1.7 of this OTAMP.

Table 3-8: Assumed Do-Minimum Network Improvements

Intersection / Location of Network Improvement	Description of Works
1. Camden Valley Way/Croatia Avenue	Widening of Croatia Avenue to two lanes in each direction
2. Campbelltown Road/Glenfield Road	Short left-turn lane from Glenfield Road to Campbelltown Road Widening of Glenfield Road to two lanes in each direction between Campbelltown Road and Brampton Avenue
3. Campbelltown Road/Glenfield Road	Reconfiguration of the intersection
4. Hume Highway/ Bigge Street	Reconfiguration of the intersection
5. Speed Street/ Pirie Street	New traffic signals and phasing, with no change in the intersection footprint Left-turn slip lane on the northern approach converted to a continuous turn lane
6. Campbelltown Road corridor	Road widening between Glenfield Road and Edmondson Park station
7. Heathcote Road corridor	Widening of Heathcote Road to two lanes in each direction between Moorebank Sports Club and Pleasure Point
8. Applied 'yellow box' to ensure no blockage of occurs from vehicle queueing across the intersection	Croatia Avenue/Edmondson Park Station Access Moorebank Avenue/Church Road Church Road/Market Street Flowerdale Road/ Mainsbridge Avenue Cedar Road/Wattle Road.

The modelling results show that the additional facility traffic does not have an adverse impact on the performance of the study intersections in 2019 and 2029 with operation generally comparable to the "Do-Minimum scenario" and no intersection upgrades are required to accommodate traffic generated by the facility.

The M5 Motorway/ Moorebank Avenue intersection and Moorebank Avenue/ Anzac Road intersection (with assumed upgrades per Table 3-7) are expected to perform satisfactorily at LOS C or better with the addition of MLP East Precinct traffic in the opening year 2019 and 2029.

[6] For further information refer to the MPE Stage 2 Operational Traffic and Transport Impact Assessment, Arcadis, September 2016

The modelling indicated satisfactory operations at both existing Cambridge Avenue/ Glenfield Road and Cambridge Avenue/ Canterbury Road roundabouts with LOS B or better with MLP East Precinct traffic in 2019 and 2029 (with the proposed network upgrades).

The existing Moorebank Avenue/ DJLU Access (I-A) and proposed Moorebank Avenue/ MLP East Precinct Warehouse Access (I-B) intersections are expected to perform satisfactorily with the addition of MLP East Precinct traffic in 2019. With the assumed network upgrade at Moorebank Avenue/ DJLU Access intersection (I-A), and the proposed upgrade at Moorebank Avenue/ MLP East Precinct Warehouse Access intersection (I-B), both intersections provide sufficient capacity to meet the projected traffic demand in 2029.

The intersections of M5 Motorway/ Hume Highway (I-3) and M5 Motorway/ Heathcote Road (I-6) are forecast to operate at capacity with LOS F in the AM and PM peaks, respectively with the MLP East Precinct in operation and the assumed network upgrades. However, compared with the “Do-Minimum scenario”, the operation is improved with reduced delays.

Refer to Figure 3-1 for the locations of these existing intersections.

Table 3-9: Intersection Level of Service with and without the MLP East Precinct - 2019

ID	Intersection	2019 without the MLP East Precinct (Do-Min Scenario)				2019 with the MLP East Precinct (Do-Min Scenario)				2019 with the MLP East Precinct (With assumed network upgrades)			
		AM Peak (8-9am)		*PM Peak (5-6pm)*		AM Peak (8-9am)		PM Peak (5-6pm)		AM Peak (8-9am)		PM Peak (5-6pm)	
		Delay (sec)	*LOS*	*Delay (sec)*	*LOS*	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
I-1	Moorebank Avenue/ Anzac Road	16	*B*	*15*	*B*	15	B	15	B	27	B	23	B
I-2	M5 Motorway/ Moorebank Avenue	24	*B*	*25*	*B*	22	B	24	B	19	B	26	B
I-3	M5 Motorway/ Hume Highway	86	*F*	*37*	*C*	83	F	32	C	37	C	35	C
I-4	Moorebank Avenue/ Newbridge Road	36	*C*	*34*	*C*	35	C	32	C	28	B	32	C
I-5	Moorebank Avenue/ Heathcote Road	56	*E*	*42*	*D*	57	E	52	D	55	D	37	C
I-6	M5 Motorway/ Heathcote Road	50	*D*	*37*	*C*	47	D	41	C	35	C	41	C
I-7	Cambridge Avenue/ Glenfield Road	10	*A*	*15*	*B*	9	A	15	B	8	A	15	B
I-8	Cambridge Avenue/ Canterbury Road	11	*A*	*7*	*A*	8	A	6	A	8	A	6	A
I-A	Moorebank Avenue/ DJLU Access	9	*A*	*8*	*A*	10	A	10	A	4	A	6	A
I-B	Moorebank Avenue/ MLP East Precinct Warehouse Access	Existing Intersection is not operational				9	A	10	A	9	A	11	A

Table 3-10: Intersection Level of Service with and without the MLP East Precinct – 2029

ID	Intersection	2029 without the MLP East Precinct (Do-Min Scenario)				2029 with the MLP East Precinct (Do-Min Scenario)				2029 with the MLP East Precinct (With assumed network upgrades)			
		AM Peak (8-9am)		PM Peak (5-6pm)		AM Peak (8-9am)		PM Peak (5-6pm)		AM Peak (8-9am)		PM Peak (5-6pm)	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
I-1	Moorebank Avenue/ Anzac Road	56	E	105	F	24	B	126	F	29	C	23	B
I-2	M5 Motorway/ Moorebank Avenue	53	D	141	F	46	D	129	F	27	B	40	C
I-3	M5 Motorway/ Hume Highway	148	F	124	F	145	F	116	F	79	F	50	D
I-4	Moorebank Avenue/ Newbridge Road	39	C	73	F	39	C	56	D	32	C	36	C
I-5	Moorebank Avenue/ Heathcote Road	65	E	146	F	56	E	104	F	61	E	54	D
I-6	M5 Motorway/ Heathcote Road	131	F	190	F	96	F	189	F	49	D	79	F
I-7	Cambridge Avenue/ Glenfield Road	11	A	61	E	8	A	79	F	7	A	8	A
I-8	Cambridge Avenue/ Canterbury Road	19	B	60	E	14	B	48	D	12	A	7	A
I-A	Moorebank Avenue/ DJLU Access	53	D	155	F	29	C	336	F	5	A	7	A
I-B	Moorebank Avenue/ MLP East Precinct Warehouse Access	Existing Intersection is not operational				29	C	356	F	9	A	11	A

3.1.9 Cumulative Traffic Impact During Operations

For the cumulative scenario, the traffic generated from the MPE Stage 1 Proposal (IMEX Terminal), MPE Stage 2 Proposal (Warehousing) and MPW Stage 2 Proposal were considered in the context of the Facility and the combined traffic impacts of this cumulative scenario was assessed. The MLP East Precinct includes the operation of the warehouses and IMEX Terminal, with a capacity of 250,000 TEU throughput per annum while the MPW Stage 2 Proposal would include an intermodal terminal with a capacity of 500,000 TEU throughput per annum and an additional 215,000 m² GFA of warehousing.

As a 'worst case' scenario, an assessment of the cumulative development impacts has been conducted for both a 2019 and 2029 full operational scenario. Table 3-11 and Table 3-12 show the predicted intersection LOS of the study intersections with the addition of the cumulative development in 2019 and 2029, respectively. Similar to the assessment of the MLP East Precinct alone, a "no-worsening of without Proposal intersection performance" approach has been adopted for the assessment of improvements directly attributable to the cumulative scenario.

Of particular importance is that the MPW Stage 2 Proposal which includes the development of an upgraded Anzac Road/ Moorebank Avenue intersection from a three leg to a four-leg intersection. This upgrade is in part to accommodate the MPW Stage 2 Proposal entrance, operational traffic for the MLP East Precinct and also background traffic. This intersection is to be developed as part of the MPW Stage 2 Proposal however is subject to funding discussions between SIMTA and RMS. The construction of this intersection would have a positive impact on operational traffic movements for the facility, the Moorebank Logistics Park and background traffic (other Moorebank Avenue road users).

The impacts from the MLP East Precinct related traffic do not result in the need for upgrades to intersections other than the Moorebank Avenue/ MLP East Precinct Warehouse Access intersection (I-B). However, network improvements are required to mitigate the impacts of the cumulative scenario and these are either directly as a result of cumulative developments, or to cater for background traffic growth. As these upgrades are not directly as a result of MLP East Precinct, they were nominated as assumed network upgrades to complete the cumulative scenario modelling that was undertaken[7].

The results of the cumulative scenario traffic modelling are summarised as follows and included in Table 3-11 for 2019 and Table 3-12 for 2029.

The assumed network upgrades at the M5 Motorway/ Moorebank Avenue (I-2) intersection and Moorebank Avenue/ Anzac Road (I-1) intersection are expected to perform satisfactorily at LOS D or better with the addition of cumulative traffic in the opening year 2019 and 2029.

The modelling indicated satisfactory operations at both existing Cambridge Avenue/ Glenfield Road (I-7) and Cambridge Avenue/ Canterbury Road (I-8) roundabouts with LOS B or better with cumulative traffic in 2019 and 2029 (with the assumed network upgrades discussed in Section 3.1.7).

The existing Moorebank Avenue/ DJLU Access (I-A) and proposed Moorebank Avenue/ MLP East Precinct Warehouse Access (I-B) intersections are expected to perform satisfactorily with the addition of MLP East Precinct related traffic in 2019. With the assumed network upgrade at Moorebank Avenue/ DJLU Access (I-A) intersection, and the proposed upgrade at Moorebank Avenue/ MLP East Precinct Warehouse Access intersection (I-B), both intersections provide sufficient capacity to meet the projected traffic demand in 2029.

[7] For further information on the assumed network upgrade refer to Section 6.1.2 and Table 6-1 in the MPE Stage 2 Operational Traffic and Transport Impact Assessment

Table 3-11: Intersection Level of Service with and without Cumulative Development Scenario – 2019

ID	Intersection	2019 without the MLP East Precinct (Do-Min Scenario)				2019 with the MLP East Precinct (Do-Min Scenario)				2019 with the MLP East Precinct (With assumed network upgrades)			
		AM Peak (8-9am)		PM Peak (5-6pm)		AM Peak (8-9am)		PM Peak (5-6pm)		AM Peak (8-9am)		PM Peak (5-6pm)	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
I-1	Moorebank Avenue/ Anzac Road / MPW Access Road	16	B	15	B	41	C	47	D	42	D	44	D
I-2	M5 Motorway/ Moorebank Avenue	24	B	25	B	25	B	57	E	20	B	34	C
I-3	M5 Motorway/ Hume Highway	86	F	37	C	107	F	53	D	45	D	39	C
I-4	Moorebank Avenue/ Newbridge Road	36	C	34	C	37	C	40	C	28	C	34	C
I-5	Moorebank Avenue/ Heathcote Road	56	E	42	D	63	E	46	D	50	D	37	C
I-6	M5 Motorway/ Heathcote Road	50	D	37	C	49	D	56	D	38	C	39	C
I-7	Cambridge Avenue/ Glenfield Road	10	A	15	B	9	A	15	B	8	A	14	B
I-8	Cambridge Avenue/ Canterbury Road	11	A	7	A	9	A	6	A	8	A	6	A
I-A	Moorebank Avenue/ DJLU Access	9	A	8	A	5	A	6	A	5	A	6	A
I-B	Moorebank Avenue/ MLP East Precinct Warehouse Access	Existing Intersection is not operational				9	A	13	A	9	A	13	A

Note: Cumulative Development Scenario = MLP East Precinct + MPW Stage 2

Table 3-12: Intersection Level of Service with and without Cumulative Development Scenario - 2029

ID	Intersection	2029 without the MLP East Precinct (Do-Min Scenario)				2029 with the MLP East Precinct (Do-Min Scenario)				2029 with the MLP East Precinct (With assumed network upgrades)			
		AM Peak (8-9am)		PM Peak (5-6pm)		AM Peak (8-9am)		PM Peak (5-6pm)		AM Peak (8-9am)		PM Peak (5-6pm)	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
I-1	Moorebank Avenue/ Anzac Road / MPW Access Road	56	E	105	F	74	F	421	F	51	D	46	D
I-2	M5 Motorway/ Moorebank Avenue	53	D	141	F	58	E	297	F	34	C	51	D
I-3	M5 Motorway/ Hume Highway	148	F	124	F	156	F	276	F	98	F	44	D
I-4	Moorebank Avenue/ Newbridge Road	39	C	73	F	40	C	115	F	37	C	36	C
I-5	Moorebank Avenue/ Heathcote Road	65	E	146	F	59	E	259	F	56	D	63	E
I-6	M5 Motorway/ Heathcote Road	131	F	190	F	140	F	283	F	68	E	100	F
I-7	Cambridge Avenue/ Glenfield Road	11	A	61	E	8	A	109	F	7	A	8	A
I-8	Cambridge Avenue/ Canterbury Road	19	B	60	E	15	B	90	F	15	B	7	A
I-A	Moorebank Avenue/ DJLU Access	53	D	155	F	83	F	455	F	25	B	7	A
I-B	Moorebank Avenue/ MLP East Precinct Warehouse Access	Existing Intersection is not operational				51	D	307	F	20	B	12	A

Note: Cumulative Development Scenario = MLP East Precinct + MPW Stage 2

3.2 Operational Traffic Management Measures

3.2.1 Operational Hours

Movement of freight between the IMEX and warehouses within the MLP East Precinct would be undertaken 24 hours per day, seven days a week. The warehouses would generally be operational for 24 hours per day, seven days a week.

3.2.2 Heavy Vehicle Access Routes

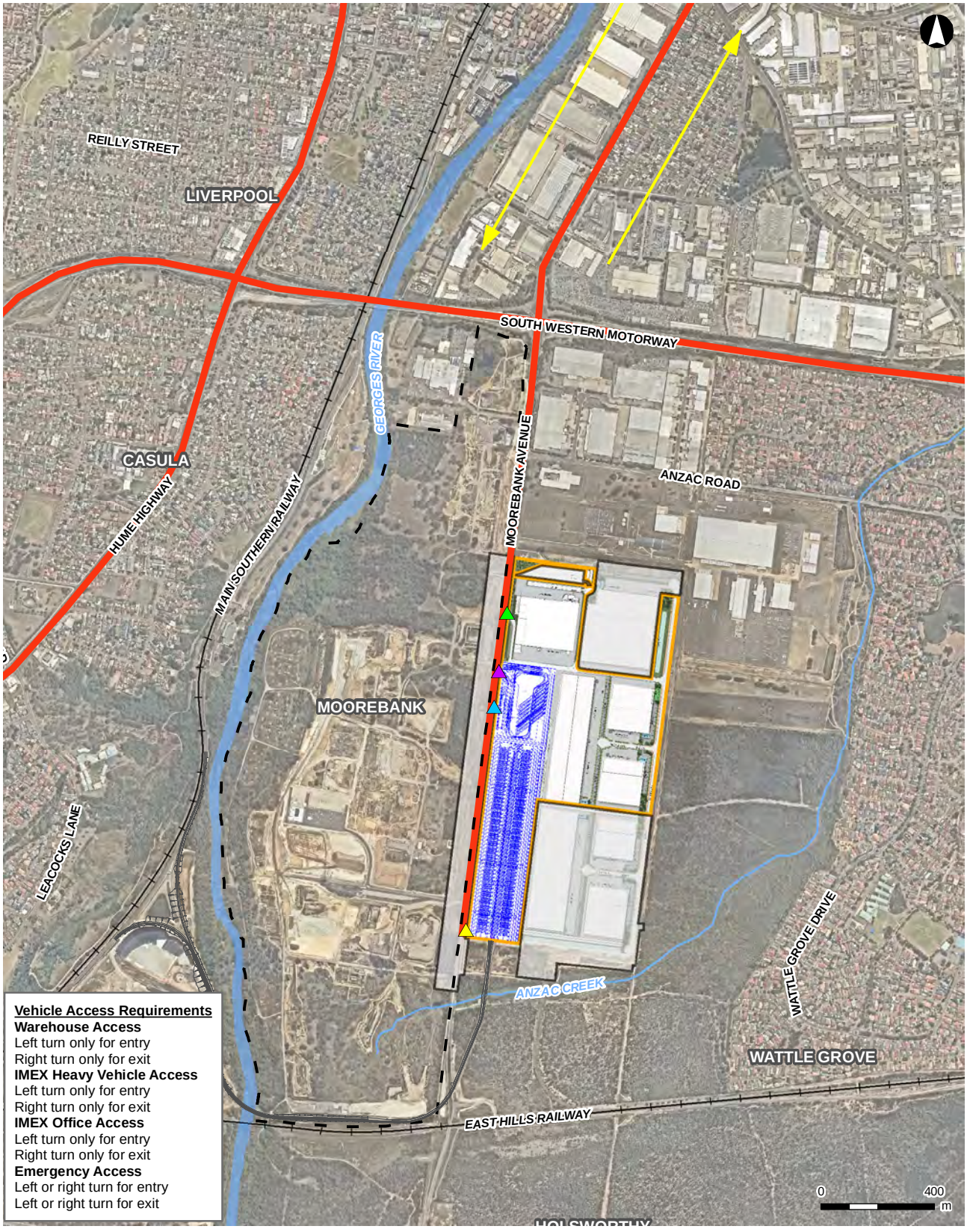
To minimise impacts to other road users, heavy vehicles travelling to or from the MLP East Precinct are required to use the nominated operational truck routes, i.e. M5 Motorway and Moorebank Avenue to access the facility as shown in Figure 3-2.

3.2.3 Operational Site Access

The traffic access points for the MLP East Precinct are via the access points identified in Figure 3-2 and Table 3-13.

Table 3-13: Operational Vehicle Access and Egress

Access Point	Vehicle Types
Warehouse Entrance	All heavy and light vehicles will access the warehousing area via a left turn into the Warehouse entrance. Heavy vehicles will not be permitted to turn right from Moorebank Avenue, or left onto Moorebank Avenue.
IMEX Heavy Vehicle Access	Heavy vehicles will enter and exit the IMEX via the new signalised intersection on Moorebank Avenue shown as 'IMEX truck access' in Figure 1-1. The IMEX access has been designed to intersect at approximately 45 degrees to Moorebank Avenue. A dedicated slip lane has been provided on the northern side of the entry to provide a dedicated left turn lane for heavy vehicles. The geometry allows for two Super B-doubles to exit the site simultaneously while utilising the existing pavement and allowing appropriate clearance for an entering vehicle. The geometry of the intersection will allow trucks to turn right on the Moorebank Avenue in the northbound direction only. A "right turn ban" will apply on Moorebank Avenue at this signalised intersection to vehicles approaching from south. Further, the angle of the signalised intersection would provide vehicle control and restrictions to trucks attempting to head in the southbound direction exiting from the IMEX Terminal. A No Left Turn sign will be installed at the approach to the exit. Trucks entering the site would be processed and security checked via the vehicle booking system (as described in Section 3.2.3) and entry/ egress procedure in Section 3.2.5.
IMEX Office Entrance	Employee and visitor cars, as well as light vehicles, will access the IMEX via the signalised 'IMEX office access' identified in Figure 1-1. This entry/ exit will be used for the purposes of SIMTA staff accessing the administration building and car parking spaces. Staff car parking would be available as part of the administration facilities.
Emergency Entrance	The 'emergency access' will be controlled via gate and only used in emergency situations for both heavy vehicles and emergency services.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- MPW site
- Heavy vehicle access route
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Existing railway
- Watercourse
- Operational rail link

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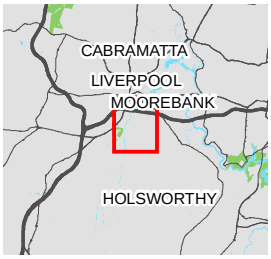


Figure 3-2: Heavy Vehicle Access Routes to MLP East Precinct

3.2.4 Vehicle Booking System

Heavy vehicle movements will be managed through a Vehicle Booking System (VBS), such as 1-Stop, to control the arrival of authorised vehicles to and from the IMEX. The VBS will require trucks arriving to the IMEX to pre-book a loading bay appointment time, prior to accessing the site.

Vehicles arriving on time will have a pre-allocated loading bay within the facility, allowing vehicles to travel directly to the correct location upon validation of the booking. Vehicles arriving outside of (either before or after) their allocated time, or vehicles arriving without a booking, will be directed to exit the site and return to their point of origin.

The use of a VBS provides greater certainty to drivers and Road Operators with regards to arrival and time within the facility, reducing and dwell time outside of the loading bay area. Within the IMEX, this will reduce queuing and congestion, and spread out incoming vehicles and truck movements over the 24-hour operation of the facility. This also ensures truck arrivals correspond to the level of resourcing within IMEX, and allows for the redirection of vehicle traffic in the event of an emergency at the facility. The system will regulate and manage truck arrivals to the facility and prevent trucks queuing and waiting on Moorebank Avenue.

3.2.5 IMEX Heavy Vehicle Access and Egress

All Road Operator drivers will be required to comply with the IMEX heavy vehicle access and egress procedure and route outlined in Table 3-14 and Figure 3-3.

Table 3-14: IMEX Heavy Vehicle Access and Egress Procedure

Stage	Process
Prior to commencement of any deliveries or pickups	Prior to the commencement of any deliveries or pickups at the IMEX Terminal, all Road Operators' drivers are required to undertake and complete the following activities: • Complete the VBS registration process • Undertake a site safety induction • Drivers will then be issued with a radio frequency identification (RFID) card (based on Mifare technology) • Read and endorse the Driver's Code of Conduct (Refer Appendix B).
Pre-arrival	Prior to arrival at the IMEX Terminal, Road Operators must book all truck deliveries and pickups through the VBS, which will capture and share the following information between the parties: • Road operator ID • Driver ID • Truck registration number • Trailer configuration • Deliver container number(s) • Pickup container number(s) • Container trailer slot allocation(s) • Container door direction(s) • Allocate a timeslot for arrival and departure time(s).
Arrival at IMEX	Upon arrival at the IMEX the following will occur: • The truck driver swipes their RFID card at the entry gate • Truck license plate is read • Container number(s) are recorded

Stage	Process
	• Arrival timestamp is recorded. If the Road Operator was unable to provide the truck registration number or the driver ID at the time of booking, the driver can enter the Visit/ Manifest PIN at the entry gate kiosk. If the actual visit information matches the booking visit information, and the driver has arrived within the pre-booked time, the driver is allowed into the terminal, otherwise the driver is rejected from the terminal.
Loading Bay	Upon entry into the IMEX Terminal, the driver drives to the truck loading bay, where the truck is unloaded and loaded with the required containers. The actual unloading and loading timestamps are recorded.
Container Turnaround Time	The container turnaround time is estimated to be 1 hour. As more data is collected during operations of the MLP East Precinct, this information will be updated accordingly.
Exit	When the driver is ready to leave the IMEX Terminal, the driver drives the vehicle to the exit gate where the following will occur: • Truck registration number is read • The container number(s) are read • The truck height is read • The axles/ axle groups are weighed • The Driver swipes their RFID card at the kiosk. If the actual visit information matches the booking visit information, the truck axle weights and height are within limits, a load ticket is printed and issued to the driver, the departure timestamp is recorded, and the Driver departs the facility. For any exceptions, the driver will be instructed to return to the loading bay to be unloaded and the Road Operator is required to resolve their issue and re-book the container(s) pickup.
Unauthorised Entry	Unauthorised drivers, or drivers that arrive outside of their booked time, entering the IMEX will be directed to return to their point of origin, until the pickup or delivery has been rescheduled through the VBS. At no time will drivers be permitted to wait on Moorebank Avenue. To minimise impacts to other road users, drivers will be permitted to turn around within the IMEX facility and exit via the heavy vehicle access, as shown in .

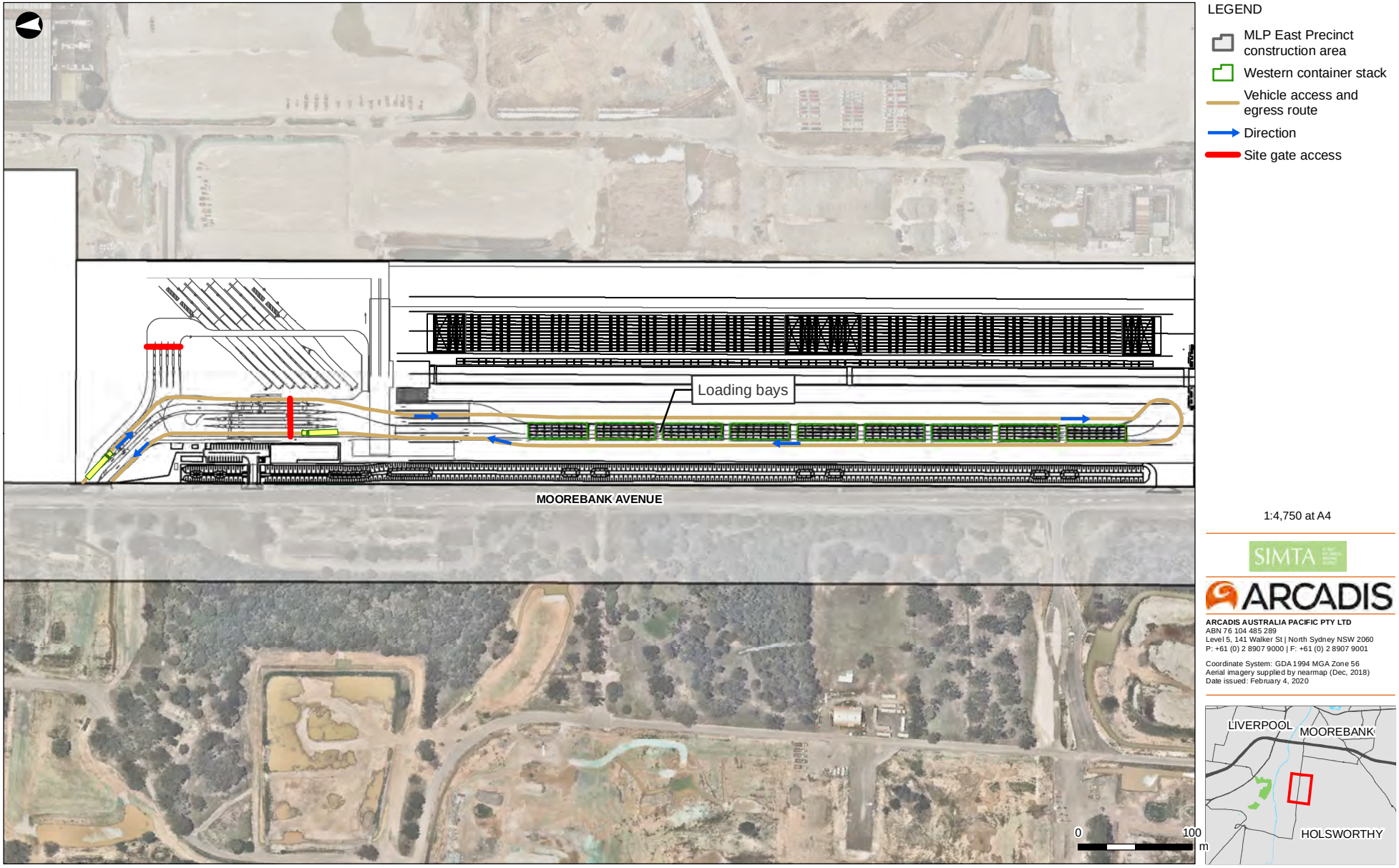


Figure 3-3: Vehicle Access and Egress Route

3.2.6 Heavy Vehicle Accommodation

The use of a VBS ensures that, under normal operations, the number of heavy vehicles entering the facility at any given time do not exceed the number of loading bays available, as vehicles will be pre-allocated a loading bay as part of the booking and confirmation process.

The design of site access, internal roads and heavy vehicle parking capacities ensure that vehicles are able to fully enter the site before stopping. This is achieved through maintaining clear access at entry to the site, and the locating of gates well within the facility. and show the vehicle access routes for IMEX and Warehouse 1 respectively, noting that vehicles are not required to stop until they are well inside the facility.

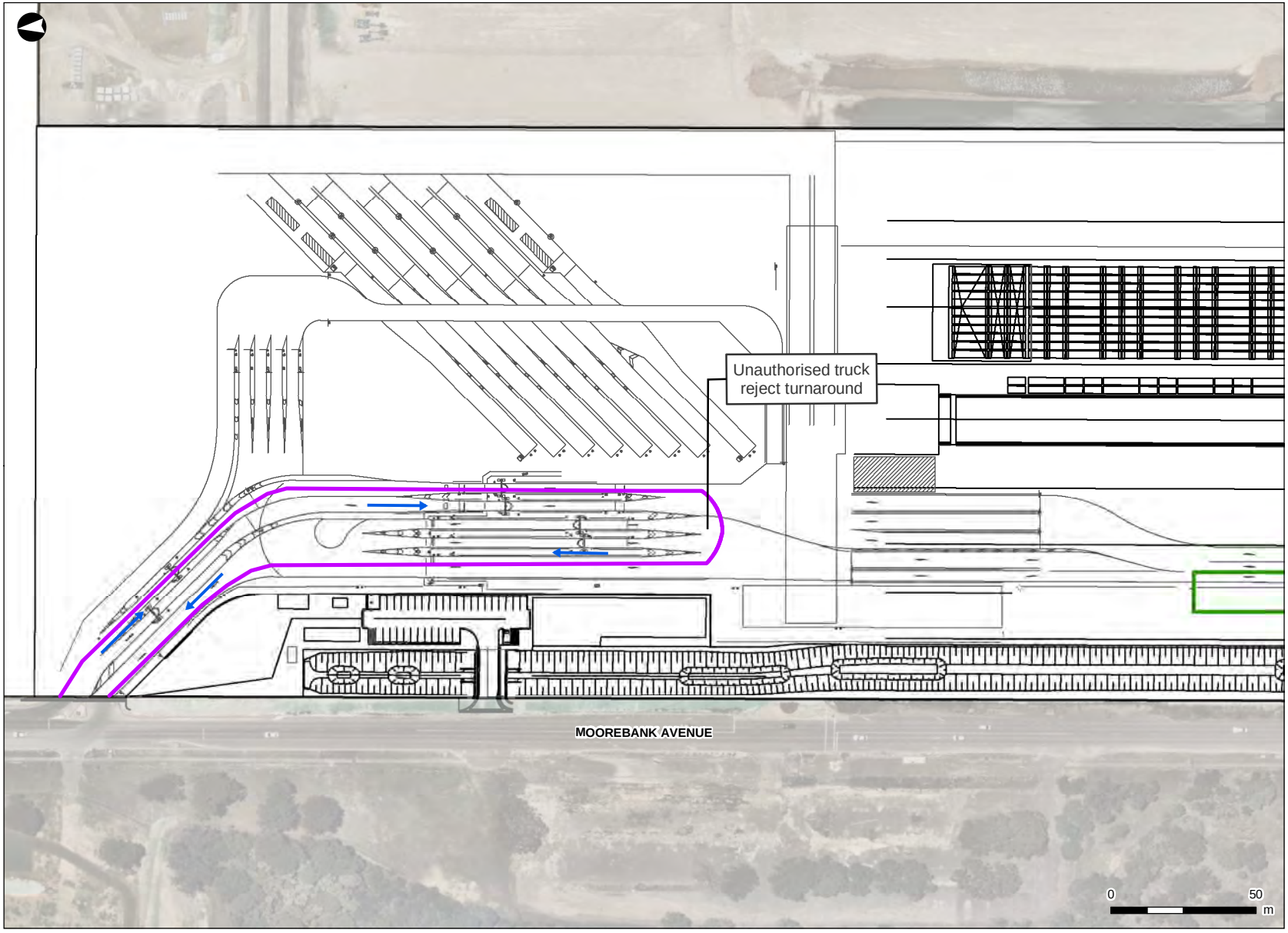
Each warehouse includes loading bays within the loading area and has potential to accommodate additional trucks if necessary to accommodate further trucks due to scheduling delays or offsite traffic incidents. The heavy vehicle parking arrangements for each warehouse is summarised in Table 3-15.

Table 3-15: Warehouse Heavy Vehicle Parking Arrangements

Warehouse	# loading Bays	Location	Additional parking if required
1	24	north-facing loading area	south-facing hardstand
3	11	north-facing loading area	south-facing hardstand
4	13	south-facing loading area	north-facing hardstand
5	31	west-facing loading area	16 loading bays on the east-facing loading area

In accordance with CoC B5(d) (SSD7628), the Facility has been designed to minimise heavy vehicle reversing by ensuring that heavy vehicles are always moving in a forward direction when entering and exiting the Facility. Figure 3-3 demonstrates the heavy vehicle access and egress route, illustrating that heavy vehicles are able to move in a forward direction at all times. Figure 3-4 demonstrates that unauthorised heavy vehicles are able to safely turn around and exit via the heavy vehicle egress and are not required to reverse out of site.

In accordance with CoC B5 (SSD 6766), in the event of an incident blocking access to the M5 Motorway / Moorebank Avenue, the MLP East Precinct has sufficient space to accommodate heavy vehicles undertaking deliveries or pickups within the facility, so as to avoid queueing on public roads. During such an incident, heavy vehicles accessing the Facility will be able to park in the loading bays (adjacent to the western container stacks). The boom gates will be shut to prevent heavy vehicles exiting the Facility. These heavy vehicles will remain within the terminal and queue along the exit lane and western apron of the rail link (west of the container stacks), as shown in Figure 3-3. The parking capacity as shown in Figure 3-3 is 500 metres in length and could accommodate up to 20 B-double vehicles end to end if required within the IMEX terminal.



LEGEND

- MLP East Precinct construction area
- Western container stack
- Vehicle rejection route

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Aerial imagery supplied by nearmap (Dec, 2018)
Date issued: May 1, 2019

Figure 3-4: Vehicle Rejection Route

Date: 1/05/2019 Path: \\hc-aus-ns-fs-01\jobs\AA008765\L-GIS\A_Current\B_Maps\MPES2\MPES2_OEMP\OTAMP\SIMTA_MPES2_OTAMP_005_VehicleRejectionRoute_A4L_v1.mxd
Created by : EM
QA by : RB

3.2.7 Vehicle Movement Plan

Figure 3-5 identifies the current operational road configuration, comprising internal access to and within Areas 1 and 2. It also shows the indicative final operational road configuration that will be utilised when the whole MLP East Precinct is operating.

Access to each warehouse within the MLP East precinct light vehicles and heavy vehicles are segregated through the use of separate access driveways and carparks as clearly identified in Figure 3-6 to Figure 3-10.

LEGEND

- MLP East Precinct operational area
- MLP East Precinct construction area
- Current operational internal road network
- Indicative final operational road network
- Road
- Warehouse
- Watercourse

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Figure 3-5: Current operational internal road network

3.2.7.1 Internal vehicle movement plans

Figure 3-6 shows the different access that heavy vehicles and light vehicles will utilise to access the IMEX terminal. Light vehicles will use the IMEX office access to access the IMEX carpark and heavy vehicles will utilise the IMEX truck access.

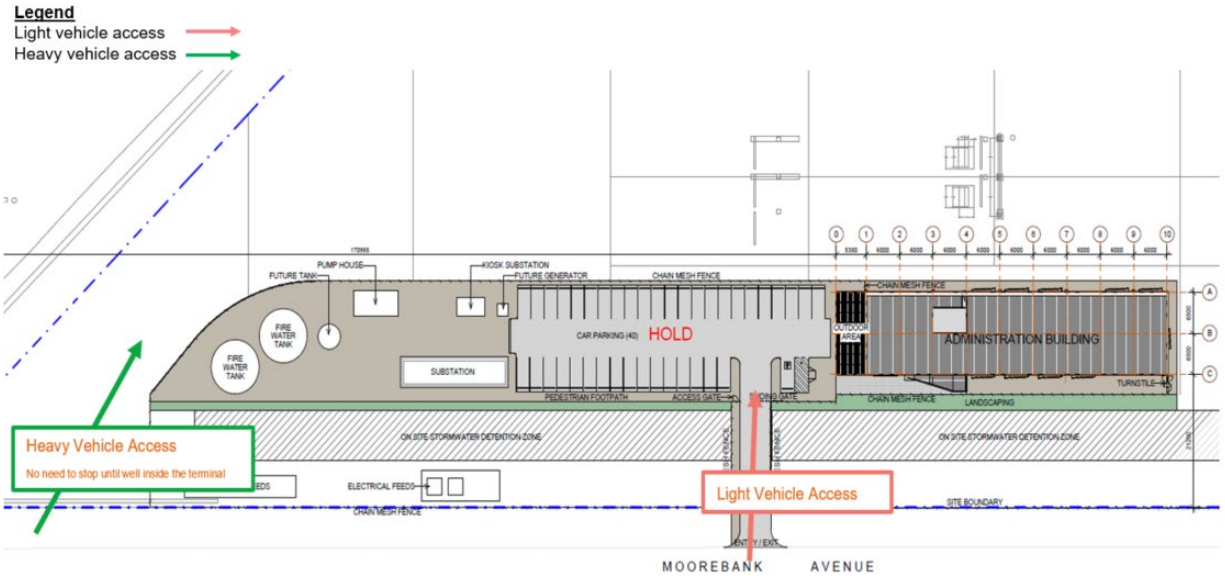

Figure 3-6 Light/Heavy vehicle segregation (IMEX)

Figure 3-7 shows the different access that heavy vehicles and light vehicles will utilise to access Warehouse 1. Light vehicles will access Warehouse 1 by utilising the first entrance on the left-hand side to enter the carpark. Heavy vehicles will enter the second entrance on the left-hand side and then follow the driveway around until it reaches its appropriate truck bay.

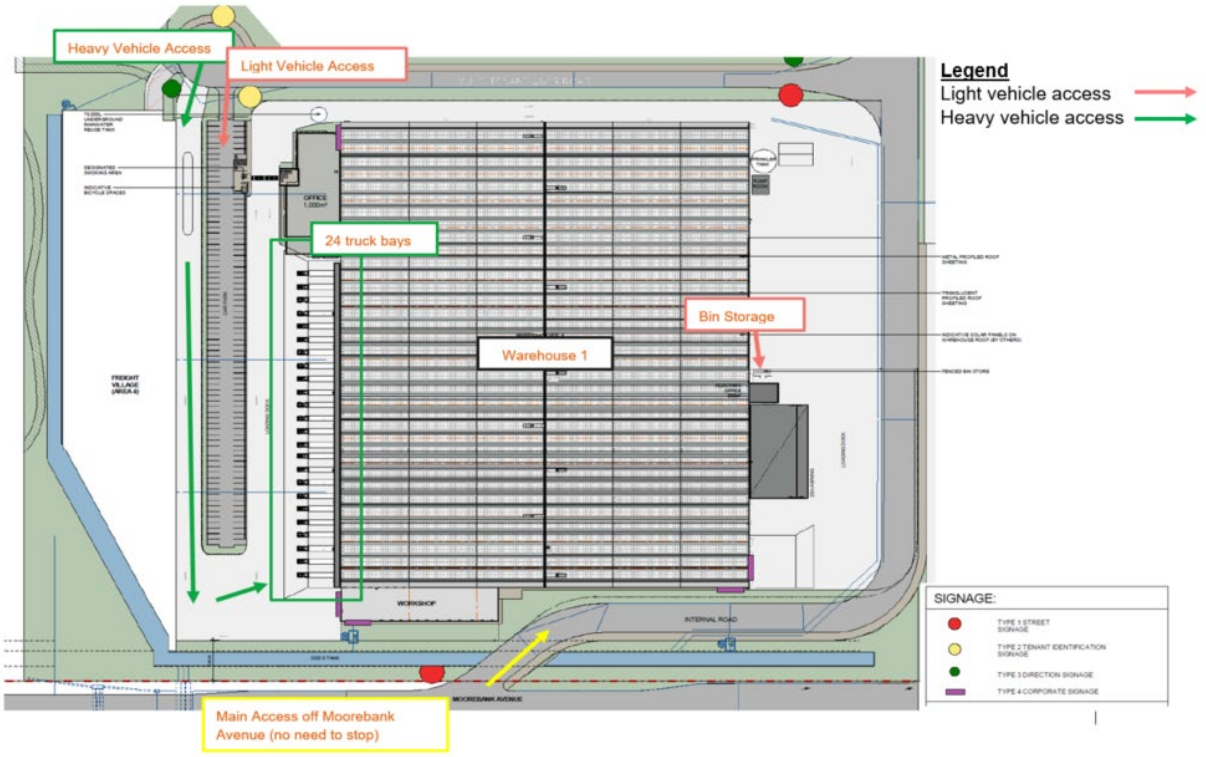

Figure 3-7 Internal road access for Warehouse 1

Figure 3-8 shows the different access that heavy vehicles and light vehicles will utilise to access Warehouse 3. Light vehicles will access Warehouse 3 carparks by utilising either of the two carpark entrances on the right-hand side. Heavy vehicles will enter Warehouse 3 by utilising either of the two heavy vehicle driveways on the right-hand side and then follow the driveway around until it reaches its appropriate truck bay.

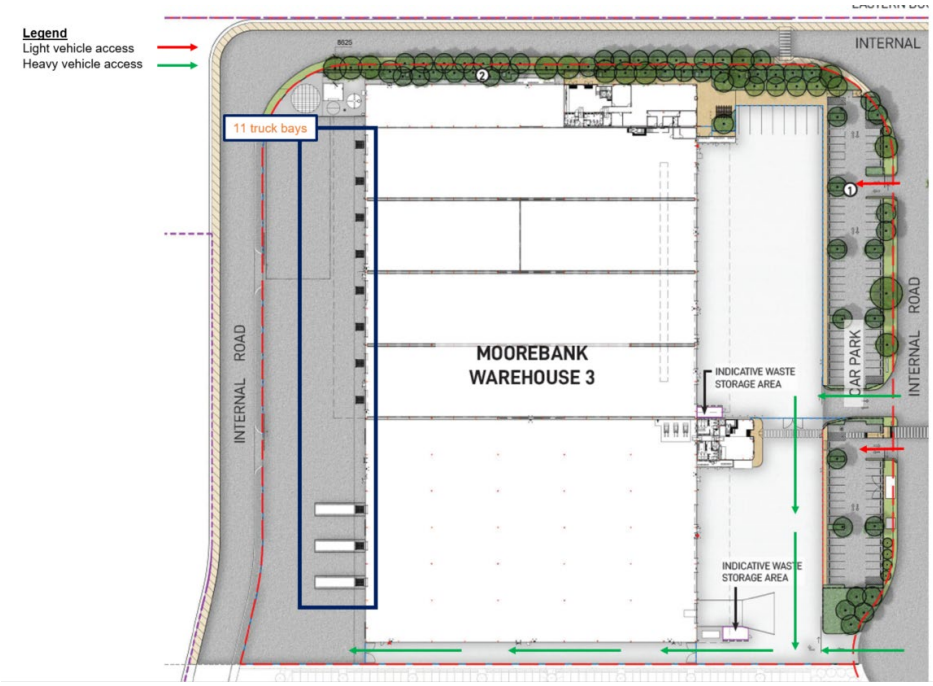

Figure 3-8 Internal road access for Warehouse 3

Figure 3-9 shows the different access that heavy vehicles and light vehicles will utilise to access Warehouse 4. Light vehicles will access warehouse 4 by utilising either the first carpark entrance or the dedicated light vehicle entrance to enter the second carpark both located on the left hand side. Heavy vehicles will utilise either of the two heavy vehicle driveways on the left hand side of the internal road and then follow the driveway until it reaches its appropriate truck bay.

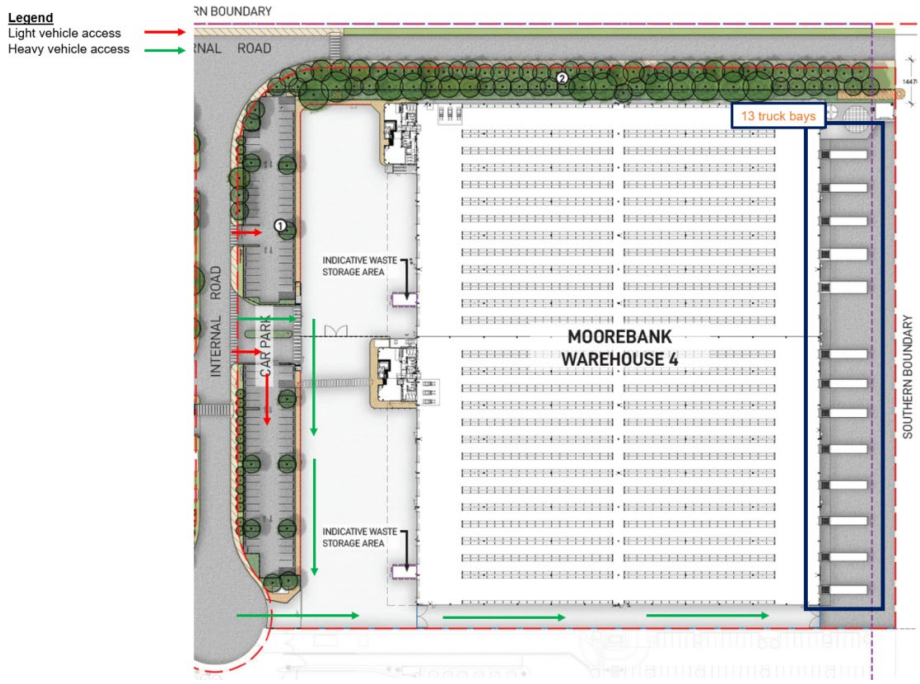

Figure 3-9 Internal road access for Warehouse 4

Figure 3-10 shows the different access that heavy vehicles and light vehicles will utilise to access Warehouse 5. Light vehicles will access Warehouse 5 by using either of the two carpark entrances located at the end of the internal road. Heavy vehicles will access Warehouse 5 by using either of the two truck driveways and then following the driveway around until it reaches its appropriate truck bay.

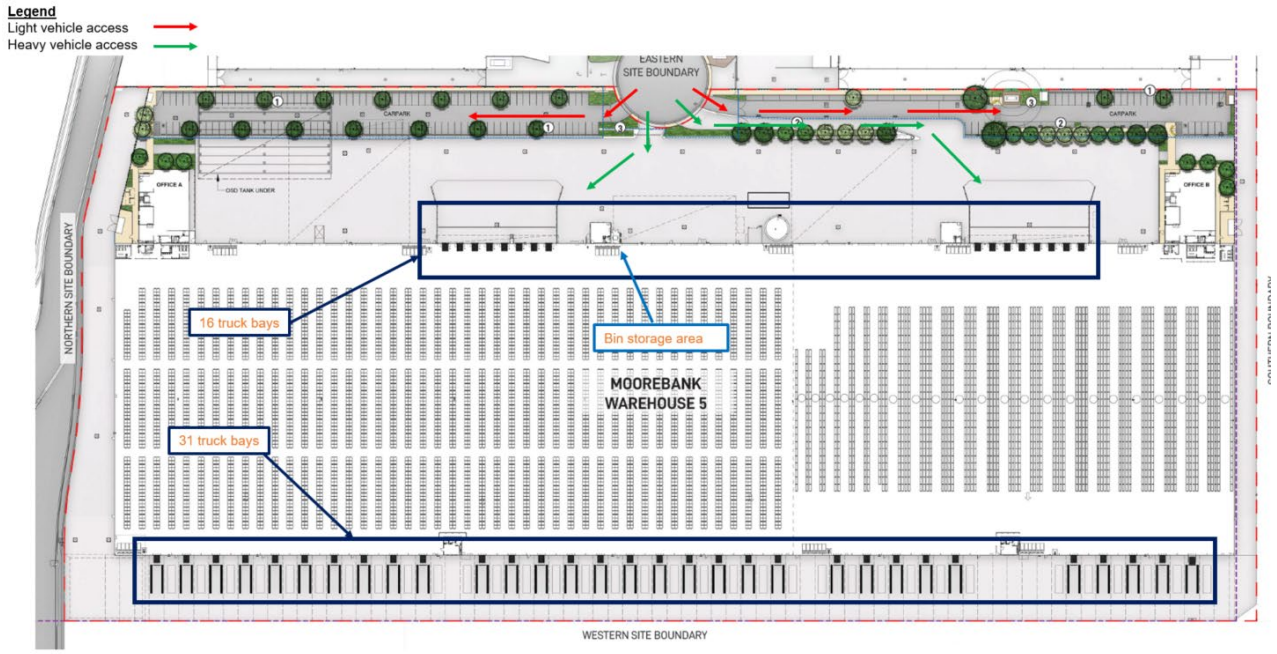

Figure 3-10 Internal road access for Warehouse 5

3.2.8 Staff and Visitor Access

To maintain safety and appropriate security for the Facility, all staff will be required to swipe their staff access cards prior to accessing the IMEX Terminal. Visitors will be required to sign in and register their details at the IMEX Terminal Office and undertake a site induction. Visitors will be escorted by a staff member at all times while they are within the Facility, to prevent unauthorised access to restricted areas, or in the event that bonded or quarantined material is stored on site.

3.2.9 Congestion Management on Moorebank Avenue

The VBS allows for greater control of the arrival of trucks to the facility, spreading out arrival demand and ensuring truck arrivals correspond to the level of resourcing within the IMEX. This reduces the likelihood of multiple vehicles arriving to the facility at once, and in turn reduces queuing and congestion along Moorebank Avenue outside the facility.

Unauthorised truck arrivals (not registered through the VBS or arriving outside of their appointment) will not be processed and will be asked to turn around and return to their point of origin. As shown in Figure 3-4, adequate space has been provided within the facility to allow heavy vehicles to turn around and exit the Facility without using Moorebank Avenue or Cambridge Avenue.

In the unlikely event that partial road closures are required on Moorebank Avenue that impacts access management during operations, stakeholders will be given prior notice of closure times with a minimum of 48 hours in advance. Temporary road closures, single-lane access and relocations will be subject to coordination with the appropriate authorities. All traffic-related issues and changes will be presented to stakeholders as part of the consultation process, and will be carried out, wherever possible, in non-peak periods.

The following requirements shall also be adopted, to minimise impacts on local amenity during operation:

- Speed limits will be set and observed at the site to minimise noise generation
- Vehicle emissions will be kept to a minimum by the avoidance of unnecessary engine running time

- Appropriate directional signage and traffic control will ensure vehicles enter and exit the facility with minimal disturbance to other road users and advise of any changes in road conditions.

3.2.9.1 Information Dissemination System

Road operators' control centres are responsible for providing heavy vehicle drivers with information on live traffic conditions on the surrounding road network when movements are scheduled, to minimise traffic impacts, such as traffic congestion or delays to other road users. The primary means of managing heavy vehicle movements is the Vehicle Booking System (Section 3.2.3). In the event that traffic conditions prevent access to the site, bookings will be cancelled or rescheduled and the drivers will be notified accordingly.

3.2.10 Road User Delay Management

Delays to road users during operations will be minimised through the design of the truck entry and exit point, which provides a slip lane for truck entry into the site. The VBS ensures automatic and efficient processing of vehicles entering the site, reducing dwell times and queues within the facility entrance. This will minimise delays to through traffic heading south on Moorebank Avenue.

3.2.11 Driver's Code of Conduct

All drivers, whether direct employees or not, have a responsibility to drive safely, comply with State road regulations, road rules and any other directives issued by the Principal's Representative. In particular, before any deliveries or pickups are undertaken all heavy vehicle drivers will be required to read and endorse the Driver's Code of Conduct, which sets out the required behaviours and procedures applicable to drivers accessing the facility, including management of truck arrivals into the facility.
Copies of the Driver's Code of Conduct will be issued to relevant transport companies in advance and copies signed by drivers will be required.

To reinforce these obligations a Driver's Code of Conduct has been prepared and is included in Appendix B.

3.2.12 Safety and Amenity of Road Users and Public

To maintain the safety and amenity of road users and the general public, the following procedures shall be followed:

- All complaints involving vehicle movements relating to operations of the site will be responded to within 48 hours
- Safe pedestrian access will be provided within the site and pedestrian access will be maintained on Moorebank Avenue.

3.2.13 Dangerous Goods

To protect the health and safety of people and the environment, the quantities of dangerous goods present at any time on the facility or transported from and to the facility will be kept below the screening threshold quantities listed in the Hazardous and Offensive Development Guidelines Applying SEPP 33, (DP&E 2011). The screening threshold quantities for each dangerous good will be defined in accordance with Table 1: Screening Methods of Applying SEPP 33.

The transport of dangerous goods will also comply with the Dan*gerous Goods (Road and Rail Transport) Act 2008* and the *Dangerous Goods (Road and Rail Transport) Regulation 2014*. Storage and handling of Dangerous Goods on the Stage 1 site will be in accordance with the requirements of the Australian Dangerous Goods code.

The WOEMP for each warehouse tenant will stipulate the requirement to ensure the quantities of any dangerous goods stored on site are monitored and that the requirements for the screening thresholds of SEPP 33 will be complied with.

3.2.14 Information Signage, Distance Information and Advance Warning

All signage including project identification signs, traffic management signs, information signs and regulatory signs will be installed prior to commencement of operation of the MLP East Precinct and will be maintained or updated, as required, during and throughout the operations of the MLP East Precinct.

Signposting covers information, regulatory, warning and guide signs, as defined in national and RMS standards all of which contribute to safety to road users. The types and classes of signs are:

- Information Signs – Used for facility identification to provide advice and notification to the public
- Regulatory Signs – Used to prohibit dangerous traffic movements
- Warning Signs – Used to provide advance notice of road hazards ahead
- Guide Signs – Used to guide drivers to make driving safer and easier.

Safety principles for these signs are:

- Before approval is given for a new sign a demonstrated need should be established
- All signs will convey a clear message to all users under all conditions
- The sign support structure will not create a safety hazard itself.

All signs will be manufactured and erected in accordance with Australian Standards AS1742, AS1742.1 to 1742.13, AS1743 and AS1744.

3.2.15 Training

Site inductions, including site layout and emergency procedures, will be carried out for all staff, visitors and truck drivers to inform them of operational traffic hazards and procedures. The induction will include, but not limited to the following:

- Overview of the requirements of this OTAMP
- Relevant legislation
- Personal protective equipment (PPE) requirements
- Contact details
- Incident management and notification
- Safety policy
- Designated parking areas
- Speed limits
- Site access points and procedures
- Site access routes
- Performance standards: environmental, Work Health and Safety (WHS), driver protocols and emergency procedures
- Community consultation protocol
- Workplace Travel Plan (Refer to Appendix C)
- Driver's Code of Conduct.

In addition to the above general induction, all visitors will be required to undergo a visitor's induction to ensure that all requirements of the site are adhered to. All visitors will be accompanied around the site by a staff member at all times.

3.2.15.1 Accredited Work Zone Traffic Controllers and Management Training

Only trained and accredited traffic control personnel will be used for traffic control works on public roads.

Traffic controllers will undergo appropriate training and be certified as competent prior to their assignment to undertake traffic management. The minimum requirement is to have satisfactorily completed the RMS's training package – Traffic Control Using a STOP/SLOW bat.

3.2.16 Traffic Control and Parking Management

During normal operations, traffic movements within and around the site will be managed to ensure access and pathways are kept clear of parked vehicles, with relevant line marking and signage used as appropriate in accordance with the Australian Standard 1742 Manual of uniform traffic control devices, Part 2: Traffic control devices for general use, and Part 11: Parking controls.

All internal roads, driveways and parking associated with the development have been designed to in accordance with the Australian Standard AS2890 Part 1: Parking facilities for off-street car parking, Part 2: Parking facilities Off-street commercial vehicle facilities and Part 6: Parking facilities – Off-street parking for people with disabilities.

When site operational activities call for special arrangements in the use of Moorebank Avenue at or near the access points to the site, traffic control procedures will be put in place.

Appropriate Traffic Control Plans based on the RMS' Traffic Control at Work Sites Manual (2010) and Australian Standard 1742.3 Manual of Uniform Traffic Control Devices, Part 3: Traffic Control Devices for Works on Roads will be produced in consultation with the relevant authority, as required.

3.2.17 Traffic Signals

The status of the road has been changed from being a private road owned by the applicant under MPE Stage 1, to a dedicated road owned by RMS under MPE Stage 2.

MPE Stage 2 CoC B21 and B22 requires the dedication as public road of part of the existing Moorebank Avenue for which signal decommissioning in consultation with RMS would be required under MPE Stage 1 CoC F7. It is envisioned that traffic signals would be located within land that is to be dedicated to RMS, as part of the dedication of Moorebank Avenue and works would be deferred until MPE Stage 2 has been completed. Approval to defer these works has been sought from the Secretary in accordance with MPE Stage 1CoC G2 which allows for the secretary to alter timing of rectification works[8].

Compliance with CoC F7 and F8 of the MPE Stage 1 Approval would be achieved through MPE Stage 2 CoC B21, B22 and B16. Compliance with these conditions will be addressed in a future update to this plan, upon completion of the Moorebank Avenue upgrade works, as per the staged/progressive application of the OTAMP identified in Section 1.3.

3.2.18 Road Maintenance after Operation

The intent of MPE Stage 1 CoC G1 is to ensure that damage to public roads used as part of the MPE Stage 1 construction activities are assessed, monitored and, as necessary, rehabilitated. MPE Stage 2 CoC A29 and A30 identify the dilapidation process prior to construction and the requirements to repair public infrastructure that has been damaged by carrying out the development.

Qube has sought approval from the Secretary to defer the rectification of the roads in the area impacted by construction activities for MPE Stage 1 and MPE Stage 2 to after the completion of MPE Stage 2. This has been sought in accordance with MPE Stage 1 CoC G2 which allows for the secretary to alter timing of rectification works[9].

[8] Correspondence with the DP&E, titled 'Moorebank Precinct East Stage 1 (SSD 6766) – Interaction with Moorebank Precinct East Stage 2 (SS 7628) Conditions of Consent' on 21 February 2019

[9] Correspondence with the DP&E, titled 'Moorebank Precinct East Stage 1 (SSD 6766) – Interaction with Moorebank Precinct East Stage 2 (SS 7628) Conditions of Consent' on 21 February 2019

3.2.19 Required Infrastructure Upgrades

Table 3-16 outlines the required upgrades and specified timing requirements, in accordance with MPE Stage 2 CoC B13 (SSD 7628). A modification to the timing of the required upgrades has been lodged 'Modification to Moorebank Intermodal Precinct East - Stage 2' and is subject to approval by DP&E. It is expected that 100 % Design Approval from RMS on the upgrades identified in Table 3-16 will be achieved prior to issue of an occupation certificate for warehousing in excess of 100,000 m^2.

Table 3-16: Required Upgrades and Specified Timing Requirements

ID	Upgrade	Specified Timing			Status
		Upgrade Requirements	Required Timing for 100% Design Approval for RMS	Required Timing for Completion of Upgrade	
I-2	M5 Motorway / Moorebank Avenue intersection	Indicative layout to be provided, subject to design development and approval by RMS	To be obtained prior to the issue of the first Occupation Certificate for warehousing in excess of 100,000m^2	Not later than December 2020, or a later date as agreed with the Secretary of Transport for NSW	Ongoing
I-5	Moorebank Avenue / Newbridge Road intersection	Indicative layout to be provided, subject to design development and approval by RMS	To be obtained prior to the issue of the first Occupation Certificate for warehousing in excess of 100,000m^2	By December 2022	Ongoing
I-4	Moorebank Avenue / Heathcote Road intersection	• As strategically described for I-5 • Heathcote Road bus jump lane must be retained or a bus jump lane of equivalent length replaced • Indicative layout to be provided, subject to design development and approval by RMS	To be obtained prior to the issue of the first Occupation Certificate for warehousing in excess of 100,000m^2	By December 2022	Ongoing
-	Moorebank Avenue Upgrade	Indicative layout to be provided, subject to design development and approval by RMS, and incorporating a bicycle / pedestrian share lane	Prior to the issue of the first Occupation Certificate for warehousing in excess of 100,000m^2	Within 24 months of 100% detailed design approval by RMS, unless otherwise agreed by the Secretary of Transport for NSW	Ongoing

3.2.20 Management Measures

This section describes the overall approach to managing and mitigating risks during operation of the facility.

Management measures are summarised in Table 3-17. These measures are based on best practice and compliance matrices detailed in Section 2.2, as well as Qube's (Facility Delivery Company) requirements and standards, which include, but are not limited to the following:

- SHEMS-QH-02-PR-0013 Legislative and Regulatory Obligations Procedure
- SHEMS-QH-09-PR-0058 Consultation and Communication Procedure
- SHEMS-QH-PR-0022 Corrective and Preventive Action Procedure
- SHEMS-QH-13-PR-0126 Incident Reporting
- SHEMS-QH-05-PR-0025 Records Management Procedure

- SHEMS-QH-06-PR-0046 Environmental Aspects and Impacts Identification Procedure
- SHEMS-QH-01-PO-0000 Safety Health and Environment Policy.

3.2.20.1 Ongoing Construction Traffic and Access

Areas of the Facility that are under construction will be managed under the applicable Construction Traffic and Access Management Plan. As these areas become operational, as identified in Section 1.3, they will fall under the jurisdiction of this OTAMP once updated and approved in accordance with Section 1.3.

Table 3-17: Traffic and Access Management Measures

ID	Management Measure	Timing	Responsibility	Reference
TA-1	All staff, contractors, subcontractors, Road Operators and their drivers will be inducted on the specific requirements of this OTAMP.	Operations	IMEX Area Manager	Best Practice
TA-2	Road Operators' drivers are required to undertake and complete the following activities prior to the commencement of any pickups or deliveries: • Complete the VBS registration process • Undertake a site safety induction • Drivers will then be issued with a radio frequency identification (RFID) card (based on Mifare technology) • Read and endorse the Driver's Code of Conduct (Refer Appendix B).	Prior to the commencement of operations	IMEX Area Manager Road Operators and drivers	EPBC Act CoA -Annexure A Summary of Mitigation Measures B26(c) (SSD 7628)
TA-3	To keep road user delays to a minimum, all Road Operators and their respective drivers will schedule deliveries and pickups through the VBS.	Operations	IMEX Area Manager Road Operators and drivers	FCMM 1C (MPE Stage 1) FCMM 1D (MPE Stage 2)
TA-4	To prevent unauthorised access to the IMEX Terminal, all staff are required to carry their staff access cards. Visitors will be required to report to the IMEX Terminal Office and sign in and undertake an induction before being permitted entry. They will be escorted around at all times by a staff member.	Operations	IMEX Area Manager	EPBC Act CoA -Annexure A Summary of Mitigation Measures B26(c) (SSD 7628)
TA-5.1	Measures such as short-range radios, GPS and wireless communications will be used to maximise the efficiency of access and circulation of vehicles, goods and staff within the SIMTA site, as required.	Operations	IMEX Area Manager Road Operators and drivers	EPBC Act CoA -Annexure A Summary of Mitigation Measures FCMM 1C (MPE Stage 1)
TA-5.2	All drivers, whether direct employees or not, have a responsibility to drive safely, comply with State road regulations and road rules. Before any deliveries or pickups are undertaken, all heavy vehicle drivers are required to read and endorse the Driver's Code of Conduct, which sets out the required behaviours and procedures applicable to drivers accessing the facility, including management of truck arrivals into the facility	Operations	IMEX Area Manager Road Operators and drivers	FCMM 1C (MPE Stage 1) CoC B26(g) (SSD 7628)

ID	Management Measure	Timing	Responsibility	Reference
TA-6	Unauthorised drivers entering the IMEX will be directed to return to their point of origin until the pickup or delivery has been rescheduled through the VBS, at no time is a heavy vehicle permitted to wait on Moorebank Avenue or use Cambridge Avenue. To minimise impacts to other road users, drivers will be permitted to turn around within the IMEX grounds and exit the facility northbound via the heavy vehicle access.	Operations	IMEX Area Manager	EPBC Act CoA 8(d) EPBC Act CoA -Annexure A Summary of Mitigation Measures CoC F6 (SSD 6766)
TA-7	All vehicles are to enter and leave the site in a forward direction.	Operations	IMEX Area Manager Road Operators and drivers All staff	CoC B7 (SSD 7628)
TA-8	All trucks entering or leaving the site with loads must have their loads covered and must not track dirt onto any public road. To meet this requirement trucks accessing site for operational activities will travel on paved and hardstand areas only.	Operations	IMEX Area Manager Road Operators and drivers	CoC B8 (SSD 7628)
TA-9	All loading and unloading of materials is carried out on-site.	Operations	IMEX Area Manager Road Operators and drivers	CoC B5(g) (SSD 7628) CoC B12(c) (SSD 7628) CoC B25(g) (SSD 7628)
TA-10	Road Operators' drivers must not use Cambridge Avenue to access the MLP East Precinct.	Operations	IMEX Area Manager Road Operators and drivers	FCMM 1C (MPE Stage 1) FCMM 1D (MPE Stage 2)
TA-11	The quantities of dangerous goods present at any time on the site or transported from and to the terminal site shall be kept below the screening threshold quantities listed in the Hazardous and Offensive Development Guidelines Applying SEPP 33, (DP&E 2011). The screening threshold quantities for each dangerous goods shall be defined in accordance with Table 1: Screening Methods of Applying SEPP 33.	Operations	Qube Health, Safety and Environmental Manager IMEX Area Manager Road Operators and drivers	CoC G5 (SSD 6766)
TA-12	To maintain the amenity of road users and the general public, the following procedures shall be followed: • All complaints involving vehicle movements relating to operations of the site will be responded to within 48 hours • Safe pedestrian access will be provided within the site and pedestrian access will be maintained on Moorebank Avenue.	Operations	IMEX Area Manager All staff Road Operators and drivers	FCMM 1D (MPE Stage 2)

ID	Management Measure	Timing	Responsibility	Reference
TA-13	Appropriate directional signage and traffic control will be used to ensure vehicles enter and exit the MLP East Precinct with minimal disturbance to other road users and the public. • Speed limits will be set and observed at the site to minimise noise generation • Vehicle emissions will be kept to a minimum by the avoidance of unnecessary engine running time • All signs will be manufactured and erected in accordance with Australian Standards AS1742, AS1742.1 to 1742.13, AS1743 and AS1744.	Ongoing as per staging plan in section 1.3	Area Managers All staff	FCMM 1D (MPE Stage 2)
TA-14	Visual inspections of turning areas and internal access roads will be undertaken to ensure they are kept clear of any obstacles, including parked vehicles, at all times.	Daily	All staff Facility Security	CoC B5(h) (SSD 7628) CoC B26(d) (SSD 7628) CoC B25(i) (SSD 7628)
TA-15	Truck Trip Generation Survey Reporting will be detailed within the BTODR, which has been prepared to satisfy SSD 7638 CoC B28.	After 24 months of the commencement of operations Within 24 months of operating at an annual throughput of 500,000 TEU Within 24 months of operating at an annual throughput of 1,000,000 TEU	Site SHEQ Manager/Advisor	FCMM 1C (MPE Stage 1)
TA-16	All vehicles will be wholly contained on site before being required to stop.	Operations	IMEX Area Manager Road Operators and drivers	CoC B5(f) (SSD 7628)
TA-17	All heavy vehicles and bins will not park or stand on local roads or footpaths in the vicinity of the site.	Operations	IMEX Area Manager Road Operators and drivers	CoC B5(e) (SSD 7628)
TA-18	An electrified locomotive shifter will be installed and implemented to reduce the need for excessive locomotive idling.	Operations	IMEX Area Manager	FCMM 4.1A (MPE Stage 1)

ID	Management Measure	Timing	Responsibility	Reference
TA-19	New reach stackers will be selected to achieve best practice emissions performance to meet US EPA Tier 3/ Euro Stage IIIA standards.	Operations	IMEX Area Manager	FCMM 4.1A (MPE Stage 1)
TA-20	Electric gantry cranes will be installed and operated within seven years of commencement of operations or on the Project achieving an annual throughput of 250,000 TEU, whichever is earlier.	Operations	IMEX Area Manager	FCMM 4.1A (MPE Stage 1)
TA-21	Review and implement options to use hybrid and electric light and heavy vehicles with lower noise emissions.	Operations	IMEX Area Manager	Best practice

4 MONITORING AND REVIEW

This section includes procedures for monitoring, review and improvement of potential traffic and access impacts associated with the MLP East Precinct operations. Implementation of the monitoring detailed in Section 4.1 will provide results that can inform the review and improvement procedure detailed in Section 4.3. Through monitoring, review and improvement, the management measures detailed in Section 3.2 can be updated as required to ensure that the management measures effectively minimise and mitigate adverse impacts to the surrounding and internal traffic network. The review process is an ongoing adaptive process with improvements made when required as indicated by the outcome of monitoring activities, personnel feedback and incident records.

4.1 Monitoring Requirements

4.1.1 Methodology for Monitoring Activities

Table 4-1 provides the methodology for each of the monitoring activities to be carried out. Note that Table 4-1 also outlines the methodology for collecting relevant data to prepare the BTODR as required under CoC B26(e).

Table 4-1: Monitoring Activity Methodology

Monitoring Activity	Methodology
Visual monitoring of all traffic movement within the MPE to detect unsafe movement of traffic and risk to persons and property	Facility Security personnel will be trained in traffic control and will review vehicle movement within the site, to ensure that movements are undertaken in accordance with the approved Vehicle Movement Plans and do not compromise the safety of personnel or cause damage to property. Potential safety issues could include driving outside of the designated road carriageways, exceeding posted speed limits, turning in undesignated areas or reversing out of accesses. All personnel inducted to the site will be aware of the approved vehicle movements and will be required to report unsafe manoeuvres to Facility Security. A comprehensive list of unsafe manoeuvres will be included in the induction to ensure personnel are aware of what behaviours should be reported. Reporting procedures of hazardous traffic movements will be included in the induction for the site. All unsafe manoeuvres observed and reported will be recorded and repeat manoeuvres and trends will be identified to review the effectiveness of traffic controls and implement alternative controls, if required.
Access roads to/ from Moorebank Avenue will be inspected to ensure roads remain clear and road conditions support a safe environment for all road users	Facility Security personnel will be responsible to visually inspecting the internal access roads to/ from Moorebank Avenue daily to ensure there are no obstructions within the access roads, with consideration of all road users. At the access gates, queuing will be managed by the VBS. Any queues onto the external road network observed by the Facility Security personnel will be mitigated by redirecting vehicles to the internal turning facilities within the site and the VBS applied to manage further potential queues.
Following periods of adverse weather conditions (e.g. a significant heavy rain event), access and onsite roads will be inspected prior to heavy vehicle traffic use to ensure driver and vehicle safety	Area Managers and Facility Security personnel will visually inspect the roads within the site and the accesses immediately following each adverse weather occurrence to confirm the roads and accesses are safe for all vehicles, pedestrians and cyclists. A road inspection checklist will be provided to the Area Managers and Facility Security personnel to inform the visual inspection, and will

Monitoring Activity	Methodology
	include items such as presence of debris, pavement damage, excess water ponding and signage/ delineation damage or obstruction.
Inspection of implementation and efficiency of traffic control measures.	Area Managers will be responsible for inspecting (if they are accredited traffic controllers, alternatively commissioning inspectors with traffic control accreditation) the traffic control measures (such as signage, delineation, bollards and intersection controls) for correct installation, condition and effectiveness for managing movement of all road users within the site. Visual monitoring of the traffic movement within the site undertaken by Facility Security personnel in the above monitoring activity will be recorded to determine the effectiveness of the traffic controls for managing the movements of all road users within the site. For example, where manoeuvres are made contrary to the intended movement, the traffic controls will be reviewed and modified where required.
Operational traffic monitoring requirements of Section 5 of the BTODR (as per CoC B26(e)):	
• Total number of vehicles accessing site	The Site SHEQ Manager/ Advisor will use the following data to determine the total number of vehicles accessing the site: • IMEX gate data collection (recorded at the gate) and the VBS records • Warehouse access data collection through installation of permanent tube counters or detector loops • Logistical schedules maintained by the Area Managers to record the total number of 20-foot equivalent shipping containers received/ dispatched. To supplement the data collected by the above sources, the accesses will be surveyed bi-annually. This bi-annual data collection includes turning movements and vehicle classification at the accesses along Moorebank Avenue. This data could be used for traffic modelling to assess the operation of the accesses.
• Origin-destination (OD) surveys	OD surveys will be commissioned by the Site SHEQ Manager/ Advisor to understand the traffic distribution of the MPE site on Moorebank Avenue, the M5 South Western Motorway, Anzac Road, Cambridge Avenue as well as all the access points of the MPE site. This data will be collected on the same day as the intersection surveys and will be analysed to provide representative vehicle origins and destinations for the site for a cordon area of the surrounding road network. This will be combined with classification counts in accordance with Austroads vehicle classifications and an hourly and daily summary. These OD surveys will capture the general road network peak periods and the peak traffic generation for the site (such as shift changeovers and anticipated heavy vehicle peaks), including the following times on a typical weekday: • 4:30am to 6:30am • 7am to 10am • 1pm to 3pm • 4pm to 6pm • 8pm to 11pm.

Monitoring Activity	Methodology
• Intersection surveys at the following access points and key intersections: – Moorebank Avenue/ M5 South Western Motorway interchange – Moorebank Avenue/ Defence Joint Logistics Unit (DJLU) access – Moorebank Avenue/ MPE warehouse access – Moorebank Avenue/ MPE IMT truck access – Moorebank Avenue/ MPE IMT staff access – Moorebank Avenue/ Cambridge Avenue – Moorebank Avenue/ Newbridge Road – M5 South Western Motorway/ Hume Highway.	Intersection turn count surveys will be commissioned by the Site SHEQ Manager/ Advisor at the key intersections and MPE accesses along Moorebank Avenue. This data will be used to analyse the general network peak period volumes captured by the OD surveys, which will be undertaken concurrently to provide representative vehicle origins and destinations for the site. This data will also be used to confirm the data recorded at the gates and accesses of the facility during the peak periods.

4.1.2 Monitoring Framework

Table 4-2 identifies the traffic and access monitoring that will be conducted as per the requirement of this OTAMP and the CoC. Monitoring of the following traffic-related aspects shall be undertaken to confirm compliance with the OTAMP and regulatory requirements:

Table 4-2: Monitoring Requirements

Monitoring Activity	Trigger/Criteria	Contingency Measure	Timeframe	Responsibility
Visual monitoring of all traffic movement within the MPE to detect unsafe movement of traffic and risk to persons and property	Unsafe movements of operational vehicles.	Direct cessation of unsafe movements. Review need to address persistent unsafe movements. Modification of traffic controls to self-enforce appropriate vehicle manoeuvres within the site.	Daily, and continuous	Facility Security
Access roads to/from Moorebank Avenue will be inspected to ensure roads remain clear and road conditions support a safe environment for all road users	Road and intersection congestion.	Clear any impediments to access roads. Report unsafe road conditions to RMS for attention.	Daily	Facility Security
Following periods of adverse weather conditions (e.g. a significant heavy rain event), access and onsite roads will be inspected prior to heavy vehicle traffic use to ensure driver and vehicle safety	Unsafe road conditions e.g. standing water, road integrity.	Any impediments to access roads will be cleared.	Continuous	Area Managers: • IMEX • Rail Link • Estate Manager Facility Security.
Inspection of implementation and efficiency of traffic control measures.	Ineffective traffic control measures for managing movement of road users. Incorrect placement of traffic controls. Damaged or faulty traffic controls.	Rectify/ adjust traffic control measures to improve visibility or effectiveness. Review need for additional or modified traffic control measures.	The traffic control inspection shall be completed every week in the first 2 months of operations and fortnightly thereafter.	Area Managers: • IMEX • Rail Link • Estate Manager

Monitoring Activity	Trigger/Criteria	Contingency Measure	Timeframe	Responsibility
Operational traffic monitoring requirements of Section 5 of the BTODR:				
• Total number of vehicles accessing site	Daily vehicle volumes (combined access volumes) exceed predicted volumes presented in Section 3.1.5 for the location on Moorebank Avenue, south of Anzac Road by more than five per cent for three consecutive days within the six-month period recorded in accordance with the BTODR.	Undertake traffic modelling to reassess operational impact of increased traffic volumes. Where operation of intersections deteriorates to worse than level of service D, identify and implement mitigation measures to improve operation to acceptable levels of service of D or better.	Continuous	Site SHEQ Manager / Advisor
• Origin-destination surveys	The predicted traffic distribution profile presented in Section 3.1.4 varies by +/- five per cent.	Undertake traffic modelling to reassess operational impacts of variance in traffic distribution. Where operation of intersections deteriorates to worse than level of service D, identify and implement mitigation measures to improve operation to acceptable levels of service of D or better.	Continuous	Site SHEQ Manager / Advisor
• Intersection surveys at the following access points and key intersections: – Moorebank Avenue/ M5 South Western Motorway interchange – Moorebank Avenue/ Defence Joint Logistics Unit (DJLU) access – Moorebank Avenue/ MPE warehouse access – Moorebank Avenue/ MPE IMT truck access	Intersections and accesses perform at levels of service worse than D, based on traffic modelling results.	Review vehicle access management measures. Identify and implement management measures to improve operation of intersections and accesses to levels of service of D or better.	Bi-annual	Site SHEQ Manager / Advisor

Monitoring Activity	Trigger/Criteria	Contingency Measure	Timeframe	Responsibility
– Moorebank Avenue/ MPE IMT staff access – Moorebank Avenue/ Cambridge Avenue – Moorebank Avenue/ Newbridge Road – M5 South Western Motorway/ Hume Highway.				

4.2 Reporting

Reporting requirements for traffic and access monitoring, auditing and reporting as required in the CoCs will be undertaken in accordance with the overarching OEMP [PREC-QPMS-EN-APP-00001]. Reporting requirements applicable to this OTAMP are summarised in Table 4-3.

Table 4-3: Traffic and Access Reporting Requirements

Requirement	Area/Location	Responsibility	Frequency
Truck Trip Generation Survey Reporting will be detailed within the BTODR, which has been prepared to satisfy SSD 7638 CoC B28	Whole Facility	Site SHEQ Manager / advisor	After 24 months of the commencement of operations Within 24 months of operating at an annual throughput of 500,000 TEU Within 24 months of operating at an annual throughput of 1,000,000 TEU

In accordance with MPE Stage 1 CoC G3, evidence must also be provided to the Certifying Authority that all easement required by SSD 6766, and other licenses have been lodged for registrations at the NSW Land and Property Information.

In addition to the reports listed in Table 4 2, an Annual Review, required under CoC C10 SSD 7628, will be prepared, which will outline the environmental performance of the Facility, including the effectiveness of mitigation measures, and will be submitted to the Secretary and EPA annually for the duration of operation.

4.3 Review and Improvement

Review and improvement of this OTAMP plan will be undertaken in accordance with the CoCs and Section 6.2 of the OEMP [PREC-QPMS-EN-APP-00001]. These reviews may also be undertaken based on the outcomes of monitoring undertaken in accordance with Table 4-1, and the assessment of the effectiveness of mitigation and management measures detailed in Table 3-16. Continuous improvement will be achieved by the ongoing evaluation of environmental management performance and effectiveness of this plan against environmental policies, objectives and targets.

A copy of the revised and re-approved OTAMP and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure, as outlined in Section 1.4.1 of the OEMP.

In addition, the Driver's Code of Conduct will be reviewed after six months of operation and updated as required.

4.4 Incidents

All traffic and access incidents, which include attainment or exceedance of trigger values/criteria in Table 4-2, will be reported and managed in accordance with Qube's Incident Reporting and Management Procedure (SHEMS-QM-13-PR-0126). Incidents are classified based on the incident's severity as shown in Section 4.6 of the OEMP [PREC-QPMS-EN-APP-00001].

All incidents will be managed and reported according to Section 4.6 of the OEMP. Near misses or potential incidents should also be reported in accordance with the OEMP.

4.5 Complaints

Traffic and access complaints will be handled in accordance with Section 4.5.1 of the OEMP and the Community Communication Strategy (CCS).

4.6 Non-Compliance, Non-Conformances and Corrective Actions

Traffic and access related non-compliance, non-conformances and resulting corrective actions are to be managed in accordance with Section 6.4 of the OEMP.

APPENDIX A SUPPLEMENTARY CONSULTATION INFORMATION

Mr Ibrahim Awad
Environmental Manager
Tactical Group
Level 15
124 Walker Street
North Sydney NSW 2060

Dear Mr Awad

Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Thank you for your correspondence dated 11 April 2019, requesting Transport for NSW (TfNSW) comments on the following reports:

- Construction Traffic & Access Management Plan B (CTAMP B)
- Operations Traffic & Access Management Plan (OTAMP)
- Bi-annual Trip Report
- Workplace Travel Plan (WTP)

It is advised that:

- Roads and Maritime Services will provide a separate response on the Construction Traffic & Access Management Plan B (CTAMP B) and Operations Traffic & Access Management Plan (OTAMP); and
- Details comments on the Bi-annual trip report and the Workplace Travel Plan (WTP) are included in **TAB A**.

If you require clarification on the above, please don't hesitate to contact Para Sangar, Senior Transport Planner on 0466 024 892.

Yours sincerely

16/5/2019

Mark Ozinga
Principal Manager, Land Use Planning and Development
Freight, Strategy and Planning

Objective Number CD19/03084

TAB A – Detailed Comments

Bi-Annual Trip Report

Section 5.1.2 – Traffic Surveys

- This section needs to clearly state the purpose of these traffic surveys and whether light and heavy vehicles will be surveyed;
- Peak periods of the development is not included for the survey period (5am-6am and 1pm-2pm);
- No information in relation to the sample size for light and heavy vehicles that would be captured for Origin-Destination surveys is provided; and
- The proposed Origin-Destination Surveys do not capture vehicle movements along the interchange ramps of M5 Motorway/Moorebank Avenue.

Workplace Travel Plan (WTP)

Section 1.5 - Objectives and Targets

The overall objective of the precinct-wide Workplace Travel Plan (WTP) should incorporate visitors as well as employees and the target mode share highlighted - 30% for public and active transport - should be set for an initial period of time not the lifetime of operations and targets should be reviewed and revised as appropriate during the monitoring and evaluation process.

Section 2.2.1 – EPBC Act Approval

The summary of mitigation measures includes the following:

- Consideration of the establishment of Glenfield Station to Liverpool Station express bus;
- Installation of a bus interchange and waiting area; and
- Consideration of the extension of Bus Route 901.

It is advised that

- Providing an attractive public bus route is not possible until Cambridge Avenue has been upgraded to eliminate flooding;
- Any bus route diversion needs to be logical and does not require the bus to double back on itself. Bus facilities for east and west Moorebank sites needs to ensure that in servicing both sites buses are not doubling back on themselves as well;
- If Cambridge Avenue upgrade is implemented, any on site diversions and bus facilities need also to be built to be compatible with a bus route linking Glenfield to Liverpool via Cambridge Avenue and Moorebank Avenue which services both sites rather than the 901 which would only ever be attractive for workers coming from Liverpool; and
- Future bus facilities need to consider the realignment of Moorebank Avenue.

Section 2.3 - Roles and Responsibilities

An important component of the overall WTP for the Moorebank Logistics Park – East precinct going forward will be the preparation of individual / organisational WTPs by each tenant/occupant. It should be a requirement of all tenants/occupants to develop and manage an individual WTP and contribute to the on-going development and management of the precinct-wide WTP.

It is recommended that:

- A Steering Group (comprising representatives from each organisation across the precinct) is formed to oversee the development and management of the precinct-wide WTP and individual WTPs; and

- A succinct one page summary of key components of the precinct-wide WTP/individual organisational WTPs is provided to include:

    - Statement demonstrating ongoing commitment of senior executive management across all workplaces across the Precinct to the:

        - Promotion of sustainable transport and operating practices; and

        - Ongoing development, implementation, monitoring, evaluation, reporting and management of a precinct-wide / individual organisational WTP.

    - Governance structure:

        - Details of precinct-wide Steering Group (interim arrangements until full occupation of precinct) and intent to form a Working Group comprising nominated Travel Plan coordinator/champion for the precinct / representative for each workplace/organisation.

- Agreed Action Plan:

        - As agreed by precinct-wide Steering Group, overview of WTP outcomes, goals and objectives, mode share targets and action plan including proposed measures, initiatives, monitoring, evaluation, reporting and stakeholder engagement strategies with indicative timeline and individual / group / agency responsible for actioning; and

        - Each tenant/organisation should prepare a summary, as detailed above, of its WTP, developed in close consultation with its occupants and visitors.

Section 6.3 – Management Measures

It is recommended that the following management measures are added:

- The Interim Steering Group needs to establish a stakeholder engagement strategy as early as possible, identifying and consulting with key partners at the earliest opportunity to assist with the progression of identified actions prior to occupation e.g. State government, local council, local community, transport operators.

- Travel Information Pack needs to be prepared to include an introductory statement from the Precinct management/ Steering Group promoting sustainable transport and operating practices and encouraging use of active and public transport. The document provides an opportunity to raise awareness of the WTP and individual organisation WTPs and the intent of the precinct management to include the whole precinct community in the on-going development, implementation and management of the wider and individual WTPs.

- The Travel Information Pack including the Transport Access Guide (TAG) and Travel Survey is prepared to inform and gain information from prospective tenants, employees and visitors prior to occupation. There is an opportunity to provide information to future users of the precinct during staff recruitment, procurement of servicing, maintenance, cleaning and caretaking, regular deliveries etc. It is recommended that the promotion of carpooling (and request to register interest in its establishment) is included in the TAG.
- On-going monitoring, education and awareness activities should be planned to promote sustainable travel from the outset. There is potential to establish a forum for interested employees who wish to participate in workplace / precinct-wide Travel Plan activities. The establishment of focus groups across precinct workplaces is another useful engagement method to gain a better understanding of transport challenges and opportunities facing occupants of the precinct
- Preferential parking provision is considered for staff / visitors who carpool with designated spaces allocated and signage displayed. Administration and management will need to be established.
- If not yet installed the car park should be future proofed to incorporate sufficient power and conduits to enable the installation of charging stations for Electric and Hybrid Vehicles and Connected and Autonomous vehicles.
- Consideration is to be given in collaboration with occupants of the precinct to the future repurposing of the car parking spaces to be removed as active and public transport use increases e.g. communal sports / recreation facilities.
- Quality end of trip facilities (including locker and secure storage facilities) should be installed to encourage greater take up of active transport as the precinct becomes more established. Such facilities will also encourage active transport during staff comfort breaks contributing to employee wellbeing. It is important that maintenance and replacement of such facilities is explicit in the Cycling and Pedestrian Access Sub Plan (not appended to WTP).
- There is an opportunity to establish a walking and cycling buddy scheme to encourage increased participation in active transport.

Appendix D - Staff Travel Surveys

- The travel survey questions workplace occupants and visitors about existing and preferred modes and seeks to gain a better understanding of any challenges and opportunities to the use of active and public transport to/from home to the precinct and during the working shift; and
- While the travel survey should not be too onerous to complete it should seek to gain as much information on existing/preferred transport mode and working practices and any challenges/opportunities e.g. shift times, scope for remote working, virtual meetings etc as this will help inform and develop targeted initiatives.

Technical Note

It is recommended that the proposals outlined in the Technical Note be considered in consultation with relevant agencies, operators and known occupants (tenants and employees) of the precinct as a matter of priority.

Tilley, Heather

From: Fei Chen <fchen@tacticalgroup.com.au>
Sent: Thursday, 30 May 2019 1:50 PM
To: Tilley, Heather
Subject: FW: Moorebank Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) RMS Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)
Attachments: Operational Traffic and Access Management Plan RMS Comments_Final.docx

FYI

Kind Regards,

FEI CHEN
GRADUATE PROJECT MANAGER

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From: Ibrahim Awad
Sent: Sunday, 26 May 2019 12:04 PM
To: VAN PUTTEN Laura E <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Cc: RATHAN Pahee <Pahee.RATHAN@rms.nsw.gov.au>; CUMMING Rachel <rachel.cumming@rms.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: Moorebank Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) RMS Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Laura

Please find attached our response to your comments on the OTAMP.

We are working to finalise our response on the CTAMP-B and BTODR and will have these to you early this week.

Please let me know if you have any further comments on this plan and/ or would like to discuss over the phone or in person.

Thanks and regards,

Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: VAN PUTTEN Laura E <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Sent: Wednesday, 15 May 2019 9:35 AM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: RATHAN Pahee <Pahee.RATHAN@rms.nsw.gov.au>; CUMMING Rachel <rachel.cumming@rms.nsw.gov.au>
Subject: Moorebank Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) RMS Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Ibrahim

Roads and Maritime has reviewed the following traffic and transport documents supplied by Tactical Group and submitted under SSD 7628 Moorebank Precinct East Stage 2 (MPE Stage 2) application to satisfy condition B2:

- Construction Traffic and Access Management Plan (CTAMP) – Phase B – SSS2-QPMS-EN-PLN-0040 - 12/03/2019
- Operational Traffic and Access Management Plan (OTAMP) – PREC-QPMS-EN-PLN-0009 - 9/4/2019
- Moorebank Precinct East Biannual Trip Origin Destination Report - PREC-ARC-TR-RPT-0001 – 13/03/2019

Roads and Maritime provides the following comments for consideration:

Construction Traffic and Access Management Plan (CTAMP)

- The CTMP needs to meet the requirements of RMS G10 specification see attached G10 specifications document. This includes but not limited to Staging Arrangement Plans, Traffic Control Plans (including temporary signal plans), Vehicle Movement Plans, Pedestrian Movement Plans, Design Drawings, Incident Management Plans etc. Traffic Control Plans and Swept Path Analysis appendices were not supplied. The missing appendices are to be provided in line with RMS requirements.

- The CTMP is to consider / address requirements within the SSD conditions.

- Safety In Design Workshop is to be arranged by the proponent prior to commencement of construction work. An independent WHS consultant is to facilitate the workshop and all effected stakeholders (not limited to) including RMS, TMC, Utilities Providers, Council etc are to attend.

- Trip Distribution figures with clear assumptions at each intersection within the study area should be provided (heavy vehicle breakdown to be included).

- SIDRA outputs are required. Table 19 & 20 Peak intersection performance results: The Level of Service(LoS) column does not corresponds to Delays as per the standard threshold values of LoS vs Average Delays. Please verify and revise accordingly.

- Section 3.1.6 what is the alternative route should the nominated route be unavailable?

- Section 3.2.1 states that the Baseline Peak hour traffic volumes are used from 2015 LMARI traffic model and updated to reflect 2017 data for revised traffic analysis. The traffic volumes should be based on current/recent surveys to simulate the current conditions.

- Section 3.2.4 how will diversions impact traffic impact reduction strategy (3.3.5)? What are the alternative routes proposed?

- Section 3.2.5: the proponent is to Identify the alternate route for pedestrian and bicycle paths during Moorebank Avenue road diversion works.

- Section 3.3.3 vehicle movements are unclear, more information required on access and direction.

- Section 3.3.9 TfNSW are to be included as a key stakeholder.

<u>Operational Traffic and Access Management Plan (OTAMP)</u>

- Similar to the CTMP updated traffic counts should be provided to simulate current conditions.
- Intersection capacity calculations should be provided with Sidra output files.
- Section 3.1.4.1 Provide the safety implications and proposed mitigations due to high percentage of heavy vehicles (56%) which might require special considerations in road geometry, width, grades and intersection layouts within the study area.
- What are the assumed network upgrades?
- Workplace travel plan not provided
- Access plans unclear
- What are the public transport services?
- What is the pedestrian/cycle detour paths?
- What is the parking management (on and off street)
- Access swept paths are required for the largest vehicles.

<u>Moorebank Precinct East Biannual Trip Origin Destination Report</u>

- Figure 2-2 on page 7 shows in red the HV access routes around the facility, in particular M5 (E and W of Moorebank Ave), and Hume Hwy. I would have thus expected that the OD survey would be designed in such a way as to identify which of these HV access routes are used by HVs to/from the facility. However, Fig 4-1 (I think it should be called Fig 5-1) on page 16 shows that the only OD survey points are along Moorebank Ave, Cambridge Ave and Anzac Ave. There are no OD survey sites on M5 or Hume Hwy so it will not be possible to determine which HV access routes have been used. This looks like a huge oversight and brings into question the rationale for the OD survey.

  Furthermore, Cambridge Ave and Anzac Ave are not shown in Fig 2-2 as HV access routes. Why are they being surveyed? Purely to detect breaches?

- On page 13 it is stated that the Operational Data Collection will involve trucks filled with RFID readers. Does this equipment also form the basis of the vehicle identification for the OD surveys? If not, what method will be used

to uniquely identify the HVs for the OD survey? Manual observation of number plates? (If so, how will this be done since the surveys extend beyond daylight hours?) Video cameras with number plate recognition software? Bluetooth readers? What level of accuracy can be expected?

- How will the OD data be tabulated / displayed? Appendix A – Reporting Table Templates outlines only the format for tabulation of operational data on vehicle & container volumes entering and leaving, gate opening periods and employee numbers. There is no reference to the presentation of OD data.

Should you have any questions or further enquiries in relation to this matter, my contact details are below or e: development.sydney@rms.nsw.gov.au.

It is emphasised that the comments provided above are informal and of a Pre-advice nature. They are not to be interpreted as binding upon Roads and Maritime and may change following formal assessment of a submitted development application from the appropriate consent authority.

Kind regards,

Laura van Putten

Land Use Assessment Officer
North West Precinct | Sydney Division
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Roads and Maritime Services

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From:	Cathy Kinsey
To:	Ibrahim Awad; Mark Wolczak
Cc:	Nathan Cairney; Fei Chen
Subject:	RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation
Date:	Friday, 3 May 2019 8:37:09 AM

Hi Ibrahim

Sorry. Being out of the office gave me some catch up work. Apologies for the delay in response.

I can confirm that as long as the OTAMP requires all heavy vehicles to arrive at and depart the Intermodal site via the M5 and not use Cambridge Ave, that Campbelltown Council has no issues. I believe this is the case.

Regards

Cathy Kinsey
Co-ordinator Stormwater and Structural Design
Campbelltown City Council
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F: 02 4645 4111
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Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.

Description: Description: Brand

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Thursday, 2 May 2019 6:49 PM
To: Cathy Kinsey; Mark Wolczak
Cc: Nathan Cairney; Fei Chen
Subject: FW: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Hi Cathy

Hi Cathy

I'm doing the weekly Thursday follow up on our consultation with Campbelltown Council on the above plan.

I note that you were on leave the last time I tried to contact you.

I'm sure if you are back now, but if you are, could you please update us on the status of your review and/or let us know if you do not wish to review the document so that we can close out this consultation?

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
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From: Ibrahim Awad
Sent: Monday, 29 April 2019 11:12 AM
To: 'cathy.kinsey@campbelltown.nsw.gov.au' <cathy.kinsey@campbelltown.nsw.gov.au>; 'mark.wolczak@campbelltown.nsw.gov.au' <mark.wolczak@campbelltown.nsw.gov.au>
Cc: Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Hi Cathy

I'm doing the weekly follow up on our consultations with Campbelltown Council on the above plan.

Has your team had the chance to review the document and is there anything else that we can do to help in that process?

Please let me know if you have reviewed the document and would like to discuss over the phone or in person.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
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From: Ibrahim Awad
Sent: Thursday, 18 April 2019 12:23 PM
To: 'cathy.kinsey@campbelltown.nsw.gov.au' <cathy.kinsey@campbelltown.nsw.gov.au>
Cc: 'mark.wolczak@campbelltown.nsw.gov.au' <mark.wolczak@campbelltown.nsw.gov.au>; 'kevin.lynch@campbelltown.nsw.gov.au' <kevin.lynch@campbelltown.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Hi Cathy

I just called on the Council number and left a message for you.

I'm doing the weekly follow up on our consultations with Campbelltown Council on the OEMP/sub-plans submitted to you for review and comment.

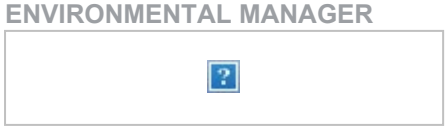
I note that you have already provided us with your comments on the Construction Traffic & Access Management Plan and that we are still awaiting your comments on the Operations Traffic & Access Management Plan which we are hoping to receive by the 29th April 2019.

Could you please let me know if there is anything we can continue to help with and/ or if you'd like to discuss any further comments over the phone or in person.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER



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From: Ibrahim Awad

Sent: Thursday, 4 April 2019 3:38 PM
To: cathy.kinsey@campbelltown.nsw.gov.au
Cc: mark.wolczak@campbelltown.nsw.gov.au; kevin.lynch@campbelltown.nsw.gov.au; Nathan Cairney <ncairney@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>; Ian Irwin <iirwin@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Dear Cathy

I'm working with Nathan Clairney on the planning & environmental approvals for the Moorebank Logistics Park.

I'd like to thank-you for your comments in the attached letter signed by Mark Wolczak (dated 2 April 2019) with respect to the 'Construction Traffic & Access Management Plan – Phase B' and confirm that we will have regard to your comments in the ongoing development of this project.

We are also required to consult with Campbelltown Council on the 'Operational Traffic & Access Management Plan' B26 (SSD7628). This document has now been completed and is attached here for your review and approval.

If it would help the consultation process, we would be pleased to meet with you to talk through the key operational traffic and access risks and proposed mitigations. Please let me know if you'd like to go ahead with this approach and your preferred meeting dates /time and suggested attendees.

We are hoping to finalise the consultations on this document by the 29th April '19 to allow these documents to be submitted to DPE for their review and approval shortly thereafter. If there is anything that we can do in addition to the above to support meeting that timeframe, please don't hesitate to let us know so that we can action accordingly.

You may also be interested to know that the Operations Environmental Management Plan (OEMP) for the Moorebank Precinct East has now been finalised and can made available to you upon request. The related sub-plans are still at various stages of development but can also be made available to you, upon request, and once complete.

Regards,
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From: Cathy Kinsey <cathy.kinsey@campbelltown.nsw.gov.au>
Sent: Wednesday, 3 April 2019 8:16 AM
To: Nathan Cairney <ncairney@tacticalgroup.com.au>
Cc: Ian Irwin <iirwin@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>; Ian Irwin <iirwin@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>
Subject: RE: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) CCC Consultation - B2 (CTAMP-B) and other upcoming documents - Moorebank Intermodal

Hi Nathan

Please find correspondence from Council with respect to your development at the Intermodal. If you need anything else please let me know.

Regards

Cathy Kinsey
Co-ordinator Stormwater and Structural Design
Campbelltown City Council
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F: 02 4645 4111
www.campbelltown.nsw.gov.au
Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.
Description: Description: Brand

From: Nathan Cairney [mailto:ncairney@tacticalgroup.com.au]
Sent: Tuesday, 2 April 2019 11:32 AM
To: Cathy Kinsey
Cc: Ian Irwin; Fei Chen; Ian Irwin; Steve Ryan
Subject: RE: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) CCC Consultation - B2 (CTAMP-B) and other upcoming documents - Moorebank Intermodal

Hi Cathy,

Nice to hear from you, we spoke quite a while ago about another Qube project in Minto. We agree with the point you have made below that “heavy vehicles to and from the site are still prohibited from using Cambridge Ave unless specifically requiring access to Glenfield Waste” and therefore consultation with Campbelltown is not necessary, however as the conditions require consultation we require your confirmation that you do not wish to be consulted.

If you can confirm that we can include this in our consultation log for this document.

Regards,
NATHAN CAIRNEY
DIRECTOR

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CPQQRT

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From: Cathy Kinsey <cathy.kinsey@campbelltown.nsw.gov.au>
Sent: Tuesday, 2 April 2019 10:11 AM
To: Nathan Cairney <ncairney@tacticalgroup.com.au>
Subject: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) CCC Consultation - B2 (CTAMP-B) and other upcoming documents - Moorebank Intermodal

Hi Nathan

I will be the contact for Campbelltown Council.

My understanding is that this will have little impact on Campbelltown as heavy vehicles to and from the site are still prohibited from using Cambridge Ave unless specifically requiring access to Glenfield Waste. Can you please confirm that this is the case?

Regards

Cathy Kinsey
Co-ordinator Stormwater and Structural Design
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Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.

Description: Description: Brand

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from RMS

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
15-May-2019	1. Similar to the CTMP updated traffic counts should be provided to simulate current conditions	This would require a variation to review the SIDRA models prepared as part of the approved EIS. For comparable projects, the approved EIS assessment has been acceptable to provide the basis of the OTAMP. It is not proposed to re-run the SIDRA analysis carried out for the approved SSDA. The development is progressing in accordance with the approved EIS yield and updating the analysis is not considered to be a requirement for the purpose of this report. The biannual data collection specified in the *Moorebank Precinct East – Biannual Trip Origin Destination Report, Framework for Data Collection and Reporting* includes regular data collection to get updated traffic information that could be compared with the EIS forecasts as required.	17/5/2019	See below		Arcadis states that the OTAMP uses a different traffic model platform to the model platform used for the MPE Stage 2 CTAMP-Phase B. But it is not clear how the base models and data can be consistent when two different platforms are used instead of the same base model. The traffic model for the EIS did not use the correct methodology, however local and state road improvements were conditioned to be undertaken by the developer to support the MPE Stage 2 development, as per condition B13. Updated traffic counts are likely to be required from the developer by Roads and Maritime for the traffic modelling used to guide the design of the concept traffic control signals for the MPE Stage 1 + 2 applications (i.e. IMEX terminal access, IMEX staff car park access, MPE Stage 2 access, DJLU upgrades, emergency access, and any other temporary/permanent traffic signals proposed as part of the concept design review for the temporary diversion road). Roads and Maritime will require the traffic modelling matters for the concept road and intersection design to be resolved as part of the WAD process. No further traffic counts are requested for this OTAMP-Phase B, provided that the developer provides the requested information to Roads and Maritime for the WAD package. ***Arcadis Response*** Noted. SIMTA will provide RMS with requested information including but not limited traffic modelling matters for the concept road and intersection design during the WAD process. ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 • RMS confirmed that older data could be used as a basis for the assessment, provided it is factored up to at least 2018 **ACTION:** Arcadis to ensure the OTAMP and CTAMP base models and data are consistent.	Refer below	How was the data factored up? No indication in the report to indicate how the data was adjusted – see below further explanation on RMS reasons and concerns with the accuracy of data.	All of the modelling and factoring was carried out during the EIS phase. No change proposed. Noting RMS requirement to have this as a standalone document, the modelling approach and methodology is made in the EIS and reference to those documents is considered an acceptable approach in lieu of	

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
					incorporating vast sections of the EIS into this management plan.	
		Arcadis confirms that the OTAMP and CTAMP base models and data are consistent. Note, however, that the OTAMP uses AIMSUN modelling and the CTAMP uses SIDRA modelling Therefore, base models use different platforms.	16/8/2019	Why are the Base models different? Base models should be consistent to ensure a holistic approach is taken to the plans. How can the statement; *'OTAMP and CTAMP base models and data are consistent'* be made if the base models are not consistent? Further explanation is required to understand why the base models are not consistent.	This modelling approach was determined at the EIS stage. The traffic modelling was completed using AIMSUN and SIDRA. The original traffic demand and movement data was obtained from the AIMSUN base models. This data was then used within SIDRA to identify the intersection layouts that best accommodated the demand. The intersection parameters where then feed back into the AIMSUN model to complete the modelling exercise and assessment. The AIMSUN modelling was used to investigate the wider network impact as well as the performance of eight key intersections in the core modelling area. This platform was used as it is the platform used for the LMARI Model and mandated for use in traffic modelling of all future development applications by the MPE Concept Conditions of Approval. SIDRA was used to provide an indication of the impact on, and performance of, the intersection and a calibration exercise was conducted between SIDRA and AIMSUN. The use of SIDRA as a method to test the sensitivity of intersection design configurations is considered acceptable as the SIDRA model was calibrated to the AIMSUN model and was used solely for a sensitivity analysis in order to understand to potential changes in intersection performance. As AIMSUN doesn't allow for detailed testing of intersection layouts, AIMSUN was used to examine network performance and SIDRA used for design of signal plans.	
				Utilising different base models leads to inconsistent results in the modelling which reduces the accuracy of understanding the actual impacts on the road network. If the base model is able to accurately represent the existing situation, then future model predictions can be afforded a higher degree of confidence.	(As above)	

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
				The modelled network needs to correctly represent the physical and operational characteristics of the real world network.	The base models were validated and calibrated at the EIS stage to ensure that they were representative of the existing conditions.	
				RMS ultimately is concerned with the ensuring safe access to and from the site with the least impact to the road network.	Noted	
				As this OTAMP (and CTAMP) will act as a base for any future interim plans it is important to ensure the base modelling provided is as close to the existing conditions as possible. Therefore Model validation should be undertaken to ensure that the impacts of this development are accurately documented. This will assist with interim OTAMPs and any mitigation works that may be required as a result of operations on the site before the required upgrades specified in B13 Table 1 are constructed (the main concern is the access on Moorebank Avenue and subsequent upgrade to 4 lanes).	The AIMSUN model was developed, calibrated and validated by Jacobs and subsequently updated by GTA Consultants (GTA). Roads and Maritime provided these models to Arcadis to undertake the operational traffic modelling for the project. Arcadis did not complete any further calibration and validation of the base models, as they remain unchanged from the model provided by Roads and Maritime.	
15-May-2019	2. Intersection capacity calculations should be provided with Sidra output files	As above	17/5/2019			The submitted SIDRA file does not include the correct intersection layouts for the MPE Stage 1 + 2 new signalised intersections and there are only 35 heavy vehicle movements (in/out) at the single access point provided to the MPE Stage 1 + 2 site. However, Roads and Maritime can close this comment out because the developer will be undertaking road and intersection upgrades on Moorebank Avenue as per conditions of consent for MPE Stage 1 + 2 SSDs. Further comment will be provided for the submitted SIDRA file as part of the MPE Stage 2 CTAMP comments ***Arcadis Response*** *Noted. Further commentary on submitted SIDRA files discussed in consultation provided on the MPE Stage 2 CTAMP-B.* ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 **ACTION:** Arcadis to provide SIDRA files for review.	Refer below			
		SIDRA files have been provided for review.	16/8/2019	2029 SIDRA files have been provided however 2019 base files have not. All SIDRA analysis files use in both OTAMP and CTAMP should be provided for RMS to review. The previous point outlines the importance of the accuracy of these files.	Base files to be provided to RMS.	
15-May-2019	3. Section 3.1.4.1 Provide the safety implications	A review is currently underway on the Moorebank Avenue Upgrade Works	17/5/2019	This comment refers to a separate Planning Agreement for MPW and therefore is not to	The WAD is being executed under MPE Stage 2 (SSD 7628) CoC B14. CoC B14 requires a	No further comment - will be dealt with as part of the WAD for MPE Stage 1 + 2 road

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
	and proposed mitigations due to high percentage of heavy vehicles (56%) which might require special considerations in road geometry, width, grades and intersection layouts within the study area	package to ensure the high percentage of heavy vehicles is considered appropriately. A draft Planning Agreement required under S7.4 of the EP&A Act is also in place between RMS and the Proponent. A Work Authorisation Deed (WAD) is currently being negotiated.		be included in justifications/discussions for MPE Stage 1&2.	WAD to be executed for the infrastructure listed in CoC B13 which includes the Moorebank Avenue Upgrade. Considerations for road geometry, lane widths, grades and intersection layouts will be undertaken in consultation with RMS during the WAD process.	works. The developer will need to address road safety as part of the MPE Stage 2 MOD application separate to this OTAMP for the overall MPE Stage 2 development. ***Arcadis Response*** *Noted. Road Safety has been addressed as part of the MPE Stage 2 MOD 1 application and will be further addressed in the WAD process.* ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 • RMS is concerned with the safety of the heavy vehicle proportion using the road network external to the site • Safety will be addressed in the Safety in Design workshop **ACTION:** Arcadis to review response to highlight design, vehicle booking system and other management measures **ACTION:** Tactical to provide RMS with the design plans separately for information. **ACTION**: DPIE have stated that they do not want design drawings within management plans. RMS to confirm approach with DPIE; Tactical to provide correspondence **ACTION:** Arcadis to revise access arrangement swept paths, clarifying location and overlaying on an aerial.	Refer below	See below		
		Section 3.2.3 Heavy Vehicle Booking System, 3.2.4 IMEX Heavy Vehicle Access and Egress and 3.2.5 Heavy Vehicle Accommodation address management measures for heavy vehicles to avoid build-up of queuing trucks on Moorebank Avenue during high traffic situations. Swept path analyses from designer Northrop	16/8/2019	Section 3.2.3 provides a very brief overview of how the checking system will operate. More information to be included in the report to appropriately explain the process. Ie. Do heavy vehicle need to access the site before being 'rejected' should they arrive early? Where do heavy vehicles 'wait' should they be 'rejected'? It is unknown from the brief information provided how the checking system will assist with vehicle queuing. More information is required to clarify.	Section 3.2.3 has been updated to provide further detail on the Vehicle Booking System.	

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
				Referring to the swept path analysis (Condition B10) provided from Northcorp **FIG 2.01 – 2.03: REV C**, the plans indicates that all traffic (light & heavy for Construction and operation) will be accessing and egressing the site from one central point which is contrary to the OTAMP. In addition from these plans it appears that Area 5 will be operational however there is no indication on the vehicle volume as a result of this area. It is understood most of these questions will be addressed under the Interim OTAMP should the Modification 1 to the conditions be finalised.	These issues will be addressed in compliance with the Final MOD Condition B26A. Refer to OTAMP Figure 1-1 which shows the four permanent Operational site accesses. Please note the following: **Not part of this OTAMP:** Area 5 will not be operational until Q4 2021. This OTAMP will be updated as each Area comes on line as presented in Section 1.3 of the OTAMP (Table 1-1). **Subsequent updates to this OTAMP:** Warehouses and Areas as the come online.	
				However at this stage these modifications are not determined and there is currently no material that indicates what the impacts are on the surrounding road network (in particular Moorebank Ave) during the operation of Warehouse 1, Area 5 (no information on the use of this area) and IMEX. The concern is that it is unknown what the impacts are. For example the following questions are raised: - How long will the queue lengths be with only one access under operation for both construction and operational traffic. The plan indicates that the other accesses will not be provided until the diversion to Moorebank Avenue is complete. For example looking at the Mod1 changes : With rough calculations based on data provided in table for up to 150,000m2 of warehouse space & IMEX – The 'worst case' scenario peak operation period - up to 3029 (952 heavy & 2077 light) vehicle movements per day.	These issues will be addressed in compliance with the Final MOD Condition B26A.	

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
				Additional point outlined in the CTAMP comments – The 'worst case' scenario peak construction period up to 2,600 vehicle movements per day. How will this number of vehicle movements be dealt with during the construction of the temporary diversion road and Moorebank Avenue upgrades being assessed by RMS under the WAD process?	These issues will be addressed in compliance with the Final MOD Condition B26A.	
				Additional design points: - Turn paths should be a smooth, single radius and not have a 'kink' as currently demonstrated (in line with Austroads Std) - The turn paths should allow for simultaneous movements at the site access and throughout the internal road network. - Civil plans showing the interim arrangement should be provided to accurately show that vehicles can safely access/egress the intermodal site from the singular access - The current signal arrangement requires vehicles turning left into the site to give way to right turn movements. No information has been provided to indicate what vehicle movement will be restricted. Will there be right turn movements permissible for light vehicles entering the site? What is the length of the left turn bay? - Moorebank Ave is a 2 lane road, any queuing onto Moorebank Avenue from spill out of the left turn bay or vehicles turning right into the singular site access will restrict the north/south through movements and will likely cause considerable delays to the surrounding network. - The TCS plans should be provided to show the phasing arrangements	These issues will be addressed in compliance with the Final MOD Condition B26A.	

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
				RMS notes that Table 2-1 Conditions of Consent B10 states approved by PCA however Swept path plans require RMS & Secretary approval. Therefore does not demonstrate compliance with B10.	Updated Northrop swept path drawings to RMS. Swept paths are also required for CTAMP-B under the WAD process as confirmed by RMS. Compliance table text for Condition B10 updated.	
15-May-2019	4. What are the assumed network upgrades	The Operational Traffic and Transport Impact Assessment (OTTIA) prepared by Arcadis December 2016, discusses the assumed network upgrades in relation to the MLP. S3 addressed the existing road network and noted that a number of regional intersections are beyond capacity already. To get the network model to converge properly in the later horizon years the intersection required upgrade. The upgrades are the responsibility of RMS as the Proponent has no / limited impacts in these areas Information relating to the assumed network upgrades has been summarised in Section 3.1.7 and Table 3-7 of the OTAMP.	17/5/2019	3.1.7 – assumed road network upgrades Have any of these upgrades been completed? Indicative timing of 2019 suggests that all these works are either constructed or under construction to be completed by 2019 which is not the case. In addition some of the 'assumed' upgrades are not committed or do not have planning consent. Therefore should not be included in the report and are not indicative of the current situation on the road network.	As outlined in the EIS Appendix Kb, the existing conditions modelling highlighted that there are a number of intersections across the broader road network that do not accommodate background traffic and anticipated background traffic growth, i.e. prior to consideration of any impacts of the Proposal or cumulative scenario related traffic. The projects identified in Table 3.8 outline those that have been planned or committed by Roads and Maritime and were included as part of the do-minimum network improvements within the base model provided by Roads and Maritime. The projects identified in Table 3.8 are projects that were identified by Arcadis as additional projects required to address the impacts of background and cumulative traffic. The indicative timing of 2019 was assumed within the project model, as these projects were identified as necessary prior to the commencement of the project.	The assumed network upgrades in the MPE Stage 2 EIS included road network improvements that did not have any funding or commitments of being constructed by Roads and Maritime prior to the commencement of the MPE Stage 2 development. No further comment provided that the developer undertakes the road and intersection upgrades required under the relevant Moorebank Intermodal consents and Planning Agreement. It is noted that concept civil plans and associated supporting documentation for the M5 Interchange and Heathcote Road/Newbridge Road intersections as requested by Roads and Maritime on 7/03/2018 and 23/03/2018 have not been submitted. ***Arcadis Response*** *Noted. Road and intersection upgrades identified in the MPE Stage 1 and MPE Stage 2 development consents will be undertaken.* ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 **ACTION:** Arcadis to include assumed upgrades in the report	Refer below	As above		
		It is confirmed that these assumed network upgrades have been considered in the assessment.	16/8/2019	As above		
15-May-2019	5. Workplace travel plan not provided	A Workplace Travel Plan (WTP) has been prepared, this can be provided to Roads and Maritime Service (RMS).	17/5/2019	WTP has been noted, – comments closed		No further comment for the OTAMP-Phase B - the workplace travel plan was provided for review separately. ***Arcadis Response*** Noted. WTP has been provided for RMS review.

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
						Consultation closed.
		Notes/ actions from meeting 17/07/2019 **ACTION:** Tactical to provide letter from TfNSW and WTP to RMS. **ACTION:** RMS to review the WTP in the context of the OTAMP as outlined in Condition B26 (f).	Refer below	As above		
		The Workplace Travel Plan is appended to Rev 006 of the OTAMP. Letter from TfNSW provided to RMS.	16/8/2019	As above		
15-May-2019	6. Access plans unclear	The access arrangements are detailed in Section 3.2.2. Figures showing the access arrangements can be prepared as part of the updates to this plan.	17/5/2019	See below		No further comment for the OTAMP-Phase B - adequate and clear access plans for the interim access still need to be provided by the developer for the MPE Stage 2 MOD application. Concept civil plans are being reviewed as part of the WAD - the developer still needs to provide Roads and Maritime with requested information to progress to detailed review stage of the 85% detailed design for the permanent access arrangements for the MPE Stage 1 + 2 developments. There are also outstanding design matters that need to be addressed by the developer for the temporary diversion road. ***Arcadis Response*** *Noted. Concept civil plans are being reviewed as part of the WAD and are to be provided to RMS. Outstanding design matters associated with the temporary diversion road do not form part of the OTAMP review.* ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 **ACTION:** Arcadis to revise access plans to include full-page figures, with improved presentation and details on lane widths, direction of travel, access to and from Moorebank Ave, etc.	Refer below	This request referred to the access arrangements for Operation before the diversion road has been completed. The plan provided by Northrop does not provide adequate information to undertake an informed review to ensure that these movements will be achieved safely and in line with Austroads stds. This information is still required. RMS notes that Table 2-1 Conditions of Consent B26 (c) states that the following sections address the requirement Section 3.2.2 Section 3.2.4; Table 3-14 Section 3.2.8 Section 3.2.9 Section 3.2.10	Updated Northrop drawings to be provided to RMS. The following sections have been updated to provide detail to further address CoC B26(c): Section 3.2.2 Section 3.2.4; Table 3-14 Section 3.2.8 Section 3.2.9 Section 3.2.10 Section 3.2.19; Table 3-16	

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
				Section 3.2.19; Table 3-16; TA-5, TA-6 However none of these sections provide adequate detail on the access arrangements.		
		Figures have been clarified and as much information as possible has been included. The lane widths and access arrangements will be determined by designer on Moorebank Avenue.	16/8/2019	RMS appreciates the information provided to date. However the original discussions around the access arrangements still remain a concern and do not demonstrate compliance with B26 (c.).	Refer to comment response above	
15-May-2019	7. What are the public transport services	Information relating to public transport services has been addressed in Section 4 of the WTP.	17/5/2019	WTP has been noted, – comments closed		This comment has been closed out for MPE Stage 2 OTAMP but will need to be provided for the MPE Stage 2 MOD and WAD (if relevant). ***Arcadis Response*** Noted. Information on public transport services will be provided as part of the MOD/WAD where relevant. ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 **ACTION:** Tactical to provide letter from TfNSW and WTP to RMS.	Refer below	WTP has been noted, – comments closed		
		Letter from TfNSW provided to RMS.	16/8/2019	WTP and letter from TfNSW has been noted, – comments closed		
15-May-2019	8. What is the pedestrian/cycle detour paths	The CPAFSP (Cycling and Pedestrian Access and Facilities Sub Plan), a sub-plan of the Urban Design and Landscape Plan (UDLP) address Cyclists and pedestrians will be able to access Warehouse 1 through the provision of shared paths from Moorebank Avenue. A shared path extends along the northern boundary of the MPE site, north of the freight village and north of the car park of Warehouse 2.	17/5/2019	It should be noted that the plans provided by Northrop do not indicate how the pedestrian/cycle movements will be accommodated during the interim. This should be outlined in the CTAMP and any WOEMPs	CTAMP-B addresses cycling and pedestrian access management required by CoC B2(g) The CPAFSP addresses cycling and pedestrian access required by Condition B141(d). Interim arrangement will be addressed in compliance with the Final MOD Condition B26A.	This comment has been closed out for MPE Stage 2 OTAMP but will need to be provided for the MPE Stage 2 MOD and WAD (if relevant). ***Arcadis Response*** *Noted. Pedestrian and cycle detour paths are being provided as part of the MOD/WAD where relevant.* ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 Closed	N/A	See above – comments closed		
15-May-2019	9. What is the parking management (on and off street)	Information relating to parking management has been addressed in Section 1.1 of the OTAMP (Revision 4 dated 1 May 2019).	17/5/2019			This comment has been closed out for MPE Stage 2 OTAMP but will need to be provided for the MPE Stage 2 MOD and WAD (if relevant). ***Arcadis Response*** *Noted. Parking management is being provided as part of the MOD/WAD where relevant.*

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
						Consultation closed.
		Notes/ actions from meeting 17/07/2019 **ACTION:** Tactical to provide RMS with updated OTAMP plan.	Refer below			
		OTAMP Rev 6 provided to RMS for consideration.	16/8/2019	It is noted in section 5.1 that there will be 1,498 car parking spaces provided across the MPE.	Noted	
15-May-2019	10. Access swept paths are required for the largest vehicles.	Figure 3-4 shows the wider access routes to the site and figure 3-2 shows the route the heavy vehicles will take once in the IMEX. The screenshot below shows the swept paths into the emergency access point at the southern end of the site.	17/5/2019	The Swept path diagram (Condition B10) provided by Northrop appears to provide swept paths for 26m/25m? B-double however it is understood that the largest vehicle expected to access this site is in fact 36m. Please provide clarification on this matter.	Updated Northrop swept path drawings to RMS. Swept paths are also required for CTAMP-B under the WAD process as confirmed by RMS.	This matter can be closed out because the access swept paths for the MPE Stage 1 + 2 applications are being reviewed as part of the WAD package. Access swept paths will still need to be provided for the interim access arrangement for the MPE site. ***<u>Arcadis Response</u>*** *Noted. Access swept paths for both final and interim access arrangements are being reviewed as part of the WAD process.* *MPE interim access arrangements swept paths will be included in the OTAMP when they are finalised as part of the WAD process.* ***Consultation closed.***
		Notes/ actions from meeting 17/07/2019 • RMS requested swept paths to be carried out on the broader road network, based on existing alignment of Moorebank Avenue **ACTION:** Tactical/ Arcadis to provide reference to detailed design	Refer below	As above		
			16/8/2019			
13/09/2019	The following statement under 1.3 requires a Warehouse OEMP to be provided 1 month prior to occupation of any warehouse. Has a WOEMP been provided for the warehouses in Area 1 & 5 and IMEX?	No WOEMPs are required for IMEX as there are no Warehouse located there. A WOEMP has been prepared for Area 1 Warehouse 1 and has been lodged with DPIE. No works have commenced in Area 5 to date, as such a WOEMP has not been triggered.				Roads and Maritime notes that a copy of the Warehouse OEMP have not been provided to Roads and Maritime for review for the constructed warehousing. The Department of Planning, Industry and Environment should be satisfied that traffic movement breakdowns and any mitigation requirements are addressed as required in the Warehouse OEMPs as the warehouses come on line. ***<u>Arcadis Response</u>*** Noted. ***Consultation closed.***

RMS Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response 26/09/2019	RMS Response 14/11/2019
	In accordance with CoC C6 (SSD 7628) each warehouse tenant will also prepare a Warehouse OEMP (WOEMP) prior to occupation of the warehouse based on the requirements of the OEMP and sub-plans. The Secretary will be notified <u>one month prior to commencement</u> of operation of each new warehouse in accordance with CoC A18 (SSD 7628).	Noted				
	These OEMP's should provide traffic management plans which indicate the breakdown of vehicle movements and provide any mitigation requirements as warehouses come on line.	Noted. All WOEMPs will be prepared in accordance with CoC C6 (SSD 7628).				

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from Cargo Movement Centre

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
CMC	13-May-2019	**Early Truck Arrivals:** Provide reference to the sections in the OTAMP / Emergency Response Plan and/ or further details that address how trucks that arrive early at the site (outside of set booking window) will be managed e.g. where will trucks go / park	Scenario #1: Truck arrives in the Moorebank area earlier than the appointment time: There are no Truck Marshalling areas for IMEX Terminal. As per the Driver Induction process and Driver's Code of Conduct, Drivers are requested not to wait in the immediate vicinity of MLP, especially where this will cause traffic and environmental inconvenience to the surrounding community. Scenario #2: Truck arrives at the IMEX Terminal earlier than the appointment time: The Driver makes a Truck Appointment booking in the VBS. Should a Driver arrive at the IMEX Terminal before the appointment time, including an early-arrival-tolerance time, the Driver is instructed to leave the terminal and to re-book another appointment.	23-May-2019
CMC	13-May-2019	**IMEX Terminal Operations Delays:** Provide reference to the sections in the OTAMP / Emergency Response Plan and/ or further details that address how automated gate failures / emergencies will be managed e.g. what happens if gate system loses capacity?	Scenario #1: Simultaneous Entry Autogate Failure. Should both Entry autogates fail simultaneously – despite the technical, communications, and power redundancy – manual gate operations will commence. The Yard Controller will interact with the Drivers, and use the TOS (Terminal Operating System) mobile data terminals to process the Truck Appointment. Scenario #2: Events Causing Minor Truck Loading Delays: The IMEX Terminal has adequate space for Truck marshalling once a Truck has legitimately arrived at the terminal. Scenario #3: Events Causing Major Truck Loading Delays or IMEX Terminal Closure: The VBS Truck Appoint process will be suspended. All imminent Truck Appointments will be cancelled, and the Driver notified and requested to re-scheduled the Appointment when terminal services are restored. The Yard Controller will open the Entry and Exit autogates to allow arriving trucks to enter, turn-around, and exit the terminal such that they do no cause congestion on Moorebank Road.	23-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
		Over-weight Trucks:	Scenario #1: Over-weight loading for multiple-container pickups that can be resolved by re-positioning the containers: At time of making the Truck Appointment, the Driver must accurately (1) declare the truck/trailer configuration; (2) nominate the container trailer loading position that will not cause an over-weight load. It is also assumed the consignor and shipping company ensured the container declared weight is true to the actual weight. When exiting the IMEX Terminal after picking up the containers, and after driving over the exit gate weighbridge, if the Driver is notified of an over-weight load, the Driver organises with the Yard Controller to re-position the load. After the load is repositioned, the Truck re-exits the terminal and drives over the weighbridge to check the over-weight load has been resolved. Scenario #2: Over-weight load that cannot be immediately resolved: At time of making the Truck Appointment, the Driver must accurately (1) declare the truck/trailer configuration; (2) nominate the container trailer loading position that will not cause an over-weight load. It is also assumed the consignor and shipping company ensured the container declared weight is true to the actual weight. When exiting the IMEX Terminal after picking up the containers, and after driving over the exit gate weighbridge, if the Driver is notified of an over-weight load that cannot be immediately resolved, the Driver organises with the Yard Controller to remove the containers. The Driver organises with the Yard Controller to deconsolidate the load at a later time. The likelihood of this scenario occurring is negligible (based on feedback from the Port Botany container terminal operators), due to the other controls in the supply chain process.	23-May-2019
		Queuing on Moorebank Road:	Scenario #1: Simultaneous Arrival of Trucks: The Yard Controller will regularly monitor the Entry gate activity, including queuing on Moorebank Road. The IMEX Terminal can accommodate six (6) B-doubles in the Entry roadway. Should the simultaneous arrival of Trucks for the Appointment Timeslot cause the Trucks to queue on Moorebank Road, the Yard Controller will open the autogate to allow sufficient Trucks in and process the Truck Appointment manually in the TOS (Terminal Operating System).	23-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
			The timeslot appointment parameters will be reviewed to reduce/eliminate the likelihood of this event from re-occurring. Scenario #2: Truck Entry Gate Delay: The Yard Controller will regularly monitor the Entry gate activity, including queuing on Moorebank Road. The Yard Controller is in contact with the Drivers at the Entry gate via the gate intercom. Should a Truck Entry issue occur that causes delay at the Entry autogate, the Yard Controller will open the autogate to allow the Truck in and resolve the issue, without holding up the other Trucks entering the terminal.	
CMC	13-May-2019	**Conditions of Consent Reporting:** Provide reference to the sections in the OTAMP / Emergency Response Plan and / or further details on how operational delays in the terminal will be managed e.g. management of truck bookings? Provide reference to the sections in the OTAMP / Emergency Response Plan and / or further details on how operational delays in the terminal will be managed e.g. management of truck bookings?	Report #1: TEU Containers Received and Dispatched: Show Received_40_Foot_Container_Count, Received _20_Foot Container_Count, Received_TEU_Container_Count, Dispatched_40_Foot_Container_Count, Dispatched _20_Foot Container_Count, Dispatched _TEU_Container_Count By Appointment_Date Where Appointment_Date is between the_previous_ 6_months *Source from TOS* Report #2: Heavy Vehicle Activity Show Appointment_Reference_Number, Vehicle_Arrival_Date/Time, Vehicle_Departure_Date/Time, Appointment_TurnAround_Time, Trailer_Configuration_Type, Received_TEU_Container_Count, Dispatched_TEU_Container_Count By Appointment_Date Where Appointment_Date is between the_previous_ 6_months *Source from TOS* Of Note: the Appointment_TurnAround_Time starts when the Truck progresses through the Entry OCR portal, which is located approximately 80m after the IMEX Terminal boundary, and 40m before the Entry AutoGate. Report #3: Light Vehicle Southerly Entry & Egress Show Arriving_Vehicle_Count, Departing_Vehicle_Count By Activity_Date, By Activity_Hour	23-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
			Where Activity_Date is the Representative Date and is between the_previous_6_months, and where vehicle entry is from the South or vehicle egress is to the South *Source from Manual Survey*	
CMC	13-May-2019	Provide Cargo Movement Centre with a 'commitment statement' confirming the actions that will be taken if the above incidents occur.	Not currently included	23-May-2019

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from LCC

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
LCC	14-May-2019	The OPTM needs to include the required mitigation or improvement measures, and timing lines for implementations, to minimise traffic impacts/congestion on the surrounding road network and intersections, including: • M5 Motorway/Moorebank Avenue intersection • Moorebank Avenue/Anzac Road intersection • M5 Motorway/Hume Highway intersection • Anzac Road as 5T Load Limit road	**Comment addressed in the following sections.** Information relating to the minimisation of traffic impacts/congestion on the road network has been provided within the Operational Traffic and Access Management Plan (OTAMP) (Revision 4 dated 1 May 2019). Please refer to the following sections: • Section 3.2.3 • Section 3.2.4; Table 3-14 • Section 3.2.5 • Section 3.2.6; Figure 3-4 • Section 3.2.8 • Section 3.2.9 • Section 3.2.10 • Section 3.2.14 • Section 3.2.17 • Section 3.2.18; Table 3-15 • Section 3.2.19; Table 3-16 • Section 4.1; Table 4-1 • Section 4-5 • Section 4-6 • Appendix B: Driver's Code of Conduct Mitigation measures and timelines for implementation that relate to construction activities are detailed within the relevant Construction Traffic and Access Management Plans (CTAMP) and will not be addressed within this OTAMP.	15/5/2019
LCC	14-May-2019	2) The OPTM outlines the need for workplace travel plan. However a the plan is not attached.	**Comment addressed:** A Workplace Travel Plan (WTP) has been prepared, this can be provided to Liverpool City Council (LCC).	15/5/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
LCC	14-May-2019	3) The OPTM needs to provide details and timing for the implementation of the following public transport improvement works:	**Comment addressed:** This information is detailed in Appendix A of the WTP and Section 6.3.	15/5/2019
LCC	14-May-2019	(a) Development and implementation of a travel behaviour change program	**Comment addressed:** Refer to Section 6 of the WTP.	15/5/2019
LCC	14-May-2019	(b) Establishment and implementation of Holsworthy Station Express bus services	**Comment addressed in Appendix A of the WTP:** Based on the ultimate solution data assessment, an express shuttle bus service to/from the Facility and Holsworthy Station during the peak shift changeover periods is considered feasible. However, this will be dependent on the outcome of the annual staff travel surveys, which will be undertaken by the Estate Manager during operations. The potential demand for an express shuttle bus service to/from Holsworthy Station will be reviewed as the Facility progressively becomes operational.	15/5/2019
LCC	14-May-2019	(c) Establishment implementation of Glenfield Station to Liverpool Station express bus	An express bus between Glenfield Station and Liverpool Station could be considered depending on the potential demand identified in the annual staff travel survey. **This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses**	15/5/2019
LCC	14-May-2019	(d) Installation of a bus interchange and waiting area	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses** The design and installation of bus stops/ interchange and associated waiting area(s) are dependant on the outcomes of consultation with TfNSW and the demand for public transport initiatives as identified in the staff travel surveys. This will be addressed in a future update to the WTP as consultation with TfNSW progresses.	15/5/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
LCC	14-May-2019	(e) Bus priority works (establishment of designated bus lanes).	**Comment addressed** Establishing dedicated bus lanes is not feasible, as this will impact on operations, specifically heavy vehicle accessibility to the Facility. Additionally, the frequency of buses proposed to service the site are unlikely to warrant the implementation of additional bus priority facilities.	15/5/2019
LCC	14-May-2019	(f) Design and construction of walking and cycleways	**Walking and cycleways addressed in UDLP and WTP** This particular comment relates to the design and construction of walking and cycleways. The Urban Design and Landscape Plan sub-plan "*Cycling and pedestrian access and facilities sub plan*" and Section 4 and 5 of the WTP show the walking and cycleways address the walking and cycleways for use during operation	15/5/2019
LCC	14-May-2019	(g) Extension of Bus Route 901	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses** The demand associated with rationalising the bus stops for route 901 and providing an additional regular bus service near the MLP East Precinct access points are dependent on the origin of employees and will be assessed as the Facility becomes progressively operational.	15/5/2019
LCC	14-May-2019	(h) Promotion of the establishment of Route 870, 871, and 872 bus	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses**	15/5/2019
LCC	14-May-2019	In addition, the OPTM, needs to confirm additional bus services to the subject site, with the proposed bus routes/service frequency. The additional bus services should be provided to Council prior to the operation of stage 1 development.	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses**	15/5/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
			The feasibility of the additional bus services, route and frequency are dependent on the outcomes of the annual staff travel surveys and ongoing consultation with TfNSW. This information will not be available prior to the commencement of operation of Stage 1 (IMEX, RALP, PIWE).	
LCC	14-May-2019	4) Traffic volumes of light vehicles will increase along Anzac Road. Sections of the road has no kerb and guttering, and increase traffic would require rehabilitation works. If the additional traffic is expected to use this road section the OPTM, should include rehabilitation of the road, prior to operation.	**Comment addressed in Section 3.2.17 of the OTAMP** The Conditions of Consent identify the dilapidation process prior to construction and the requirements to repair public infrastructure that has been damaged by carrying out the development. Qube has requested that the requirement to rectify roads in the area impacted by construction activities for MPE Stage 1 and MPE Stage 2 be deferred to after the completion of MPE Stage 2. A formal request to DP&E was made in accordance with MPE Stage 1 CoC G2 which allows for the secretary to alter timing of rectification works	15/5/2019
LCC	14-May-2019	5) Anzac Road is 5T Load Limit road. The OPTM needs to include documented approach and strategies to restrict heavy vehicles from using the road.	**Comment addressed in the OTAMP (Revision 4 dated 1 May 2019)** Refer to the following sections: • Section 3.2.6; Figure 3-4 • Section 3.2.10 • Section 3.2.14 • Section 3.2.19; Table 3-16 • Section 4-5 • Section 4-6 • Appendix B: Driver's Code of Conduct	15/5/2019
LCC	14-May-2019	6) The OPTMS needs to include an emergency response plan.	An Emergency Response Plan (ERP) has been prepared as a standalone document. The ERP and OTAMP will not be combined.	15/5/2019
LCC	14-May-2019	7) Impact of Construction Access – The OPTM needs to outline construction access arrangement and include a separate accesses for construction and operational activities.	**Comment addressed in Figure 1-1 and Section 3.2.2 of the OTAMP** There is a single entrance point from Moorebank Avenue to access the site for both operation and ongoing construction activities. The	15/5/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
			Warehouses will make use of the same access point. There are no plans to provide a separate access for construction traffic as there is no suitable location to provide a separate access point of Moorebank Avenue	
LCC	14-May-2019	8) Detailed drawings of all the proposed access arrangement including the warehouse, IMEX truck access, IMEX office, and emergency access should be included in the OPTM and with copies to Council	**Access arrangements are addressed in Section 3.2.2 of the OTAMP**	15/5/2019
LCC	14-May-2019	9) A time line to update the OPTM and associated consultation with Liverpool, and Campbelltown Council is to be included OPTM.	**Consultation is addressed in Section 1.6** Section 1.6; Table 1-3 identifies the status of consultation with the applicable agencies, including Liverpool City Council and Campbelltown City Council. **Timelines for updating the OTAMP are detailed in Section 1.3. The proposed staging of the delivery of the operational plans was approved by DP&E on 21/05/2019** Section 1.3 outlines the proposed strategy for updating the OTAMP as operation of the site progresses and is currently being reviewed by the DP&E. Due to the ongoing consultation requirements of the WTP, a timeframe cannot be provided for items 3(a-h) above. As significant milestones are reached, such as the provision of a new bus route, an updated copy of the WTP can be provided for Council's records.	15/5/2019

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from Liverpool City Council

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
LCC	26-May-2019	I note the Workplace Travel Plan (WTP), is yet to be prepared	A Work Place Travel has been prepared	28-May-2019
LCC	26-May-2019	Arrangement to highlight the 5T load limit along Anzac Road has not been addressed, improvement works to minimise are yet to be carried out and a timeline for these works have also not been outlined	Both management plans effectively prohibit the use of large vehicles on Anzac road, but the weight is not specifically referenced. Section 3.1.4.1 of the OTAMP states "*No container trucks would travel to the MLP East Precinct via Anzac Road (east of Yulong Close) or Cambridge Avenue. The design of the IMEX Terminal and Warehouse access points precludes heavy vehicles turning right into the MLP East Precinct, or left onto Moorebank Avenue.*" Section 3.1.9 discusses the upgraded Anzac Road/ Moorebank Avenue intersection from a three leg to a four-leg intersection. This upgrade is in part to accommodate the MPW Stage 2 Proposal entrance. This intersection is to be developed as part of the MPW Stage 2 Proposal however is subject to funding discussions between SIMTA and RMS The CTAMP-B states that "*No heavy vehicles will use Anzac Road*.", included in Section 3.1.6.	28-May-2019

From: Steve Ryan
To: Malgy Coman
Cc: Laura Van putten; Ahmad Mangal; fchen@tacticalgroup.com.au; David Gainsford; Michael Yiend; Dan Blyde; Rachel Cumming
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP-B
Date: Tuesday, 12 November 2019 3:10:25 PM

Malgy,

As discussed on the Moorebank teleconference today, Mike Yiend informed me that on this call you could be available tomorrow to discuss the modelling related to the CTAMP-B rather than delaying this to the 25/11/2019 meeting that you have scheduled. I will make myself available at any time tomorrow that suits your diary. Please let me know what will suit you.

Please let us know if you have any queries in this regard.

Do not hesitate in calling to discuss further.

Regards,
STEVE RYAN
MANAGING DIRECTOR

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From: Steve Ryan
Sent: Tuesday, 12 November 2019 6:28 AM
To: 'Rachel Cumming' <rachel.cumming@rms.nsw.gov.au>; 'Malgy Coman' <Malgy.COMAN@rms.nsw.gov.au>
Cc: 'Laura Van putten' <Laura.VAN.PUTTEN@rms.nsw.gov.au>; 'Ahmad Mangal' <Ahmad.MANGAL@rms.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP-B

Malgy,

We have received your invite for 25/11 regarding a discussion on CTAMP-B and MOD1 conditions etc, thank you. It would be appreciated if you could provide any comments or confirmation of closing out consultation with CTAMP-B and OTAMP for MPE at your earliest opportunity so we can address any outstanding matters in this regard.

We have received your comments/clarifications surrounding the Interim Access Arrangements (MOD1) and are current working through appropriate responses to these comments received.

Please let us know if you have any queries in relation the matters above.

Do not hesitate in calling to discuss further.

Regards,
STEVE RYAN
MANAGING DIRECTOR

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Before printing this document, please consider the environment.

From: Steve Ryan
Sent: Wednesday, 6 November 2019 2:33 PM
To: Rachel Cumming <rachel.cumming@rms.nsw.gov.au>; Malgy Coman <Malgy.COMAN@rms.nsw.gov.au>
Cc: Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>; Ahmad Mangal <Ahmad.MANGAL@rms.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP-B

Rachel/Malgy,

Per my attempted call earlier this week, we have attempted to contact you to discuss the progression of RMS' further review of CTAMP-B and OTAMP for SSD7628. We just wanted to follow up to ascertain anticipated timing for receiving confirmation (or otherwise) that these documents are satisfactory and can progress to DPIE for approval.

We would be happy to meet with yourself and your team to discuss any particular clarifications you may have to enable us to expeditiously close out consultation on CTAMP-B and OTAMP for SSD7628.

If you would like to meet, can you please nominated some preferred dates/times in which you might be available.

Please let us know if you have any queries or require further information.

Regards,
STEVE RYAN
MANAGING DIRECTOR

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Before printing this document, please consider the environment.

From: Steve Ryan
Sent: Tuesday, 29 October 2019 1:03 PM
To: 'Rachel Cumming' <rachel.cumming@rms.nsw.gov.au>; 'Malgy Coman' <Malgy.COMAN@rms.nsw.gov.au>
Cc: 'Laura Van putten' <Laura.VAN.PUTTEN@rms.nsw.gov.au>; 'Ahmad Mangal' <Ahmad.MANGAL@rms.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP-B

Rachel/Malgy,

Per my attempted call yesterday afternoon, we have attempted to contact you to discuss the progression of RMS' further review of CTAMP-B and OTAMP for SSD7628. We just wanted to follow up to ascertain anticipated timing for receiving confirmation (or otherwise) that these documents are satisfactory and can progress to DPIE for approval.

We would be happy to meet with yourself and your team to discuss any particular clarifications you may have to enable us to expeditiously close out consultation on CTAMP-B and OTAMP for SSD7628.

If you would like to meet, can you please nominated some preferred dates/times in which you might be available.

Please let us know if you have any queries or require further information.

Do not hesitate in calling to discuss further.

Regards,
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MANAGING DIRECTOR

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Before printing this document, please consider the environment.

From: Steve Ryan
Sent: Friday, 11 October 2019 6:11 AM
To: Rachel Cumming <rachel.cumming@rms.nsw.gov.au>

Cc: Malgy Coman <Malgy.COMAN@rms.nsw.gov.au>; Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>; Ahmad Mangal <Ahmad.MANGAL@rms.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP-B

Rachel/Malgy,

We have attempted to contact you to discuss the progression of RMS' further review of CTAMP-B and OTAMP for SSD7628. We just wanted to follow up to ascertain anticipated timing for receiving confirmation (or otherwise) that these documents are satisfactory and can progress to DPIE for approval.

We would be happy to meet with yourself and your team to discuss any particular clarifications you may have to enable us to expeditiously close out consultation on CTAMP-B and OTAMP for SSD7628.

If you would like to meet, can you please nominated some preferred dates/times in which you might be available.

Please let us know if you have any queries or require further information.

Do not hesitate in calling to discuss further.

Regards,
STEVE RYAN
MANAGING DIRECTOR

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Before printing this document, please consider the environment.

From: Steve Ryan
Sent: Monday, 30 September 2019 1:43 PM
To: 'Rachel Cumming' <rachel.cumming@rms.nsw.gov.au>
Cc: 'Malgy Coman' <Malgy.COMAN@rms.nsw.gov.au>; 'Laura Van putten' <Laura.VAN.PUTTEN@rms.nsw.gov.au>; Ibrahim Awad <iawad@tacticalgroup.com.au>; 'Ahmad Mangal' <Ahmad.MANGAL@rms.nsw.gov.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP-B

Rachel,

Please find link below relating to the update of OTAMP, addressing RMS Comments.

- Tracked changes Word version
- Clean Word version
- Compiled PDF version

- Final RMS consultation table.
- SIDRA Models

https://www.dropbox.com/s/wwtxrd62jt24mkp/Rev%209%20-%20Addressed%20Further%20RMS%20Comments.zip?dl=0

We believe this has now adequately addressed the comments raised by RMS. It would be appreciated if you could please review the documentation provided and confirm in writing that consultation regarding OTAMP has been satisfied. We would be happy to meet with you to discuss the content of OTAMP if this would assist in expediting the completion of consultation.

Please let us know if you have any queries in relation to the content provided.

Do not hesitate in calling to discuss further.

Regards,
STEVE RYAN
MANAGING DIRECTOR

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Before printing this document, please consider the environment.

From: Steve Ryan
Sent: Thursday, 26 September 2019 10:09 AM
To: 'Rachel Cumming' <rachel.cumming@rms.nsw.gov.au>
Cc: Malgy Coman <Malgy.COMAN@rms.nsw.gov.au>; Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>; Ibrahim Awad <iawad@tacticalgroup.com.au>; Ahmad Mangal <Ahmad.MANGAL@rms.nsw.gov.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP-B

Rachel,

Please find attached the following documents related to update of CTAMP-B from revision H to revision I, undertaken in order to address RMS comments provided in the RMS Comments Table (revision 3) received 13/9/19:

- MPES2 CTAMP-B (Rev I) – Tracked word
- MPES2 CTAMP-B (Rev H) – Clean word
- MPEES2 CTAMP-B (Rev H) – Compiled PDF
- RMS Comments Table (Rev C) – Word
- RMS Comments Table (Rev C) - PDF

We believe this has now adequately addressed the comments raised by RMS. It would be appreciated if you could please review the documentation provided and confirm in writing that

consultation regarding CTAMP-B has been satisfied. We would be happy to meet with you to discuss the content of CTAMP-B if this would assist in expediting the completion of

Please let us know if you have any queries in relation to the content provided.

Do not hesitate in calling to discuss further.

Regards,
STEVE RYAN
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Before printing this document, please consider the environment.

From: Rachel Cumming <rachel.cumming@rms.nsw.gov.au>
Sent: Friday, 13 September 2019 4:04 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>
Cc: Malgy Coman <Malgy.COMAN@rms.nsw.gov.au>; Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>; Ahmad Mangal <Ahmad.MANGAL@rms.nsw.gov.au>
Subject: RMS Consultation Meeting - OTAMP, CTAMP-B

Hi Steve and Ibrahim

Thank you for providing the updated documents accessible in the link in your email below and as discussed during the meeting held on 4 September 2019.

Please see attached Roads and Maritime's response to the outstanding items in Tactical's comments tables for both the CTAMP (Stage 2) and OTAMP (Stage 1 & 2) relating to Moorebank East Precinct (MPE). Laura and Malgy will be able to assist if you have any further questions.

Kind regards,

Rachel

Rachel Cumming
Senior Manager Land Use Assessment
North West Precinct
P: (02) 88492077
M: 0428411723
www.rms.nsw.gov.au
Every journey matters

Roads and Maritime Services
Level 5/27 Argyle Street Parramatta NSW 2150

From: Ibrahim Awad
Sent: Friday, 16 August 2019 8:29 AM
To: Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Cc: CUMMING Rachel <rachel.cumming@rms.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Hi Laura

We have now addressed RMS's outstanding comments from our last meeting on 17 July 2019.

Please find below the links to the RMS response tables, updated CTAMP-B and OTAMP documents, and SIDRA/detailed design drawings requested.

Each link contains:

- RMS response table for specific plan
- Clean and tracked word version of the document
- Compiled document

CTAMP - https://www.dropbox.com/s/o66m4dnow4rxwvd/CTAMP%20B%20Rev%20H%20-%20RMS%20comments%20addressed.zip?dl=0

OTAMP - https://www.dropbox.com/s/p8skh9q1iiwd9oa/OTAMP%20-%20Rev%206.zip?dl=0

Design Drawings - https://www.dropbox.com/s/dwmhfib69uxo9dq/RMS%20Requested%20Drawings.zip?dl=0

Please note that we have provided SIDRA model and outputs for Moorebank Avenue operational access 2029 AM/PM scenarios. We have also provided operational access plans for:

- MAAI: turning path plans and intersection dimensions
- MAUW: turning path plans and TCS plans for intersection dimensions. Note – Southern IMEX emergency access does not have a TCS plan and so no dimensions are provided.
- Full page figures as requested.

With respect to providing evidence that DPE did not wish to see detailed design drawings, we can confirm that this advice was verbal and was communicated to us in our regular meetings with DPE/DPIE.

We are working to have the 'summary of actions table' completed and sent to you today for ease of tracking and closing out comments.

Can you please confirm, at your earliest, that you are satisfied that we have addressed your comments on both CTAMP-B and OTAMP as per the response tables so that we can submit to DPIE for approval?

Please let me know if you need any further information on the above and/ or would like to discuss.

Thanks,
Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Sent: Monday, 29 July 2019 11:41 AM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Thanks Ibrahim

I have made a few minor changes

Kind regards,

Laura van Putten

A/Senior Land Use Planner
Strategic Land Use | Sydney Planning
Greater Sydney Division
T 02 8849 2480 **M** 0429 505 961
www.rms.nsw.gov.au

Roads and Maritime Services

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Monday, 29 July 2019 11:04 AM
To: Laura Van putten
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Hi Laura

I've summarised the actions for CTAMP-B and OTAMP in the attached. Please let me know if you are happy with this format and we'll continue to populate and then circulate.

Thanks,
Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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Before printing this document, please consider the environment.

From: Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Sent: Thursday, 25 July 2019 4:43 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Thanks Ibrahim

If you can send all the actions as a package so I can review together that would be greatly appreciated.

Kind regards,

Laura van Putten

A/Senior Land Use Planner
Strategic Land Use | Sydney Planning
Greater Sydney Division
T 02 8849 2480 **M** 0429 505 961
www.rms.nsw.gov.au

Roads and Maritime Services
Level 5/27 Argyle Street Parramatta NSW 2150

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Thursday, 25 July 2019 4:05 PM
To: Laura Van putten
Cc: Rachel Cumming; Nathan Cairney; Fei Chen
Subject: RE: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Hi Laura

Please find attached the revised response tables for OTAMP and CTAMP-B which include your comments, additional discussions points and associated actions.

We will begin to action these items and send through the required information / documentation soon.

The attendees from our side were:

- Ibrahim Awad – Environmental Manager, Tactical
- Fei Chen – Graduate Project Manager, Tactical
- Ketan Patel – Principal Environmental Consultant, Arcadis
- Nicole Vukic – Manager Transport Planning & Traffic Engineering, Arcadis
- Jamie Crawford, Senior Environmental Consultant

Please let me know if you need anything further from us at this stage.

Thanks,
Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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W www.tacticalgroup.com.au

Before printing this document, please consider the environment.

From: Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Sent: Thursday, 25 July 2019 1:36 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Rachel Cumming <rachel.cumming@rms.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>

Subject: FW: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Hi Ibrahim

Thank you for meeting the other day and providing the minutes. Please see the following changes to be included in the minutes:

OTAMP
5. Action: RMS to review the WTP in the context of the OTAMP as outlined in Condition B26 (f).

CTAMP
7. Action: Arcadis to provide SIDRA files

Additional discussion points –

Referring to Table 13 and Figure 1-1

- RMS questioned what phase of construction is under review in this CTMP.
  Arcadis responded that this is Phase B - Figure 1-1 outlines each phase
  Action: Arcadis to highlight these phases better on figure 1-1

- Arcadis indicated that the other works (phase A & Early Works) are already initiated.
  RMS questioned what utility & drainage works under Phase A is being undertaken. A site visit noted that there is work being undertaken on Moorebank Ave. RMS outlined that any works relating to Moorebank Ave must be approved. What approvals has been provided?
  Action: Arcadis/Tactical to provide evidence of approvals and confirmation that no works are being undertaken on the road reserve.

Swept Paths & Access Arrangements - CTAMP

- Action: Arcadis are to provide the following:
  I. Swept paths to be provided of the largest vehicle (& checking vehicle) that will be accessing the site – plans are to be clear and to scale (can be shown as an overlay on an aerial view).
  II. Access arrangements need to be clearly provided on plans.

Please provide an attendee list with the final email in addition to the points above.

RMS attendees are as follows:

- Rachel Cumming - Senior Manager Land Use Assessment, Greater Sydney
- Laura van Putten - A/Senior Land Use Planner, Greater Sydney
- Vicky Waler – A/Network & Safety Manager West Precinct, Greater Sydney
- Mohammed Ifran - Network & Safety Officer West Precinct, Greater Sydney

Any questions I am happy to assist.

Kind regards,

Laura van Putten

A/Senior Land Use Planner
Strategic Land Use | Sydney Planning
Greater Sydney Division
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www.rms.nsw.gov.au

Roads and Maritime Services
Level 5/27 Argyle Street Parramatta NSW 2150

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Monday, 22 July 2019 8:23 PM
To: Rachel Cumming; Laura Van putten
Cc: Nathan Cairney; Fei Chen
Subject: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Hi Rachel, Laura

Please find attached our summary of additional comments / actions discussed in our meeting last week with respect the CTAMP-B and OTAMP. These are listed in the right hand column of the response tables.

Can you please let me know if you think we have missed anything and/ or confirm that we have accurately captured our discussions so that we can go ahead and action?

Thanks,
Ibrahim
Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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W www.tacticalgroup.com.au

Before printing this document, please consider the environment.

From: Ibrahim Awad
Sent: Thursday, 18 July 2019 2:42 PM
To: Rachel Cumming <rachel.cumming@rms.nsw.gov.au>; Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Cc: Nathan Cairney <ncairney@tacticalgroup.com.au>; Dan Blyde <Dan.Blyde@qube.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RMS Consultation Meeting - OTAMP, CTAMP, BTODR, WTP

Hi Rachel, Laura

Nice to meet you yesterday and thanks to you and your team for making time to run through RMS's comments.

Attached is the letter from TfNSW and below is the link to the most up-to-date WTP. The TfNSW comments and our responses / related actions on the WTP can be found at the end of the document for your reference.

https://www.dropbox.com/s/hgw8ri9qdqbiuat/PREC-QPMS-EN-PLN-0007%20-%20WTP_Rev%209_clean.pdf?dl=0

We will forward a summary of the outstanding comments / actions discussed in our meeting to you for review tomorrow.

Please let me know if there is anything else that we can do to help in the meantime.

Thanks,
Ibrahim
Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

LEVEL 15 | 124 WALKER STREET | NORTH SYDNEY | NSW | 2060

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From:	Malgy Coman
To:	Steve Ryan
Cc:	Jake.Shackleton@planning.nsw.gov.au; Rachel Cumming; Colin Langford; Dan.Blyde@qube.com.au; Laura Van putten
Subject:	Re: Operational Traffic and Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 2 SSD
Date:	Thursday, November 21, 2019 9:49:18 AM
Attachments:	RMS comments for OTAMP MPE Stage 2 SSD - November 2019.xlsx

Hi Steve,

I have unfortunately been out of the office since last Friday due to dealing with a sick family member so have not been able to contact you regarding the response for the updated MPE Stage 2 OTAMP submission. Please see the attached Excel spreadsheet which provides comments from Roads and Maritime Services (Roads and Maritime) for your consideration. Please note that any references in the OTAMP to any interim access arrangements for the IMEX and warehousing developments on Moorebank Avenue should be removed and instead provided in the supplementary document for the MPE Stage 2 SSD and MOD application.

Roads and Maritime does not require further information for this OTAMP, subject to the developer complying with relevant conditions of consent relating to required road and intersection upgrades on Moorebank Avenue, the M5 Interchange, and the Heathcote Road/Newbridge Road/Moorebank Avenue intersection. With regard to complying with condition B13 can you please provide an update on the progress of the concept civil plans, traffic control plans and other requested documentation for the M5 Interchange and the Heathcote Road/Newbridge Road/Moorebank Avenue intersection?

Please let me know if you have any questions.

Regards,

Malgy Coman
A/Senior Land Use Assessment Coordinator
North West Precinct
T 02 8849 2413
(Part-time: Monday-Thursday)
www.rms.nsw.gov.au
Every journey matters

Roads and Maritime Services
27 Argyle Street Parramatta NSW 2150

Roads and Maritime Services

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From:	Steve Ryan
To:	Malgy Coman; Jake Shackleton
Cc:	Shiraz Ahmed; fchen@tacticalgroup.com.au; Richard; David Gainsford; Greg Pauline; Erica van den Honert; Dan Blyde; Aman Brar; Michael Yiend; "Anthony Vaccaro"; Rachel Cumming
Subject:	RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)
Date:	Thursday, November 14, 2019 6:03:36 AM

Jake/Malgy,

As discussed on the Moorebank teleconference earlier this week, I've been asked by Michael Yiend to confirm that the OTAMP sent to RMS on 30/9/2019 (per email below) has now adequately closed out consultation. We now provide the following link below which contains the final version of the OTAMP (including WTP) for DPIE review and approval. The link below contains the following:

- Tracked changes Word version (providing where DPIE's interim comments have been addressed within the OTAMP from 30/9/2019)
- Clean Word version
- Compiled PDF version

https://www.dropbox.com/sh/6jad3sx7b06wdjr/AACfkZ1oxZFbXJGapJMVcPTSa?dl=0

Please let us know if you have any queries in this regard.

Do not hesitate in calling to discuss further.

Regards,

STEVE RYAN
MANAGING DIRECTOR

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From: Aman Brar <Aman.Brar@planning.nsw.gov.au>
Sent: Wednesday, 16 October 2019 11:55 AM
To: Steve Ryan <sryan@tacticalgroup.com.au>
Cc: Jake Shackleton <Jake.Shackleton@planning.nsw.gov.au>; Shiraz Ahmed <Shiraz.Ahmed@planning.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>; Richard <richard@aspectenvironmental.com.au>
Subject: RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)

Hi Steve

Thanks for your email. The Department has completed an interim review of the OTAMP and provided the comments to TACTICAL in its correspondence dated 18 September 2019 to help expedite the review process.

The Department will commence review of the updated OTAMP once RMS is satisfied and confirms that their comments have been adequately addressed and evidence for the closed out consultation is documented .

If you wish to discuss this further please do not hesitate to contact me.

Kind regards

Aman Brar
Senior Environmental Assessment Officer

Infrastructure Management | Department of Planning, Industry and Environment
T 02 8289 6868 | **E** Aman.brar@planning.nsw.gov.au
Level 29, 320 Pitt Street, Sydney NSW 2039
www.dpie.nsw.gov.au

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: Steve Ryan <sryan@tacticalgroup.com.au>
Sent: Wednesday, 16 October 2019 6:15 AM
To: Aman Brar <Aman.Brar@planning.nsw.gov.au>
Cc: Jake Shackleton <Jake.Shackleton@planning.nsw.gov.au>; Shiraz Ahmed <Shiraz.Ahmed@planning.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>; Richard <richard@aspectenvironmental.com.au>
Subject: RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)

Aman,

By way of update and in response to DPIE comments on the OTAMP, please refer to attached.

In addition, we have also submitted a recent update to the OTAMP to RMS on 30/9/2019, the RMS re-submission included the following in relation to the OTAMP:

- Tracked changes Word version
- Clean Word version
- Compiled PDF version
- Final RMS consultation table.
- SIDRA Models

Please find link below relating to the update of OTAMP, addressing RMS Comments - https://www.dropbox.com/s/wwtxrd62jt24mkp/Rev%209%20-%20Addressed%20Further%20RMS%20Comments.zip?dl=0

We believe this has now adequately addressed the comments raised by RMS, we are yet to receive comment from RMS and would be proposing to incorporate any responses from RMS within a final updated OTAMP which will include responses to DPIE comments (per the attached) in the subsequent update which we would be hoping closes out consultation for this plan.

It would be appreciated if you could please let us know whether you have any comments to the proposed response to DPIE comments to ensure we adequately close out the OTAMP in an expeditious manner.

Please let us know if you have any queries in relation to content provided.

Do not hesitate in calling to discuss further.

Regards,

STEVE RYAN
MANAGING DIRECTOR

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Sent: Wednesday, 18 September 2019 1:46 PM
To: Steve Ryan <sryan@tacticalgroup.com.au>
Cc: Jake Shackleton <Jake.Shackleton@planning.nsw.gov.au>; Shiraz Ahmed <Shiraz.Ahmed@planning.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)

Hi Steve,

Thanks for sending through the link to access the OTAMP. The Department notes the consultation required (specifically with RMS) for the this Plan is still in progress and OTAMP will be updated to incorporate comments from the consultation process. The updated OTAMP will be submitted to the Department for approval.

The Department has completed an initial review of the OTAMP (please see attached the interim comments) and the official review of the OTAMP will only commence following submission of the final OTAMP with close out of the consultation comments and requirements under the CoC being met and completed.

Should you require any further information, please do not hesitate to contact me.

Kind Regards

Aman Brar
Senior Environmental Assessment Officer

Infrastructure Management | Department of Planning, Industry and Environment
T 02 8289 6868 | **E** Aman.brar@planning.nsw.gov.au
Level 29, 320 Pitt Street, Sydney NSW 2039
www.dpie.nsw.gov.au

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: Steve Ryan <sryan@tacticalgroup.com.au>
Sent: Tuesday, 27 August 2019 9:42 AM
To: Aman Brar <Aman.Brar@planning.nsw.gov.au>
Cc: Jake Shackleton <Jake.Shackleton@planning.nsw.gov.au>; Shiraz Ahmed <Shiraz.Ahmed@planning.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)

Hi Aman,

Please refer to the following link - https://www.dropbox.com/s/6jyloigpc3h1a23/OTAMP%20-%20Rev%206.zip?dl=0

Please let us know if you have any queries or require further information.

Do not hesitate in calling to discuss further.

Regards,
STEVE RYAN
MANAGING DIRECTOR

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Sent: Tuesday, 27 August 2019 9:13 AM
To: Steve Ryan <sryan@tacticalgroup.com.au>
Cc: Jake Shackleton <Jake.Shackleton@planning.nsw.gov.au>; Shiraz Ahmed <Shiraz.Ahmed@planning.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>
Subject: FW: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)

Hi Steve,

Would you please be able to send me the link again for the OTAMP files submitted by Nathan on 16 August 2019.

Kind Regards

Aman

From: Nathan Cairney <ncairney@tacticalgroup.com.au>
Sent: Friday, 16 August 2019 9:49 AM
To: Jacqui McLeod <jacqui.mcleod@planning.nsw.gov.au>; Jake Shackleton <Jake.Shackleton@planning.nsw.gov.au>; Shiraz Ahmed <Shiraz.Ahmed@planning.nsw.gov.au>
Cc: Erica van den Honert <erica.vandenhonert@planning.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>; Ibrahim Awad <iawad@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>; 'RJohnson' <richard@aspectenvironmental.com.au>; Aman Brar

<Aman.Brar@planning.nsw.gov.au>
Subject: RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)

Jake,

Please see below link to the updated OTAMP and WTP in a zip file including:

- Updated clean copy in word
- Updated compiled clean copy in pdf
- Updated tracked changes version
- Comments response sheet

OTAMP - https://www.dropbox.com/s/p8skh9q1iiwd9oa/OTAMP%20-%20Rev%206.zip?dl=0
WTP - https://www.dropbox.com/s/h4czc3ods8wb4ze/WTP%20Rev%209%20-%20Resubmitted%20to%20DPE.zip?dl=0

As with the CTAMP-B submitted earlier this morning, we have not yet received confirmation from RMS that they are satisfied with the comments responses and confirmed consultation is complete, however there is a meeting today between Qube, RMS, and DPIE and we expect that this may yield a path forward to confirm completion of consultation.

Regards,
NATHAN CAIRNEY
DIRECTOR

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From: Nathan Cairney
Sent: Thursday, 30 May 2019 6:25 PM
To: Jacqui McLeod <jacqui.mcleod@planning.nsw.gov.au>; Jake Shackleton <Jake.Shackleton@planning.nsw.gov.au>
Cc: Erica van den Honert <erica.vandenhonert@planning.nsw.gov.au>; Fei Chen <fchen@tacticalgroup.com.au>; Ibrahim Awad <iawad@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>; 'RJohnson' <richard@aspectenvironmental.com.au>
Subject: Operational Traffic & Access Management Plan - Moorebank Logistics Park - East Precinct - MPE Stage 1 & 2 F6 (SSD6766) and B26 (SSD7628)

Jacqui/Jake,

We have completed the Operational Traffic and Access Management Plan (OTAMP) as required in the above condition of consent and obtained the Environmental Representative's (ER) endorsement. The OTAMP is provided via the below link and the ER endorsement letter attached.

https://www.dropbox.com/s/3xf3075jsg9isnz/PREC-QPMS-EN-PLN-0009__OTAMP_Stakeholder%20Consultation_clean%20compiled.pdf?dl=0

We have been unable to confirm a time with the agency to confirm they are satisfied that their comments, where appropriate and in line with the requirements of the conditions of consent, have been addressed. Evidence of consultation has been provided in this document. However given the duration of this consultation is now in excess of 8 weeks, we consider this to be a reasonable period of time for consultation and submit the plan to the Secretary for your review and comment, or if satisfied, approval.

We note that this document is critical to the project and request that it be reviewed and commented on if necessary and your prompt response would be greatly appreciated.

Please let us know if there is anything that we can do to assist you in your review of this document.

Regards,

NATHAN CAIRNEY
DIRECTOR

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APPENDIX B DRIVER'S CODE OF CONDUCT

Driver's Code of Conduct

Purpose and Objective

The Driver's Code of Conduct aims to minimise the impacts of operational traffic on the external road network, including adjoining properties. The purpose of this Code is to define and detail acceptable behaviour and procedures for all heavy vehicle drivers associated with operation of the MLP East Precinct.

Responsibilities of Drivers

- Drivers are to follow **ALL** rules and regulations required by law including:
  - Hold a current and valid license for the vehicle class they are operating
  - Always carry your current driver's license with you while you are on duty
  - Comply with all posted and/ or Road Work speed limits on all roads
  - Adhere with the posted vehicle load limits on all roads
  - Comply with all operational and construction traffic signs and devices
  - Do not overload vehicles beyond its maximum load limits and/ or relevant approvals
- Drivers are to practise safe driving and behaviour which includes, but is not limited to:
  - Driving in a manner that is appropriate with road and weather conditions
  - Not operating any machines whilst suffering from fatigue or under the influence of drugs and/ or alcohol.
- Drivers must access the warehousing area via a left turn into the Warehouse entrance
- Drivers of heavy vehicles must exit the IMEX via a right turn only
- Drivers are to follow the appropriate turnaround routes and exit via the heavy vehicle access, if unauthorised to enter the site
- Drivers must follow the appropriate routes on site
- Drivers must behave in a professional manner at all times. No yelling at others.
- Drivers must adhere to the approved nominated routes for operations, consistent with the OTAMP (refer to Figure 3-2) and they must not use roads if their weight is over the posted load limit.
- Drivers must not consume or be under the influence of alcohol or drugs whilst on duty
- Drivers are not to queue or wait on any public road, unless approved and agreed with relevant authorities (e.g. RMS and Local Councils) and Qube Operations Manager.
- Drivers are not to park or leave equipment including plant, bins or containers on or adjacent to local roads or footpaths in the vicinity of the MLP East precinct.
- Drivers must not use Cambridge Avenue to access the MLP East Precinct.
- Drivers must have completed their vehicle booking system registration, safety training, induction and obtained their RFID card, before they will be permitted access to the IMEX for deliveries and pickups.
- Drivers must never leave the vehicle with the engine running. Drivers parking are to engage the park brake and leave the vehicle in gear.
- Drivers must adhere to the 20 km/hr internal road speed limit, unless stated otherwise
- Drivers must attempt to limit the amount of reversing that they undertake on site.
- Drivers must not use engine braking on or within the vicinity of site.
- Drivers leaving their vehicle must wear appropriate personal protective equipment.
- Drivers must enter and exit the site gates in a forward direction, under no circumstances are drivers allowed to reverse onto a public road, unless approved by the relevant authorities.
- Use of tonal-reversing alarms must be minimised as far as possible, except as required in an emergency situation or by legislation. Where possible tonal alarms should be replaced by quieter options.
- Vehicles must not transfer debris or waste onto public roads. If any materials are deposited on the roads, then the IMEX Area Manager must be contacted immediately.

- All drivers must carry out their duties in a way which does not adversely affect their health and safety or that of others.
- All drivers must only perform tasks for which they have authorisation and/ or the necessary training, and for which all necessary safety arrangements are in place.
- Prior to leaving site covering truck loads is mandatory and when required, tailgates must be swept clean before leaving site.
- If approached by individuals with enquiries about the facility, drivers are not to engage with the individual beyond providing them with the Community Consultation contact details.
- As a courtesy to individuals who may be impacted by driver behaviour, drivers will:
    - Not use compression braking unless it is an emergency situation
    - Ensure no extended periods of idling
    - Ensure that there is no littering
    - Remain calm and courteous when in contact with other members of the public
    - Maintain trucks in good working order and a clean and tidy condition
    - Not block residential driveways or any other access points.
- Drivers to follow the instructions of the Warehouse management in relation to the quantities of dangerous goods being transported from and to the facility. Warehouse management will follow the procedures of the WOEMP to ensure Dangerous goods storage and movements shall be kept below the screening threshold quantities listed in the Hazardous and Offensive Development Guidelines Applying SEPP 33, (DP&E 2011). The screening threshold quantities for each dangerous goods shall be defined in accordance with Table 1: Screening Methods of Applying SEPP 33 as detailed in the WOEMP.

Monitoring

Failure to comply with this Driver's Code of Conduct may lead to either the issue of a warning notice or disciplinary action. In addition to this, supervisors will be required to undertake formal observations/ review of compliance at three monthly intervals and document and undertake any remedial actions with drivers, as required.

Some non-compliances may also carry penalties such as fines and demerit points under the Road Rules and environmental protection legislation.

This Code will be reviewed after six months of operation and updated as required.

APPENDIX C WORKPLACE TRAVEL PLAN

WORKPLACE TRAVEL PLAN

Moorebank Logistics Park – East Precinct

26 MARCH 2020

MOOREBANK INTERMODAL TERMINAL ALLIANCE

Moorebank Logistics Park – East Precinct

Workplace Travel Plan

Author	Ketan Patel	
Checker	Nicole Vukic	
Approver	Heather Tilley	
Report No	PREC-QPMS-EN-PLN-0007	
Date	26/03/2020	
Revision Text	012	

Author Details

Author Details	Qualifications and Experience
Ketan Patel Arcadis Level 16/580 George Street Sydney NSW 2000	MSc BSC (hons) Ketan has 14 years of environmental management experience in post approval roles including the development of construction and operational environmental management plans, auditing, compliance and on-site environmental management. Ketan has completed the Certificate of Competence in Environmental Noise Measurement issued by the Institute of Acoustics (UK).
Nicole Vukic Arcadis Level 16/580 George Street Sydney NSW 2000	Nicole Vukic is a traffic engineer and transport planner with over 18 years of experience within private multi-disciplinary and specialist consultancies. Nicole's experience includes parking assessments and strategies, development of traffic management strategies, construction staging, traffic management plans, independent verification for large road projects, transport impact assessments, travel behaviour change and planning and design for pedestrians and cyclists. Nicole is also an accredited and experienced Level 3 Lead Road Safety Auditor

REVISIONS

Revision	Date	Description	Prepared by	Approved by
001	4/03/2019	Draft – Issued for client review	DP/NV	KP
002	28/03/2019	Draft client comments addressed	DP	HT
003	1/04/2019	Draft client comments addressed	DP	HT

Revision	Date	Description	Prepared by	Approved by
004	9/04/2019	Draft client comments addressed and TAG updated	DP	HT
005	18/04/2019	Draft ER comments addressed	ZQ	HT
006	10/05/2019	Second round of ER comments addressed	DP	HT
007	23/05/2019	Updated to address stakeholder comments	HT	NV
008	11/06/2019	Final for submission to DPE	HT	NV
009	24/06/2019	Updated to address DPE comment and OSD9 layout	HT	KP
010	13/11/2019	Minor updates to address DPIE comments on OTAMP	AC	AL
011	27/02/2020	Updated to address DPIE Conditional Approval comments and include Area 2 as an operational area	ZQ	JC
012	26/03/2020	Updated to address ER comments for ER endorsement and Mod 2	ZQ	HT

Acronyms and Definitions

Acronym / Term	Meaning
Area Manager: Estate Manager	Common or non-tenanted areas of the MLP East Precinct (eg internal roads, stormwater management infrastructure, waste management, landscaping etc) will be managed by the Estate Manager.
Area Manager: IMEX	Responsibility for operational activities within the IMEX
Area Manager: Rail	Responsibility for operational activities within the Rail Link
BTS	Bureau of Transport Statistics
CCS	Community Communication Strategy
CoA	Conditions of Approval
CoC	Conditions of Consent
CPAF	Cycling and Pedestrian Access and Facilities Sub Plan
DIPNR	Department of Infrastructure Planning and Natural Resources
DotEE	Commonwealth Department of the Environment and Energy
DP&E	Department of Planning and Environment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	NSW Environment Protection Authority
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
Facility, the	The MPE Concept (MP10_0193), MPE Stage 1 (SSD 6766) and MPE Stage 2 (SSD 7628) Project, including the operation of the IMEX terminal, warehousing and distribution facilities. A rail link is included as part MPE Stage 1 (SSD 6766) and connects the Facility to the SSFL.
FCMMs	Final Compilation of Mitigation Measures
GMA	Greater Metropolitan Area
IMEX	Import Export Terminal. Includes the following key components: • Truck processing, holding and loading areas with entrance and exit from Moorebank Avenue • Rail loading and adjacent container storage areas serviced by container handling equipment • Administration facility and associated car parking with light vehicle access from Moorebank Avenue
JTW	Journey to Work
MLP	Moorebank Logistics Park
Moorebank Logistics Park	Refers to the whole Moorebank intermodal precinct, i.e. Moorebank Precinct East (MPE) and Moorebank Precinct West (MPW)

Acronym / Term	Meaning
MLP Approvals	• *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Approval (No. 2011/6229), March 2014 • MPE Concept Approval received 29 September 2014 (MP10_0193). • MPE Stage 1 approved 12 December 2016 (SSD 6766) • MPE Stage 2 approved 31 January 2018 (SSD 7628) • MPE Stage 2 Modification 2 approved 31 January 2020 (SSD 7628 Mod 2) • MPW Concept and Stage 1 approved 3 June 2016 (SSD 5066) • MPW Stage 2 approved 11 November 2019 (SSD 7709)
MLP East Precinct	The term refers to the operation of MPE Stage 1 and MPE Stage 2 Projects under the MPE Concept Approval (MP 10_0193) including the operation of RALP, IMEX and warehousing and distribution facilities
MLP Owner	Qube Holdings (Qube)
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
OEMP	Operational Environmental Management Plan
Operational area / Operational footprint	Extent of operational activities for the operation of the MLP – East Precinct
OTAMP	Operational Traffic and Access Management Plan
WTP	Workplace Travel Plan
POPD	Programme for Operational Phase Documentation
PUD	Pick-up and delivery vehicles
Rail link	Part of MPE Stage 1 (SSD 6766), connecting the MPE site to the SSFL. The Rail link is to be utilised for the operation of the Facility.
RMS	Roads and Maritime Services
RtS	Response to Submissions
SHEMS	Safety Health and Environmental Management System
SSD	State Significant Development
SSFL	Southern Sydney Freight Line
TfNSW	Transport for New South Wales
WOEMP	Warehouse Operational Environmental Management Plan

CONTENTS

REVISIONS ..... **I**
1 INTRODUCTION **1**
1.1 Background 1
1.2 Purpose and Application 4
1.3 Proposed staged/progressive application of the OEMP 4
1.3.1 Relationship of Stages 6
1.3.2 Triggers 6
1.4 Revision of this Plan 6
1.5 Objectives and Targets 6
1.6 Consultation 7
2 STATUTORY REQUIREMENTS **9**
2.1 Legal and Other Obligations 9
2.2 Development Consent 9
2.2.1 EPBC Act Approval 9
2.2.2 EP&A Act Approval 11
2.3 Roles and Responsibilities 13
3 EXISTING TRANSPORT MODE SHARE **15**
3.1 Liverpool Local Government Area 15
3.2 Moorebank Catchment Area 16
4 EXISTING TRANSPORT PROVISIONS **18**
4.1 Bus and Train 18
4.2 Cyclist Infrastructure 20
4.3 Pedestrian Infrastructure 21
4.4 Traffic Generation 24
5 MLP EAST PRECINCT TRANSPORT PROVISIONS **29**
5.1 Car Parking Provisions 29
5.2 Bicycle Facilities Provisions 29
5.3 MLP East Precinct and Cyclist Interconnectivity 29
5.4 Staged Delivery of Future Transport 29
6 IMPLEMENTATION **31**
6.1 Transport Access Guides 31
6.2 Monitoring 31
6.3 Management Measures 31
7 REPORTING AND REVIEW **36**
7.1 Reporting 36
7.2 Review and Improvement 36
7.3 Incidents 36
7.4 Complaints 37

7.5 Non-Compliance, Non-Conformances and Corrective Actions 37

APPENDICES

APPENDIX A EVIDENCE OF NEGOTIATIONS WITH RELEVENT AGENCIES TO SATISFY COC B29(E)

APPENDIX B EXAMPLE TAG

APPENDIX C EXAMPLE STAFF TRAVEL SURVEY

APPENDIX D EVIDENCE OF CONSULTATION

LIST OF TABLES

Table 1-1: Progression of the MLP East Precinct operation 4
Table 1-2: Objectives and Targets 7
Table 1-3: Consultation Summary 7
Table 2-1: EPBC Act CoA 10
Table 2-2 CoC of SSD 6766 (MPE Stage 1) 11
Table 2-3: CoCs of SSD 7628 (MPE Stage 2) 11
Table 2-4: Final Compilation of Mitigation Measures (MPE Stage 2) 13
Table 2-5: Roles and Responsibilities 13
Table 3-1: Existing Model Share Liverpool LGA 15
Table 3-2: Moorebank Catchment Area Travel Mode Share 16
Table 4-1: Public transport services operating in the vicinity of the precinct 18
Table 4-2: Walk Score (Source: https://www.walkscore.com/) 24
Table 4-3: Daily Traffic Volumes and Heavy Vehicle Volumes in 2019 (Opening Year) 27
Table 4-4: Daily Traffic Volumes and Heavy Vehicle Volumes in 2029 (10-Year Horizon) 28
Table 6-1: Management Measures 33
Table 7-1: WTP Reporting Requirements 36

LIST OF FIGURES

Figure 1-1: Site Location 3
Figure 1-2: Proposed staged/progressive staging of the MLP East Precinct 5
Figure 3-1: Moorebank Catchment Area 17
Figure 4-1: Local public transport and pedestrian/ cyclist network 19
Figure 4-2: Sealed & marked road shoulders on Moorebank Avenue – permitted for on-street cycling 20
Figure 4-3: Existing Bus Route and Stop Location Walking Catchments 22
Figure 4-4: Locations of existing pedestrian crossing facilities on Moorebank Avenue 23
Figure 4-5: Walkable Catchment from Site 26
Figure 5-1: Pedestrian and cyclist connectivity 30

1 INTRODUCTION

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stages 1 and 2 of the Moorebank Precinct East (MPE) Project (SSD 6766, SSD 7628 and SSD 7628 Mod 2, respectively) fromthe NSW Department of Planning & Environment, as well as the Department of the Environment and Energy(DotEE) *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Approval and MitigationMeasures (No. 2011/6229), which together comprise approval for the two stages of development under theMPE Concept Approval (MP10_0193). This Workplace Travel Plan (WTP) has been developed to managetravel to and from the site during operations of MPE, hereafter referred to as the "Moorebank Logistics Park(MLP) East Precinct."

This WTP addresses the relevant requirements of the Project Approvals, including the Environmental Impact Statement (EIS), Response to Submissions (RtS) and Minister's Conditions of Consent (CoCs), and all applicable guidelines and standards specific to the management of workplace travel during operations of the MLP East Precinct.

1.1 Background

The MLP is an integral component of the Freight, Ports and Transport strategies of both the NSW and Commonwealth governments to help manage the challenges of an expected tripling of freight volumes at Port Botany by 2031.

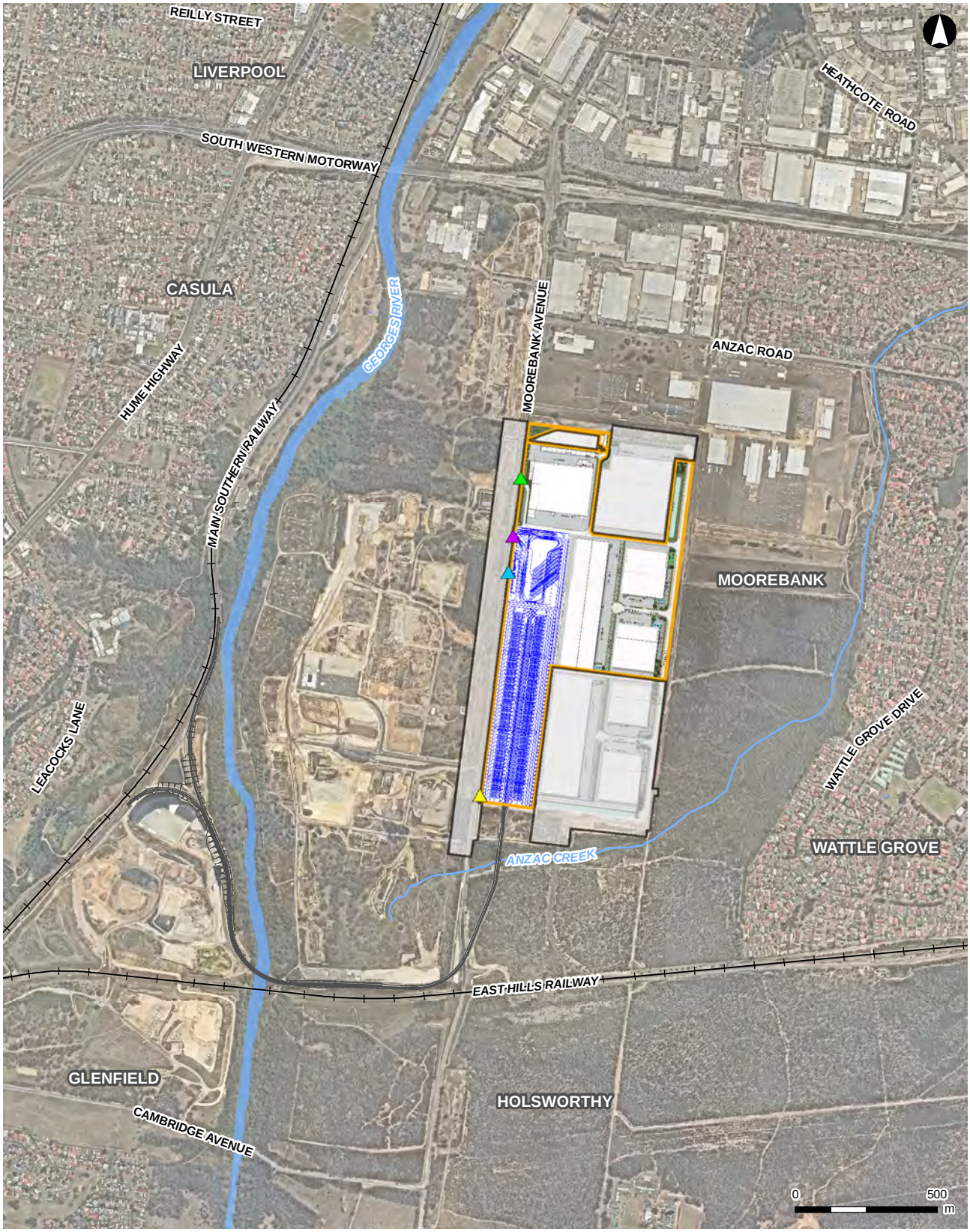
The MLP aims to streamline the freight logistics supply chain from port to store, deliver savings to businesses and consumers, and help service the rapidly growing demand for imported goods in south-west Sydney. It is located approximately 27 kilometres (km) south-west of the Sydney Central Business District and approximately 26 km west of Port Botany within the Liverpool Local Government Area. The MLP is divided into an East Precinct and a West Precinct, located east and west of Moorebank Avenue respectively, (Figure 1-1). The MLP East Precinct is operational and is managed under an Operation Environmental Management Plan (OEMP), while the MLP West Precinct is still currently under construction.

The main features of the MLP East Precinct include:

- An Import Export (IMEX) Terminal. The IMEX Terminal comprises:
  - Truck processing, holding and loading areas with an entrance and exit from Moorebank Avenue
  - Rail loading and container storage areas serviced by container handling equipment
  - An Administration facility and associated car parking with light vehicle access from Moorebank Avenue
- A Rail Link connecting the IMEX terminal and the Southern Sydney Freight Line (SSFL) traversing Moorebank Avenue, Anzac Creek, Georges River and Glenfield Waste Facility
- Associated ancillary infrastructure including signage, lighting, landscaping, water management
- Warehouse and distribution facilities including warehousing up to 21 m in height, typically ranging in size from 20,000 m^2 to 62,000 m^2.
  - Office and administration facilities
  - Amenities
  - Car parking
  - Truck loading/unloading docks
  - Internal parking for pick-up and delivery vehicles (PUD)
  - Specialised sortation and conveyor equipment
  - Hardstand areas that provide trailer parking spaces, external PUD parking spaces, vehicle manoeuvring areas and access to the main internal site road
  - Signage for business identification purposes, including backlit illuminated signage on each warehouse
  - Internal fitout, comprising racking and storage.

- A freight village including a mix of retail, commercial and light industrial spaces typically up 15 metres in height and varying in size and design
- An internal road network to enable efficient movement of vehicles, dispatch of freight from the warehouses and transport of containers between the IMEX Terminal and warehouse and distribution facilities

The location of the MLP East Precinct is shown in Figure 1-1.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Operational rail link
- Existing railway
- Watercourse

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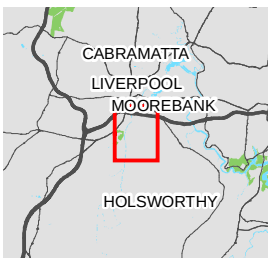


Figure 1-1: Site Location

1.2 Purpose and Application

This WTP is a sub plan to the Operational Environmental Management Plan (OEMP) and has been developed to address the requirements of the MPE Stage 2 CoC B29 and B30 'Workplace Travel Plan' (SSD 7628) which require the preparation of an WTP, to the satisfaction of the Secretary of Department of Planning and Environment (DP&E) prior to the commencement of operation. This WTP has been prepared in accordance with MPE Stage 2 CoC C7 (SSD 7628), the planning instruments and guidelines listed in Section 2.1 and Section 2.2.

The WTP identifies the operational management measures that will be applied to activities undertaken across the MLP East Precinct to manage and encourage a travel behaviour change program. The specific conditions relevant to the development of this plan are identified in Section 2.2.

This WTP provides measures intended to inform and encourage the use of sustainable transport options for travel to and from the MLP East Precinct and recommendations for the use of active transport modes such as walking and cycling, as well as public transport options that service the area. The use of active and public transport will be determined by the location of residence of staff and accessibility to the public transport network.

The most recent, approved version of this plan will be implemented to manage employees' travel to and from the facility for the proposed activities.

1.3 Proposed staged/progressive application of the OEMP

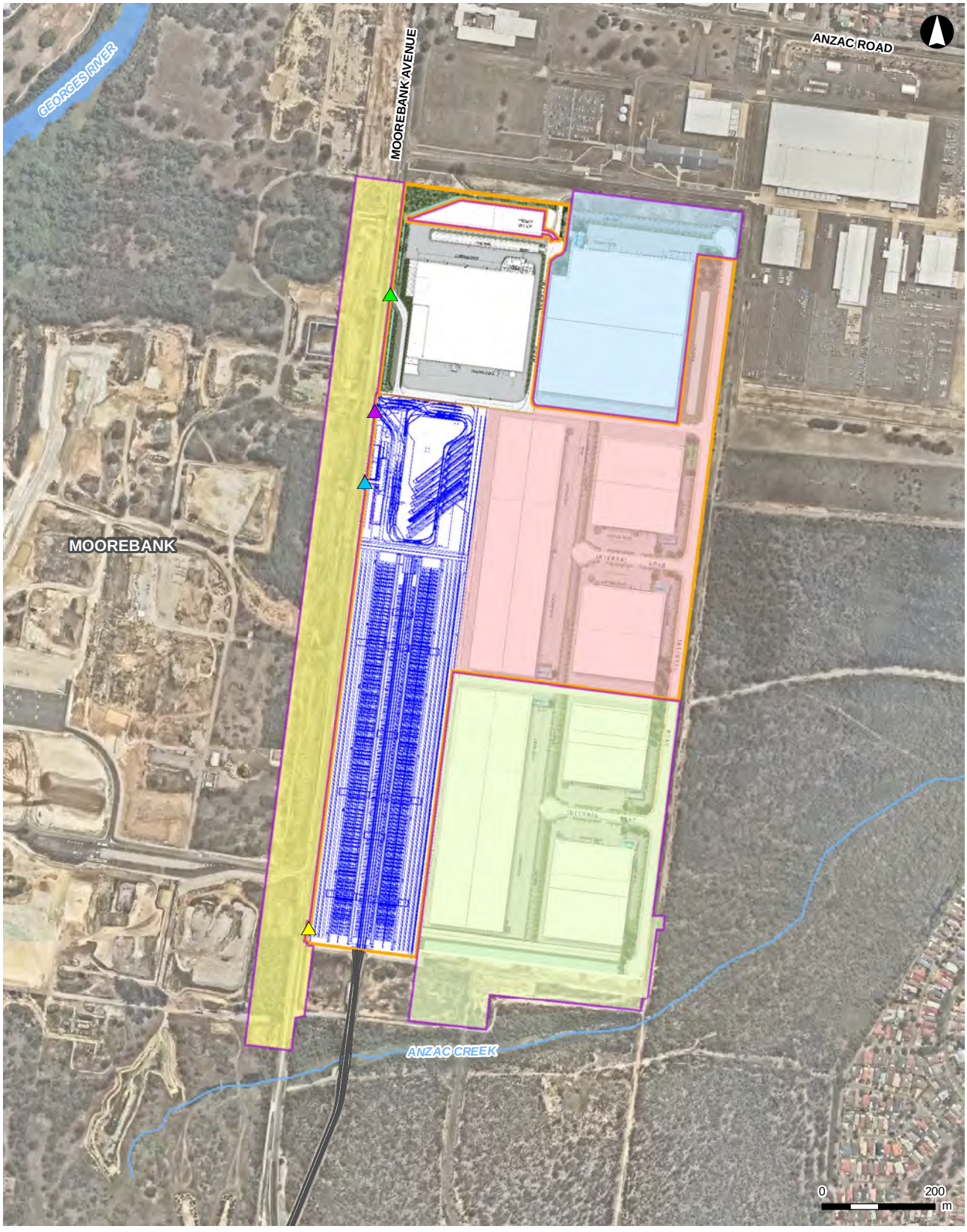
The OEMP and sub-plans are applicable to the entire MLP East Precinct. However, as operational areas will come online incrementally as warehouses are constructed and tenanted, the OEMP and sub-plans will be progressively applied to those operational areas. The proposed staged/progressive application of the OEMP and sub-plans is described in the Program for Operational Phase Documentation (POPD), which was approved by the Secretary on 21 May 2019.

The proposed staged/progressive application of the OEMP, as described in the POPD, is shown on Figure 1-2, with estimated dates of operation detailed in Table 1-1. Note that these dates are estimates and are subject to change. Area 1 and Area 2 are currently operational.

Table 1-1: Progression of the MLP East Precinct operation

Area	Approximate Dates	Operation
Area 1	Q2 2019	IMEX, Rail Link and Warehouse 1
Area 2	Q4 2019	Warehouse 3, 4 and 5
Area 3	Q2 2020	Warehouse 6, 7 and 8
Area 4	Q4 2020	Freight village
Area 5	Q4 2021	Warehouse 2
Area 6	Q2 2020	Moorebank Avenue upgrade

In accordance with CoC C6 (SSD 7628) each warehouse tenant will also prepare a Warehouse OEMP (WOEMP) prior to occupation of the warehouse based on the requirements of the OEMP and sub-plans. The Secretary will be notified one month prior to commencement of operation of each new warehouse in accordance with CoC A18 (SSD 7628). The WOEMP will be submitted to the Secretary for approval prior to commencement of operation of the warehouse.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Watercourse
- Operational rail link
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access

Operational staging:

- Area 1
- Area 2
- Area 3
- Area 5
- Area 6

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Figure 1-2: Proposed staged/progressive staging of the MLP East Precinct

1.3.1 Relationship of Stages

The OEMP and sub-plans are applicable to the entire MLP East Precinct. However, as areas become operational incrementally, construction areas will be rescinded and will continue to be managed in accordance with CEMP and sub-plans; conversely, operational areas will be managed in accordance with the OEMP and sub-plans. Operation of the site will only commence once the OEMP and sub-plans have been approved by the Secretary.

The Environmental Representative (ER), under CoC C24(d) (SSD 7628), is required to review the CEMP and OEMP to ensure they are *"consistent with requirements of the consent."* The ER will continue to review and endorse any proposed changes to the CEMP and subplans until such time construction is complete and the MLP East Precinct site is fully operational. The ER will also review and endorse the updated figures for all operational documentation to ensure parity between construction and operational documentation. The operational figures will then be submitted to DP&E for information as described in Section 1.3.2.

Until the entire MLP East Precinct is operational, all construction zones will be fenced off to provide clear distinction between construction zones and the operational facility.

1.3.2 Triggers

As required by CoC A18 (SSD 7628) the Secretary will be notified one month prior to commencement of operation of each new area shown in Table 1-1 and Figure 1-2. The notification will include updated figures detailing the new areas of operation which will fall under the remit of the OEMP as well as the reduced construction areas. As described in Section 1.3.1 the updated areas will have been endorsed by the ER prior to submission to the Secretary for approval.

Following notification, the OEMP and each sub-plan will be updated with the new operational site layout, while the CEMP and applicable sub-plans will be revised to show the reduced area of construction.

1.4 Revision of this Plan

Delivery of the OEMP and the sub-plans has not been staged. Although the MLP East Precinct will become operational incrementally as warehouses are constructed and tenanted (as described in the OEMP Section 2.4), the OEMP and sub-plans are applicable to the entire MLP East Precinct. In accordance with CoC B30 (SSD 7628) this WTP will be implemented for the life of the MLP East Precinct. As subsequent stages of the MLP East Precinct become operational incrementally, and as travel behaviours change, this WTP will be reviewed and updated as required at reasonable intervals.

In accordance with CoC C6 (SSD 7628) each warehouse tenant will prepare a Warehouse OEMP (WOEMP) prior to occupation of the warehouse based on the requirements of the OEMP and sub-plans. The WTP will be updated to incorporate any subsequent operational activities, including warehouses and the freight village should this be required.

Review of the WTP will be undertaken as a minimum annually for the life of the of the operation of the MLP East Precinct. Further reviews and improvements of the WTP is discussed in Section 7.2.

1.5 Objectives and Targets

Table 1-2 outlines the objectives and targets set out for the MLP East Precinct for the management of workplace travel during operation. These objectives and targets were developed by the Principal's Representative based on collective industry experience and best practice and have been endorsed by the Environmental Representative.

Table 1-2: Objectives and Targets

Objective	Target	Timeframe	Accountability
Reduce employee private motor vehicle usage across the MLP East Precinct	Achieve a public and active transport mode share of approximately 30 per cent[1] over the lifetime of operations of the MLP East Precinct, dependant on employee residence locations and available transport modes.	Reviewed annually[2]	Operations Manager Area Manager: Estate

1.6 Consultation

As required by CoC B29(a) (SSD 7628), this WTP will be prepared in consultation with Campbelltown City Council (CCC), Liverpool City Council (LCC) and Transport for New South Wales (TfNSW) as outlined in Table 1-3 will be updated as consultation with the applicable agencies progresses. Evidence of consultation is provided in Appendix D.

Table 1-3: Consultation Summary

Agency	Date	Person contacted	Comment	Status
Transport for NSW (TfNSW)	26/3/19	TfNSW representative	Draft plan emailed for review and comment	Open
	11/4/19	TfNSW representative	Email to follow up on progress of review	Open
	18/4/19	TfNSW representative	Email to follow up on progress of review	Open
	29/4/19	TfNSW representative	Email to follow up on progress of review	Open
	4/5/19	MLP representative	Email to provide TfNSW contact	Open
	9/5/19	TfNSW representative	Email to follow up on progress of review	Open
	10/5/19	MLP representative	Email to note that comment will be provided by next week	Open
	15/05/19	MLP representative	Email to confirm that a letter has been prepared for TfNSW executive review	Open
	16/5/19	MLP representative	Email with letter outlining comments (See Appendix D)	Open
	26/5/19	TfNSW representative	Email with response to TfNSW comments (See Appendix D)	Open
	6/6/19	TfNSW representative	Email to follow up on response to TfNSW comments	Open
	6/6/19	MLP representative	Email stating that comments are being reviewed	Open
	7/6/19	TfNSW representative	Email confirming receipt of email	Open
	7/6/19	MLP representative	Email providing response to comments	Open
	8/6/19	MLP representative	Email confirming the close out of consultation	Closed

[1] This is based upon EPBC Act CoA – Annexure A – Summary of Mitigation Measures
[2] The target will be dependent on staff residence locations and available transport modes. This target will be reviewed and revised, as required, on an annual basis in conjunction with the findings of the annual staff travel survey.

Agency	Date	Person contacted	Comment	Status
Liverpool City Council (LCC)	18/4/19	LCC representative	Draft plan emailed for review and comment	Open
	10/5/19	MLP representative	Email with additional information requested	Open
	26/5/19	LCC representative	Comments on WTP provided	Open
	3/6/19	MLP representative	Email to follow up on progress of review	Open
	6/6/19	LCC representative	LCC note the ongoing negotiations with TfNSW and Qube regarding bus services following commencements of operations	Open
	7/6/19	MLP representative	Email confirming the close out of consultation	Closed
Campbelltown City Council (CCC)	27/5/19	CCC representative	Draft plan emailed for review and comment	Open
	27/5/19	MLP representative	CCC has no objection to the plan, as no heavy vehicles will be allowed to used Cambridge Ave.	Closed

2 STATUTORY REQUIREMENTS

2.1 Legal and Other Obligations

The legislation, planning instruments and guidelines considered during development of this WTP are listed below with specific details provided in the Legislation Register within Appendix B of the OEMP.

- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning and Assessment Regulation 2000*

Additional legislation, standards and guidelines relating to the workplace travel and end of trip facilities include:

- Australian Standard AS2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities
- Parking Facilities Liverpool City Council Development Control Plan (DCP) 2008, Part 1, *General Controls for All Developments*
- *City of Sydney Development Control Plan 2012, Section 3 — General Provisions*
- DIPNR (referred to currently as the DP&E) Planning *Guidelines for Walking and Cycling 2004*
- New South Wales Bike Plan 2010
- Draft Liverpool City Council Bike Plan 2017

2.2 Development Consent

The operation of the MLP East Precinct was approved under both the *Environmental Planning and Assessment Act* 1979 (EP&A) Act) and the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act). Both of these approvals have environmental conditions relevant to the operational works for the MLP East Precinct, which are discussed below.

The operational requirements for the facility, including consultation, impact mitigation and management, is documented in the following documents:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Approval (No. 2011/6229), March 2014
- MPE Concept Approval (MP 10_0193), 29 September 2014
- State Significant Development (SSD) Consent SSD 6766, 13 March 2018 (superseding initial approval 12 December 2016)
- Moorebank Precinct East – Stage 1 – Environmental Impact Statement (Arcadis Australia Pacific Pty Limited, May 2015)
- Moorebank Precinct East – Stage 1 – Response to Submissions (Arcadis Australia Pacific Pty Limited, September 2015)
- State Significant Development (SSD) Consent SSD 7628, 31 January 2018
- State Significant Development (SSD) Consent SSD 7628 Modification 2, 31 January 2020
- Moorebank Precinct East – Stage 2 – Environmental Impact Statement (EIS) (Arcadis Australia Pacific Pty Limited, December 2016)
- Moorebank Precinct East – Stage 2 – Response to Submissions (RtS) (Arcadis Australia Pacific Pty Limited, July 2017)

2.2.1 EPBC Act Approval

The EPBC Act approval for the MPE Concept was granted by the DotEE in March 2014 (No. 2011/6229). Approval was required due to impacts on listed threatened species and communities (Sections 18 and 18A of the EPBC Act) and Commonwealth land (Sections 26 and 27A of the EPBC Act).

The operation of the MLP East Precinct has been designed to be consistent with the EPBC Act Conditions of Approval (CoA), where relevant. EPBC Act Approval conditions include specific conditions and commitments that are required to be addressed in this plan. These conditions are identified within Table 2-1.

Table 2-1: EPBC Act CoA

Commonwealth	Requirement	Sections or documents where requirements addressed
8(h)	For the better protection of Commonwealth land, the person taking the action must engage a suitably qualified expert(s) to prepare an Operation Environment Management Plan (OEMP) for the approval of the Minister. The OEMP must include in relation to operation of the proposed facility: h) evidence of consultation with Defence regarding the adequacy of proposed mitigation measures	Section 1.6 OEMP [PREC-QPMS-EN-PLN-0001
Annexure A – Summary of Mitigation Measures		
Traffic	In addition to the stated Traffic Management Plan, all reasonable steps would be taken to encourage staff to use public transport, walk and cycle to reduce the dependence on travel to and from the SIMTA site by private motor vehicle. SIMTA would assess the feasibility of the provision of a peak-hour express shuttle bus service to and from Liverpool Station via Moorebank Avenue and Newbridge Roads, with a potential expansion to this route over time to include Holsworthy Railway Station	This WTP The feasibility of the peak period express shuttle bus will be determined in consultation with Qube and TfNSW as part of the development of this WTP and is presented in Appendix A Appendix A will be updated as negotiations progress.
	The combined impact of the bus and rail focused measures would be to achieve specific public transport usage increases as a result of the SIMTA proposal, above those applying across the Liverpool LGA at the present time. If a reasonable proportion of employees live within the region, then substantial trip reduction benefits could be achieved. A SIMTA employee public transport mode share of about 30 per cent is currently considered feasible, with a significant proportion of employees living locally. This would manifest through a 2-3 per cent increase in the walk mode share. In summary, measures to reduce private motor vehicle trips would include:	Section 1.5 Table 1-2 Section 6.3 Table 6-1
	• Development and implementation of a travel behaviour change program	Section 6
	• Reduce on-site car parking supply over-time (dependant on proportion of employees living locally and accessibility of public transport)	Section 5.1 Table 6-1

Commonwealth	Requirement	Sections or documents where requirements addressed
	• Consideration of the establishment of Holsworthy Station Express bus services	These items are currently being addressed separately in consultation with TfNSW. Appendix A of this WTP will be updated as negotiations progress.
	• Consideration of the establishment of Glenfield Station to Liverpool Station express bus	
	• Installation of a bus interchange and waiting area	
	• Bus priority works (establishment of designated bus lanes) …	These items are currently being addressed separately in consultation with TfNSW. Appendix A of this WTP will be updated as negotiations progress.
	• Consideration of the extension of Bus Route 901	
	• Promote the establishment of Route 870, 871, and 872 bus	

2.2.2 EP&A Act Approval

The MLP East Precinct was approved under Part 4, Division 4.7 (previously Division 4.1 prior to 1 March 2018) of the EP&A Act. Approval for MPE Stage 1 was originally received on 12 December 2016 (SSD 6766) and subject to appeal, with revised CoC issued from the Land and Environment Court on 13 March 2018; approval for MPE Stage 2 was received on 31 January 2018 (SSD 7628).

The CoCs include requirements to be addressed in this plan and delivered during operation of the Facility. These requirements, and how they are addressed are provided within Table 2-2 for CoC relating to SSD 6766 and Table 2-3 for SSD 7628.

Table 2-2 CoC of SSD 6766 (MPE Stage 1)

CoC	Requirement	Sections or documents where requirements addressed
B8	The SSD shall be designed to ensure a bus stop on Moorebank Avenue (including direct pedestrian access from the terminal site to the bus stop), and associated turnaround facility suitable for a 14.5 metre long non-rear steer bus is not precluded.	This item is currently being addressed separately in consultation with TfNSW. Appendix A of this WTP will be updated as negotiations progress.

Table 2-3: CoCs of SSD 7628 (MPE Stage 2)

CoC	Requirement	Sections or documents where requirements addressed
B29	Prior to the issue of any Occupation Certificate, the Applicant must prepare a **Workplace Travel Plan** to the satisfaction of the Secretary. The Workplace Travel Plan must form part of the Operational Traffic and Access Management Plan required by condition C3, and must:	This WTP. This plan has been prepared separately to the Operational Traffic and Access Management Plan (OTAMP) but will resubmitted to DP&E as part of the OTAMP as required by CoC C3.
	a) be prepared in consultation with TfNSW	Section 1.6 Table 1-3

CoC	Requirement	Sections or documents where requirements addressed
	b) outline facilities and measures to promote public transport usage, such as car share schemes and employee incentives	Section 6.1 Section 6.3 Table 6-1
	c) describe pedestrian and bicycle connections and linkages to and from the site from Moorebank Avenue and within the site including between warehouses and the freight village	Section 4.2 Section 5.3 Also refer to UDLP
B29	d) describe end of trip facilities available on-site which must include under cover bike storage, showers and change facilities - the layout, design and security of bicycle facilities must comply with the minimum requirements of Australian Standard AS 2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities	Section 5.2 The UDLP will include end of trip facilities provided by each warehouse tenants.
	e) include the results of negotiations with the relevant agencies/ authorities as required to facilitate the staged delivery of the public transport infrastructure including:	These items are currently being addressed separately in consultation with TfNSW. Appendix A of this WTP will be updated as negotiations progress.
	i) construction of a covered bus drop off/ pick up facility within the site to encourage the use of buses for employees	
	ii) review and rationalisation of the locations of Route 901 bus stops in the vicinity of the site to match the proposed northern terminal entry location and enhance accessibility	
	iii) peak period and SIMTA shift work responsive express buses to/ from the site and Liverpool Station via Moorebank Avenue and Newbridge Roads with frequency dependent on the development of the site	
	iv) peak period express buses to/ from the site and Holsworthy rail station via Anzac Road, Wattle Grove Drive and Heathcote Road with frequency dependent on the development of the site	
	v) potential to extend the Route 901 bus through the site via the light vehicle road and increasing peak period bus service frequencies to better match the needs of existing and future employees of the locality with frequency dependent on the extent of development of the site	
	vi) changes to existing bus stop locations and the identification of new bus stop locations if required	
	f) include provision of annual reporting of employee numbers to DP&E, Transport for NSW and RMS for a period commencing one year from commencement of operation up to and including 5 years from occupation of final building	Section 7.1
B30	The Applicant must ensure that the Workplace Travel Plan is implemented for the life of the development	Section 1.4 Section 7.2

The Final Compilation of Mitigation Measures (FCMM) are presented within the MPE Stage 2 RtS (Arcadis, July 2017) documents. A list of Revised Mitigation Measures as relevant to the Facility and how they have been complied within this plan are provided in Table 2-4.

Table 2-4: Final Compilation of Mitigation Measures (MPE Stage 2)

FCMM	Requirement	Sections or documents where requirements addressed
0D	The construction and/or operation of the Amended Proposal may be delivered in a number of stages. If construction and/or operation is to be delivered in stages a Staging Report would be provided to the Secretary prior to commencement of the initial stage of construction and updated prior to the commencement of each stage as that stage is identified.	Refer to Program for Operational Phase Documentation (POPD) and Section 1.3
1D	It is intended that the POTMP would be further progressed and integrated into the OEMP for the Amended Proposal. Specifically, the following key aspects would be addressed in the OTMP: • Heavy vehicle route management • Safety and amenity of road users and public • Congestion management on Moorebank Avenue • Road user delay management • Information signage, distance information and advance warning • Driver code of conduct • Incident management • Traffic monitoring.	Addressed in the main body of the OTAMP
1E	Bicycle and end of trip facilities would be provided in accordance with the City of Sydney Section 3 – General Provisions	Section 5.2
1F	Consultation would be undertaken with relevant bus provider(s) regarding the potential to extend the 901 bus service (or equivalent) and additional regular service bus stops with the aim of maximising public transport accessibility to, from and within the Amended operational area	This item is currently being addressed separately in consultation with TfNSW. Appendix A of this WTP will be updated as negotiations progress.

2.3 Roles and Responsibilities

Key roles and responsibilities applicable to this WTP are presented in Table 2-5.

Table 2-5: Roles and Responsibilities

Roles	Responsibilities
Operations Manager	• Participate in annual review to determine the feasibility of reducing on-site car parking supply over-time (dependant on proportion of employees living locally and accessibility of public transport)
Area Managers: IMEX Rail Link Estate Manager	• Maintenance of end of trip facilities • Updating WTP as required • Development, update and distribution of Transport Access Guides (TAG) to staff and warehouse tenants • Undertake staff travel surveys

Roles	Responsibilities
Site Safety, Health, Environment and Quality Manager / Advisor (Site SHEQ Manager/Advisor)	• Annual reporting of employee numbers and travel modes
Warehouse Tenant	• Installation of end-of-trip facilities in line with the detailed design drawings • Maintenance of end of trip facilities associated with the warehouse • Distribution of TAG to warehouse staff

3 EXISTING TRANSPORT MODE SHARE

3.1 Liverpool Local Government Area

The Bureau of Transport Statistics (BTS) provides Journey to Work (JTW) data for the Sydney Greater Metropolitan Area (GMA), which comprises a comprehensive sample of commuter travel, collected during the 2011 Census. Work trip origin and destinations are coded to the 2011 travel zones.

Table 3-1 summarises some of the key transport indicators for the Liverpool LGA and the Sydney Statistical Division sourced from the BTS Household Travel Survey. Generally, Liverpool's residents exhibit higher trip making and car-based mode shares than the average for Sydney. Total travel per person (km) and vehicle kilometres travelled (distance travelled by vehicle) per person are both above the Sydney average. Mode choice in Liverpool is dominated by the car, which is approximately 17 per cent higher than the Sydney average (86 per cent for Liverpool compared to 69 per cent average for the Sydney GMA).

Table 3-1: Existing Model Share Liverpool LGA

Indicator	Sydney	Liverpool
Population	4,551,000	168,000
Households	1,689,000	54,000
Trips per person	2.7	3.3
Total travel per person (km)	31.9	38.3
Model of travel (%):		
• Car Driver	47%	59%
• Car passenger	22%	27%
• *Car combined*	*69%*	*86%*
• Train	5%	10%
• Bus	6%	2%
• Walk	18%	2%
Vehicles per Household	1.6	1.8
Ave. trip length [km]	8.7	11.7
VKT per person	18.5	22.6
Ave. work trips (mins)	35	37
Daily travel time (per person)	81	83

Source: BTS HTS 2012/13 Sydney Greater Metropolitan Area (GMA)

3.2 Moorebank Catchment Area

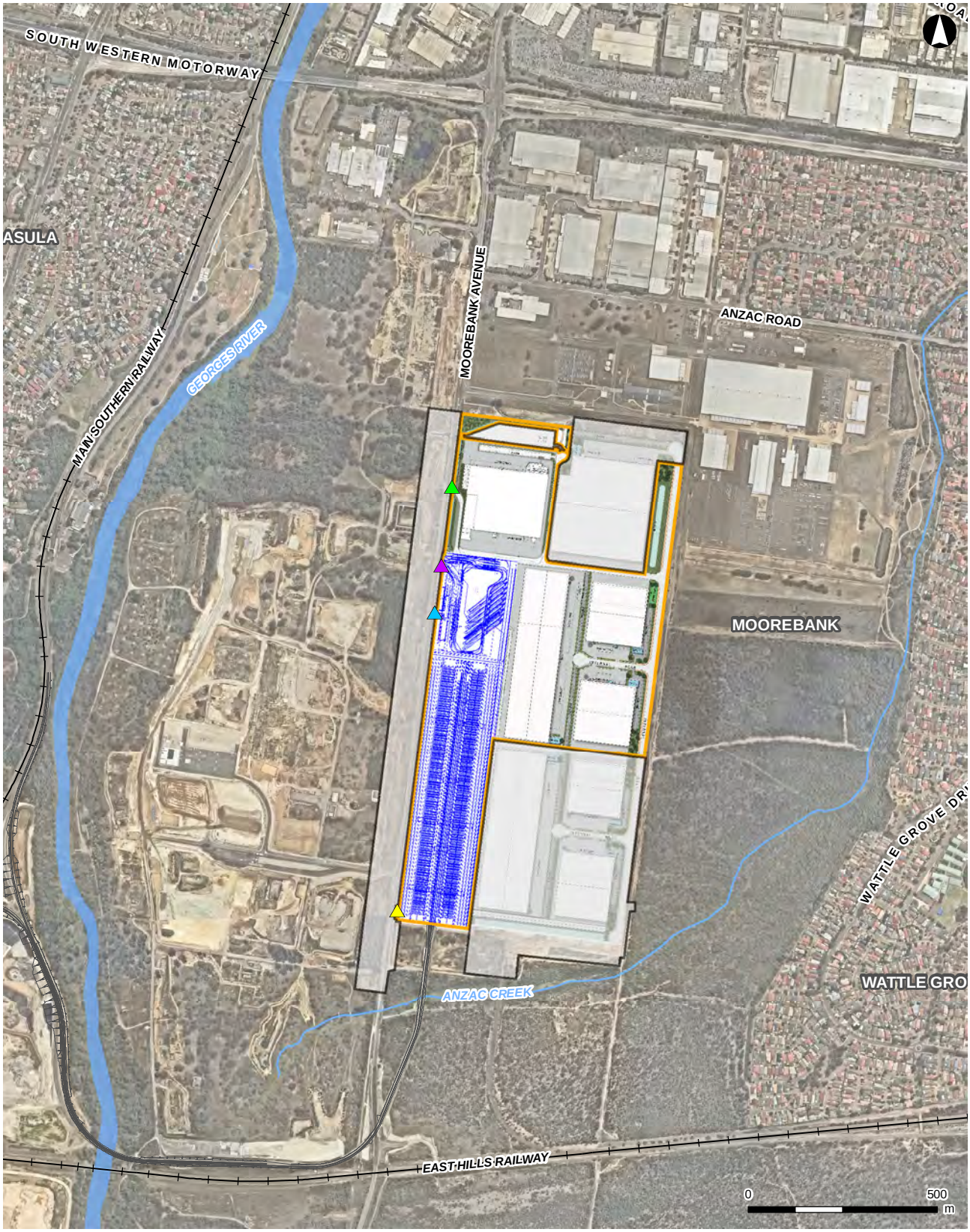
Transport mode share data was further investigated for the Moorebank catchment area (Travel Zone 3824), in the vicinity to the MLP East Precinct. The 2011 JTW data relates to trips to places of employment within travel zone 3824 in Moorebank. The travel zone boundary is shown in Figure 3-1.

In 2011, about 2,100 employees travelled to the Moorebank catchment area for work. Table 3-2 shows existing mode share within the Moorebank catchment area. Approximately 80 per cent of people surveyed travelled to work by private vehicle (driver and passenger), while two per cent of workers travelled by public transport. The remainder of trips comprised walking/ cycling trips (six per cent), indicating that a proportion of employees live locally. The remainder worked from home, did not travel, or the travel mode was not stated (six per cent).

Table 3-2: Moorebank Catchment Area Travel Mode Share

Travel Mode	Study Area as Workplace (Inbound trips)	% Study Area as Workplace
Car Driver	1,695	80%
Car Passenger	118	6%
Public Transport	40	2%
Others (walk, cycle, etc.) 127 6%	127	6%
Work at home, did not travel, or not stated	128	6%
Total	**2,108**	**100%**

The current low public transport usage (two per cent) within the Moorebank catchment area is due to the MLP East Precinct currently being poorly serviced by public transport. The public transport currently servicing the MLP East Precinct is further discussed in Section 4.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Existing railway
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Watercourse
- Operational rail link

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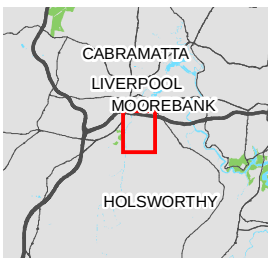


Figure 3-1: Moorebank Catchment Area

4 EXISTING TRANSPORT PROVISIONS

This section addresses the existing travel provisions associated with the operation of the MLP East Precinct and the workplace travel controls established to manage key risks.

Figure 4-1 shows the current public (bus and train) and active transport (cycling and pedestrian) facilities and routes within the general vicinity of the MLP East Precinct.

4.1 Bus and Train

As shown in Figure 4-1, the MLP East Precinct is serviced by a single bus service (route 901). While bus stops are located on Moorebank Avenue, including the MLP East Precinct frontage, these are limited service bus stops, which are supported by a single 901 bus service during the AM and PM peak periods only. Regular service bus stops[3], supported by all 901 route bus services, are located at the Moorebank Avenue/ Anzac Road intersection (north of Anzac Road) and along Anzac Road with all bus services stopping at these stops. The regular service bus stop (north of Anzac Road) is located approximately 750 metres north of the MLP East Precinct and closest warehouse, however, as all warehouses share the same entrance, the walking distance for staff at the other warehouses will be longer.

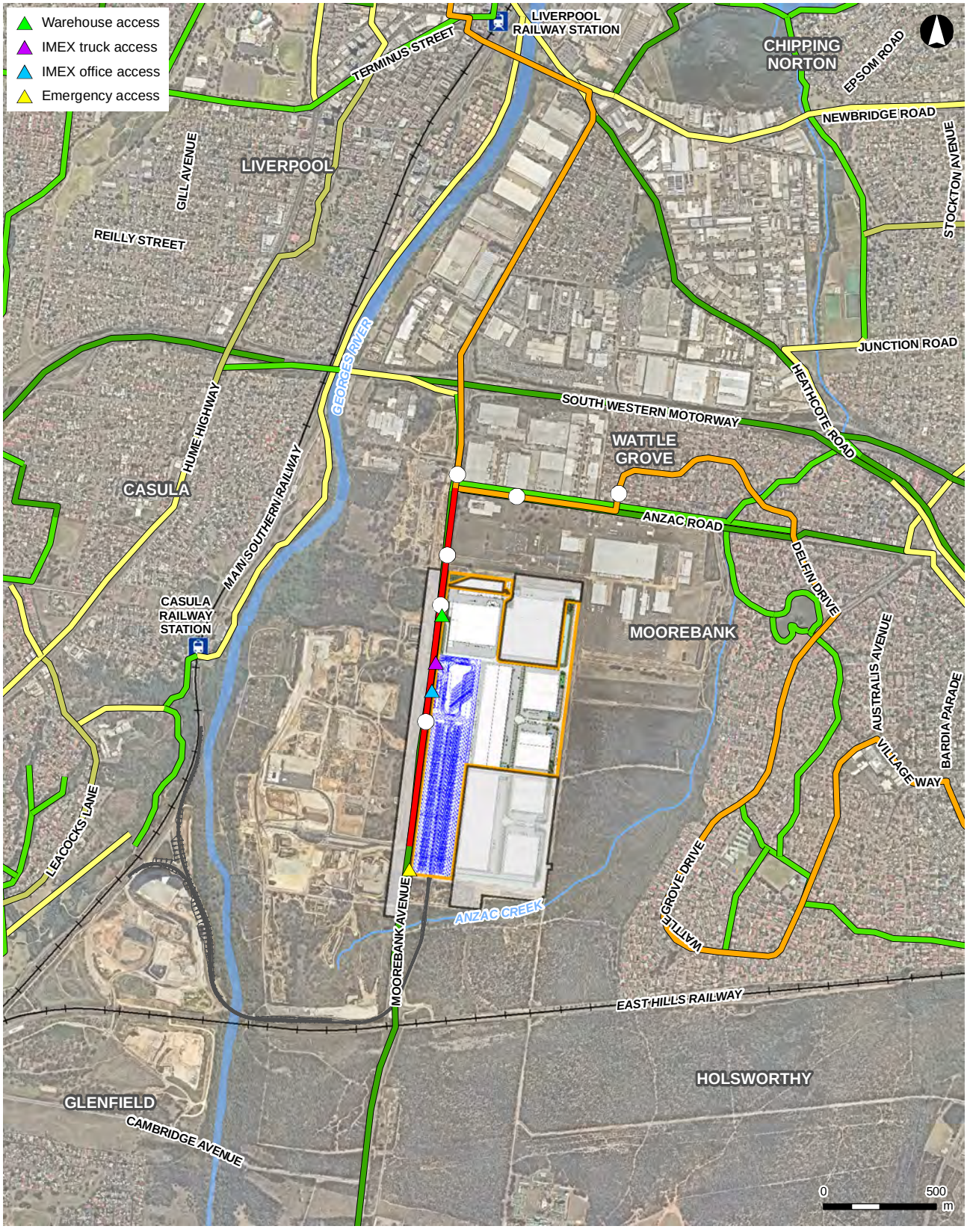
Overall, bus route 901 operates as a feeder service to the Liverpool and Holsworthy train stations. The train services provide good transit connectivity to major destinations in the South West Sydney area and the wider Sydney metropolitan region. However, due to the long walking distance from the MLP East Precinct to the 901 bus service's regular service bus stops, and only the limited peak period services bus stops being readily accessible to the MLP East Precinct, connectivity of the MLP East Precinct to Liverpool and Holsworthy train stations is considered to be limited.

A summary of the service details for each public transport service operating in the general vicinity of the MLP East Precinct (bus and train) is provided in Table 4-1.

Table 4-1: Public transport services operating in the vicinity of the precinct

Mode	Stop/station	Route Description	Significant Destinations on Route	Service Frequency
Bus	Moorebank Avenue/ Anzac Road intersection	Route 901 (standard route), Liverpool to Holsworthy	Liverpool train station, Liverpool Westfield shopping centre, Wattle Grove shops, Holsworthy train station	30 mins (peak) 60 mins (off-peak)
	Moorebank Avenue (site frontage)	Route 901 (via precinct), Liverpool to Holsworthy		One service during each AM and PM peak
Train	Liverpool train station	T2 Inner West and South Line	Strathfield, Sydney CBD	30 mins (peak) 60 mins (off-peak)
		T3 Bankstown Line	Bankstown, Sydney CBD	15 mins (peak) 30 mins (off-peak)
		T5 Cumberland Line	Parramatta, Blacktown, Glenfield, Campbelltown	30 mins (peak) 30 mins (off-peak)
	Holsworthy train station	T2 Airport and South Line	Airport, Sydney CBD, Glenfield, Campbelltown	8 mins (peak) 20 mins (off-peak)

[3] The regular service stops operate on a more frequent basis on an approximate half hourly basis on Monday to Friday from 5:32am to 9:51pm, hourly basis on Saturday from 7:02am to 6:34pm and hourly basis on Sunday from 8:21am to 5:34pm.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Bus route 901
- Limited service bus route
- Existing railway

Liverpool Bike Plan (2017)

- Existing off road cycleway
- Existing on road cycleway
- Proposed off road cycleway
- Proposed on road cycleway

- Existing bus stop
- Rail station
- Watercourse
- Operational rail link

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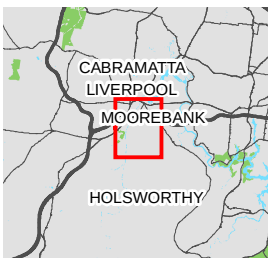


Figure 4-1: Local public transport and pedestrian/cyclist networ

4.2 Cyclist Infrastructure

On-road cycling is permitted on Moorebank Avenue[4], with sealed and lane-marked shoulders of varying width (approximately 1.5 to 2.5-metre width, refer to Figure 4-2) provided on both sides of the road. However, the sealed shoulders are not marked as cycle lanes. The posted speed limit on Moorebank Avenue is 60 km/h, which is acceptable for cyclists to share with vehicles or cycle within the shoulder.

Figure 4-2: Sealed & marked road shoulders on Moorebank Avenue – permitted for on-street cycling

Moorebank Avenue connects to a series of cyclist routes in the surrounding area, as shown in Figure 4-1. These are provided in the form of either on-road cycle lanes, shared pedestrian and cyclist paths or shared with general traffic on local roads. As an example, a cyclist route from the MLP East Precinct to Holsworthy train station is possible via a connection of shared paths and local streets in the Wattle Grove residential area (with a cycling distance of approximately 5.6 km).

In addition to the above:

- The NSW Bike Plan (June 2010) has identified new bicycle routes (to be constructed) around Liverpool on Moorebank Avenue, Heathcote Road and Newbridge Road
- Sydney's Cycling Future (Transport for NSW, 2013) commits to completing missing links in the existing cyclist network to the Liverpool CBD. This would include improving cyclist access to the Liverpool City Centre from the south by completing the missing sections of the off-road walking and cycling corridor along Glenfield Creek, between Casula and Liverpool. Moorebank Avenue is also considered a strategic cyclist corridor. This improved access would integrate with the cyclist routes proposed in the Liverpool Bike Plan (Liverpool City Council, 2017).

As part of Moorebank Avenue Upgrade Works (MAUW), a temporary diversion road will be built to enable upgrade of the existing Moorebank Avenue, while still allowing motor vehicle access to the operational MLP East Precinct. No cyclist access will be permitted on Moorebank Avenue during construction of the temporary diversion road[5].. Signage will be installed at the northern and southern end of Moorebank Avenue

[4] It is noted that the cycling routes will be altered during construction of Moorebank Avenue Upgrade and communicated as described in the Community Communication Strategy, as well as the TAG and noticeboards in staff communal areas.
[5] MPE Stage 2 Construction Traffic and Access Management Plan – Phase B, [SSS2-QPMS-EN-PLN-0040]

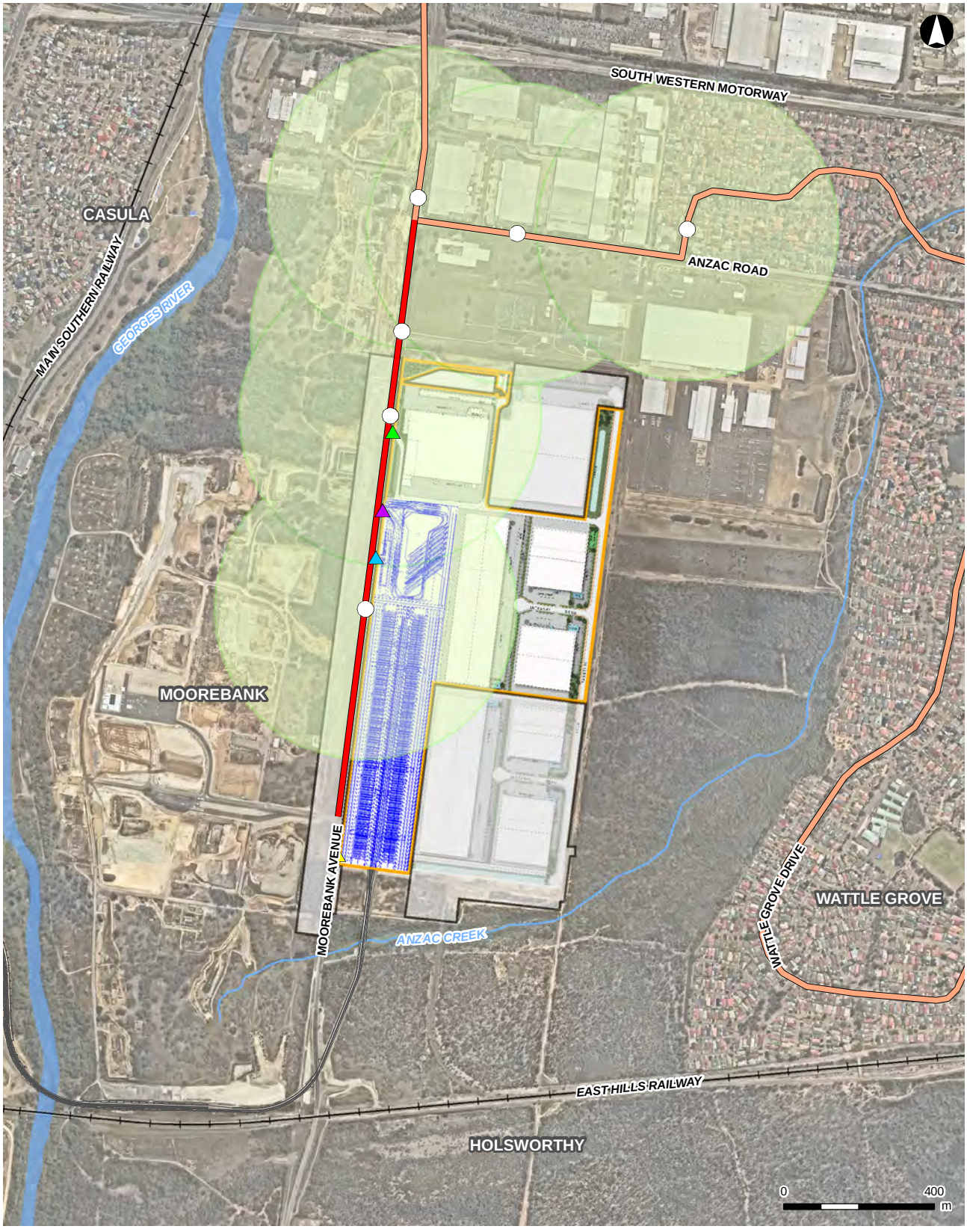
to indicate this. After construction of the temporary diversion road has been completed, cyclists will be permitted on Moorebank Avenue.

4.3 Pedestrian Infrastructure

The walking distance to the limited-service bus stops along Moorebank Avenue from the warehousing in the north-west of the MLP East Precinct is within the acceptable walking distance of 400 metres, as shown in Figure 4-3. The remainder of the MLP East Precinct has a walking distance of more than 400 metres, due to the IMEX and rail connection restricting direct access from Moorebank Avenue.

A concrete footpath is provided on the western (northbound) side of Moorebank Avenue with pedestrian crossing facilities located at signalised intersections, which are spaced approximately 250 metres to 600 metres apart, as shown in Figure 4-4. Sightlines along Moorebank Avenue are generally clear, providing drivers with sufficient opportunity to see pedestrians waiting to cross at the traffic lights.

No pedestrian access will be permitted on Moorebank Avenue during construction of the temporary diversion road as part of MAUW[5]. Signage will be installed at the northern and southern end of Moorebank Avenue to indicate this. After construction of the temporary diversion road has been completed, pedestrians will be permitted on Moorebank Avenue.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Bus route 901
- Limited service bus route
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Existing bus stop
- Existing walking catchment
- Existing railway
- Watercourse
- Operational rail link

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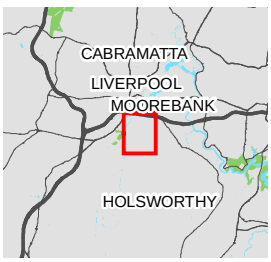

Figure 4-3: Existing Bus Route and Stop Location Walking Catchments

LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Signalised T-Intersections
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Existing railway
- Watercourse
- Operational rail link

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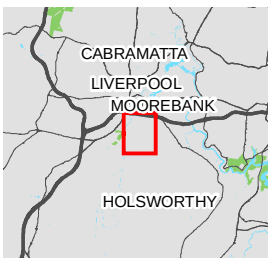


Figure 4-4: Locations of existing pedestrian crossing facilities on Moorebank Avenue

A walk score is a measure of pedestrian accessibility of a development to retail and entertainment centres, schools, restaurants and public transport. A higher walk score value corresponds to a high level of accessibility to key destinations by non-car options.

The walk score provides a broad indicative insight on the accessibility of a given area. Table 4-2 provides definitions of the scores.

Table 4-2: Walk Score (Source: https://www.walkscore.com/)

Walk Score	Description
90-100	Walker's Paradise (Daily errands do not require a car)
70-89	Very Walkable (Most errands can be accomplished on foot)
50-69	Somewhat walkable (Some errands can be accomplished on foot)
25-49	Car-Dependent (Most errands require a car)
0-24	Car-Dependent (Almost all errands require a car)

MLP East Precinct offers limited shopping, dining and entertainment and public transport services within walking distance. As a result, the MLP East Precinct has been assessed to have achieved an existing walk score of 7, indicating a low level of walkability and accessibility to public transit. Therefore, it is likely that employees will rely on private vehicles to access key destinations surrounding the MLP East Precinct.

PedCatch is pedestrian accessibility modelling tool that shows the extent of a walking catchment, given speed and time. Using topographical mapping, it considers physical barriers that may restrict access for pedestrians and present issues for mobility impaired pedestrians.

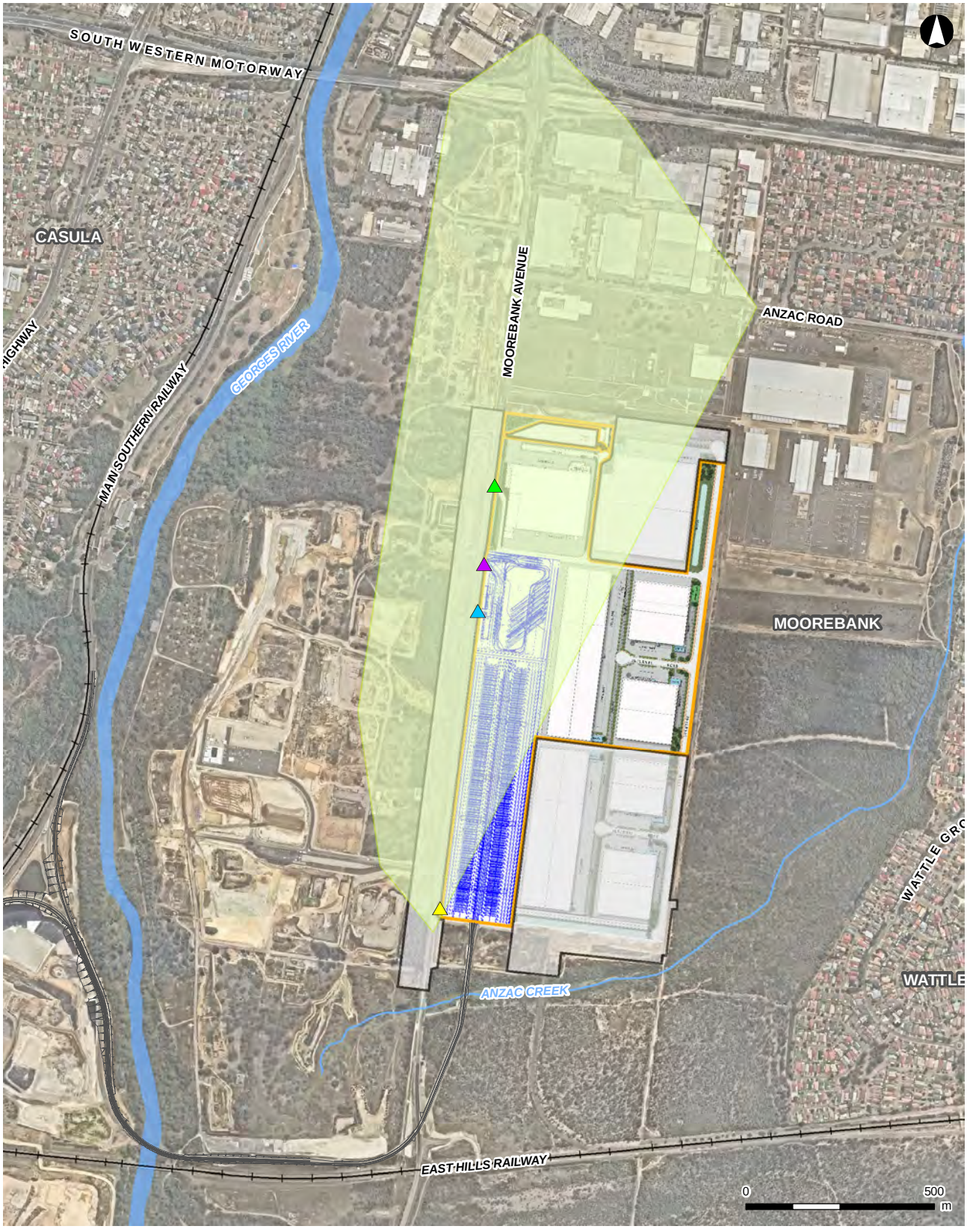
Figure 4-5 shows the extent of the MLP East Precinct 's walkable catchment within 15 minutes, assuming a walking speed of approximately 4.8 kilometres per hour.

4.4 Traffic Generation

The MLP East Precinct will contribute to reducing the existing and potential increase in regional freight traffic movements along the M5 Motorway between Port Botany and Moorebank Avenue, primarily by facilitating a mode transfer from road to rail. Notwithstanding this, operations would increase traffic movements within the vicinity of the MLP East Precinct, particularly on Moorebank Avenue to the south of the M5 Motorway interchange. The M5 Motorway interchange is the MLP East Precinct's primary point of access to the south-western Sydney freight catchment, which is located to the west of the M5 Motorway interchange. These increased local traffic movements would be a result of heavy vehicle movements for freight distribution to and from the MLP East Precinct and for light vehicle movements for employees and visitors accessing the facility.

The potential increase in traffic generated by the MLP East Precinct on the road network was assessed by comparing forecast 2019 (opening year) and 2029 (10-year horizon) daily traffic volumes on Moorebank Avenue, Anzac Road and Cambridge Avenue with and without the MLP East Precinct as shown in Table 4-3 and Table 4-4, respectively.

The results show that increased total traffic volumes from the operation of the MLP East Precinct would be the greatest along Moorebank Avenue (to the south of Anzac Road, with traffic volume increases of 23 per cent in 2019 and 19 per cent in 2029. The MLP East Precinct would also increase the total traffic volumes along Moorebank Avenue, north of Anzac Road with an increase of 18 per cent in 2019 and 15 per cent in 2029. Some minor increases in traffic volumes would also be experienced to the east of Moorebank Avenue, along Anzac Road and along Cambridge Avenue, west of Moorebank Avenue in 2019 and 2029.



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- 15 minute walking catchment area
- Operational rail link
- Existing railway
- Watercourse
- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access

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Figure 4-5: Walkable Catchment from Site

Table 4-3: Daily Traffic Volumes and Heavy Vehicle Volumes in 2019 (Opening Year)

Road Locations	2019 without the MLP East Precinct			2019 with the MLP East Precinct			Traffic Increase Contributed by the MLP East Precinct in 2019 (Opening Year)	
	All Vehicles (per day)	Heavy Vehicles (per day)		All Vehicles (per day)	Heavy Vehicles (per day)			
		No of Heavy Vehicles.	% of All Vehicles		No of Heavy Vehicles	% of All Vehicles	All Vehicles (per day)	% Increase in total traffic*
Moorebank Avenue, north of Anzac Road	23,200	1,200	5	27,320	1,760	6	4,120	18
Moorebank Avenue, south of Anzac Road	19,000	980	5	23,440	1540	7	4,440	23
Anzac Road, east of Moorebank Avenue	11,100	510	5	11,420	510	4	320	3
Moorebank Avenue, north of Cambridge Avenue	19,000	1,050	6	19,120	1,050	5	120	0.6
Cambridge Avenue, west of Moorebank Avenue	17,900	630	4	18,020	630	3	120	0.7

*Traffic increase contributed by the MLP East Precinct equals to facility traffic generation divided by background traffic.

Table 4-4: Daily Traffic Volumes and Heavy Vehicle Volumes in 2029 (10-Year Horizon)

Road Locations	2019 without the MLP East Precinct			2029 with the MLP East Precinct			Traffic Increase Contributed by the MLP East Precinct in 2029	
	All Vehicles (per day)	Heavy Vehicles (per day)		All Vehicles (per day)	Heavy Vehicles per day)			
		No of Heavy Vehicles.	% of All Vehicles		No of Heavy Vehicles	% of All Vehicles	All Vehicles (per day)	% Increase in total traffic*
Moorebank Avenue, north of Anzac Road	28,000	1,450	5	32,120	2,010	6	4,120	15
Moorebank Avenue, south of Anzac Road	23,500	1,220	5	27,940	1,780	6	4,440	19
Anzac Road, east of Moorebank Avenue	12,800	590	5	13,120	590	4	320	3
Moorebank Avenue, north of Cambridge Avenue	23,600	1,310	6	23,720	1,310	6	120 0	0.5
Cambridge Avenue, west of Moorebank Avenue	22,300	780	3	22,420	780	3	120 0	0.5

*Traffic increase contributed by the MLP East Precinct equals to facility traffic generation divided by background traffic.

5 MLP EAST PRECINCT TRANSPORT PROVISIONS

5.1 Car Parking Provisions

The EPBC Act CoA requires the facility to "reduce on-site car parking supply over-time (dependant on proportion of employees living locally and accessibility of public transport)". This section provides an overview of the baseline parking provisions for the MLP East Precinct, which represent the initial number of on-site parking spaces accommodated.

The Roads and Maritime Services (Roads and Maritime) key reference document for guidance on traffic generation and parking provision is the *Guide to Traffic Generating Development* (Roads and Maritime [formerly Roads and Traffic Authority], 2002) (The Guide). The Guide makes no specific requirement for minimum parking numbers required for intermodal terminals, in which this warehousing could be included.

For warehouses, it states that *"all new warehouses on undeveloped sites must provide on-site parking for all vehicles used by employees. In the case of wholly redeveloped sites each site is treated on its merit."*

For warehouse and office land uses, Roads and Maritime recommends the following car parking provision:

- One car space per 300 m^2 Gross Floor Area (GFA) for warehouses
- One car space per 40 m^2 GFA for offices/ commercial
- One car space per 20 m^2 GFA for retail.

Based on the Roads and Maritime parking standards and the proposed warehouse, and office GFAs for the MLP East Precinct, a total of 1,498 car parking spaces have been provided.

5.2 Bicycle Facilities Provisions

In accordance with SSD 7628 CoC B29(d), the end of trip facilities available for the warehouses will include undercover bike storage, showers and change facilities. The layout, design and security of bike facilities will comply with Australian Standard AS2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities. The specific design details are included in the Urban Design and Landscape Plan (UDLP) [SSS2-QPMS-EN-AP-00034] and individual Warehouse Operational Environmental Management Plans (WOEMP).

The *City of Sydney Development Control Plan 2012*, Section 3 – General Provisions specifies bicycle provisions for individual land uses, similar types of development and providing a standard which is mid-range (i.e. did not over or under provide). The guidelines stipulate the following on-site bike parking rates for Industry or Warehouse/Distribution Centres:

- 1 bicycle rack per 10 staff/employees
- 1 personal locker for each bike parking space
- 1 shower and change cubicle for up to 10 bike parking spaces
- 2 shower and change cubicles for 11 to 20 or more bike parking spaces are provided
- 2 additional showers and cubicles for each additional 20 bike parking spaces or part thereof.

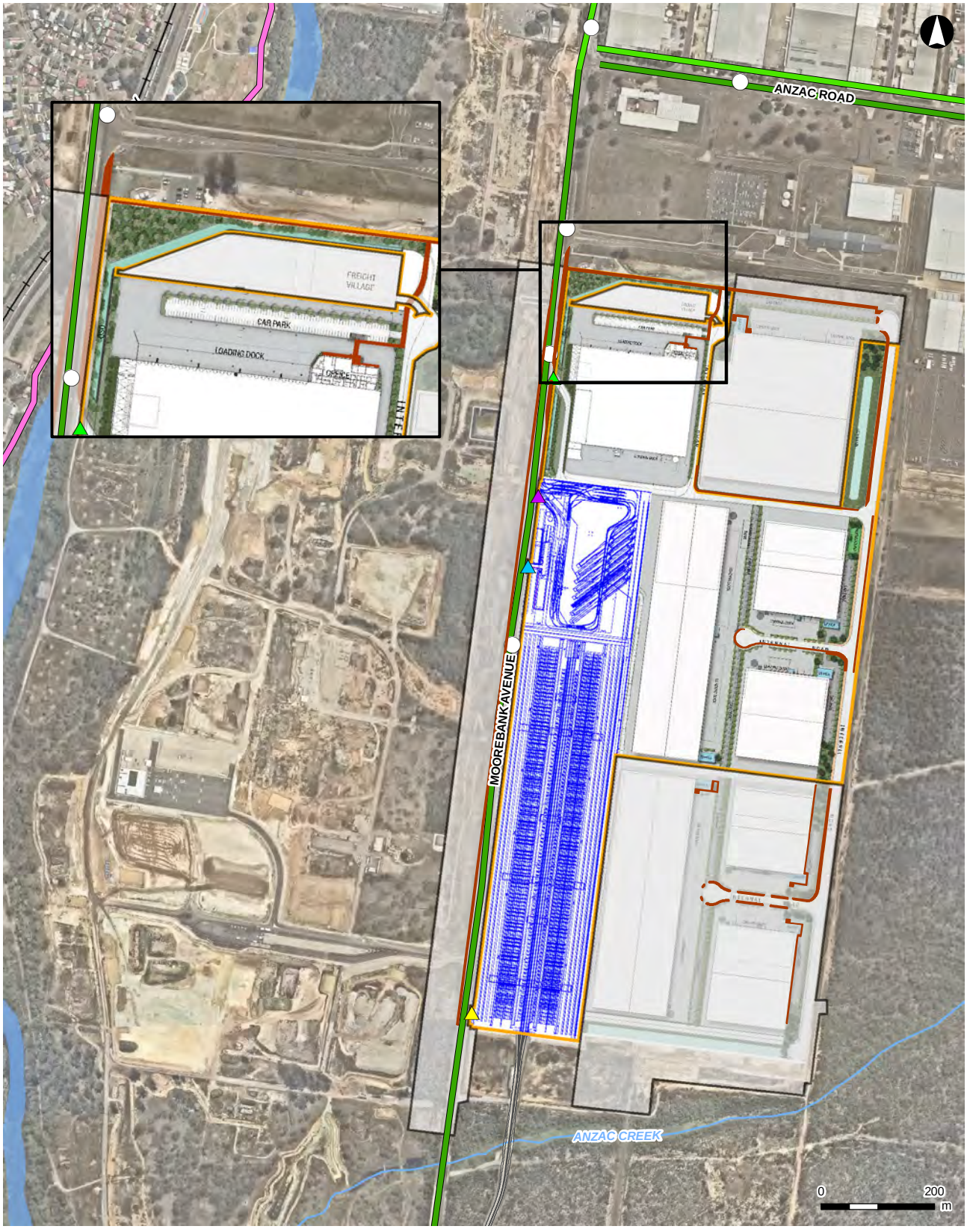
In accordance with CoC B141(d) (SSD 7628), the Cycling and Pedestrian Access and Facilities Sub Plan (CPAF), a sub plan to the MPE Stage 2 (SSD 7628) UDLP, details the specific provisions for undercover bicycle parking, showers and change room facilities for each tenant in accordance with the above guidelines.

5.3 MLP East Precinct and Cyclist Interconnectivity

Figure 5-1 shows the pedestrian and cyclist path interconnectivity across the MLP East Precinct.

5.4 Staged Delivery of Future Transport

Appendix A shows the evidence of discussions with relevant agencies/ authorities as required to facilitate the staged delivery of the public transport infrastructure in accordance with CoC B29(e).



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Existing bus stop
- Watercourse
- Existing railway

Liverpool Bike Plan (2017)

- Existing off road cycleway
- Existing on road cycleway
- Proposed off road cycleway
- Proposed shared path

- Warehouse access
- IMEX truck access
- IMEX office access
- Emergency access
- Operational rail link

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Figure 5-1: Pedestrian and cyclist connectivity

6 IMPLEMENTATION

Based on the existing transport network summarised in Section 4, this section identifies the potential travel patterns that might be anticipated as a result of the MLP East Precinct and surrounding development during the operational phase and identifies transport targets that would be achievable for staff and visitors of the precinct.

The following section provides a summary of the travel behaviour change program measures that will be implemented to encourage the use of sustainable transport modes for staff throughout the duration of operations of the MLP East Precinct.

6.1 Transport Access Guides

An example Transport Access Guide (TAG) has been for prepared for staff following consultation with TfNSW and bus operators and is included in Appendix B. The TAG describes ways to access the precinct through walking, cycling or public transport simplifying the process of trip planning for staff/ visitors; and will assist in increasing the proportion of trips made to the precinct through public and active transport modes. This TAG will provide information on:

- The location of bicycle parking and end-of-trip facilities and how to access these facilities
- Nearest public transport stops and stations
- Bus routes and trains services to the precinct and the frequency of these services
- Useful applications and travel information websites
- Car share pods near the precinct.

The TAG will be updated annually at a minimum, or as required, when additional stages become operational or construction works impact accessibility and in response to annual travel surveys where applicable, to ensure the information is accurate and up-to-date.

A “walking and cycling buddy scheme” will be established to encourage increased participation in active transport as part of the future updates to the TAG.

6.2 Monitoring

A travel survey will be undertaken annually to monitor and assess the effectiveness of this WTP in achieving the mode share targets and identification of additional measures required to encourage mode shift to sustainable transport modes.

An example of a travel survey has been provided in Appendix C. The travel survey will continue to be adapted to ensure that information on transport modes, working practices and challenges can be obtained as the MLP East Precinct becomes progressively operational.

6.3 Management Measures

This section describes the overall approach to managing and mitigating risks relating to workplace travel during the operation of the facility.

Management measures are summarised in Table 6-1. These measures are based on best practice and the compliance matrices detailed in Section 2.2, as well as Qube’s (Project Delivery Company) requirements and standards, which include, but are not limited to the following:

- SHEMS-QH-02-PR-0013 Legislative and Regulatory Obligations Procedure
- SHEMS-QH-09-PR-0058 Consultation and Communication Procedure
- SHEMS-QH-PR-0022 Corrective and Preventive Action Procedure
- SHEMS-QH-13-PR-0126 Incident Reporting

- SHEMS-QH-05-PR-0025 Records Management Procedure
- SHEMS-QH-06-PR-0046 Environmental Aspects and Impacts Identification Procedure
- SHEMS-QH-01-PO-0000 Safety Health and Environment Policy.

Table 6-1: Management Measures

ID	Management Measure	Timing	Responsibility	Reference
General				
WT1	Staff will be inducted on the WTP and the sustainable transport options and facilities that are available to them.	Operations	Site SHEQ Manager/Advisor Relevant staff manager	Best practice
Pedestrian and cyclist access and safety				
WT-2	End of trip facilities for each warehouse will be clearly marked across the MLP East Precinct	Prior to the commencement of operations	Warehouse Tenant	SSD 7628 CoC B29(c)
WT-3	Effective internal wayfinding signage to direct staff to bicycle parking and end of trip facilities will be installed and maintained across the MLP East Precinct	Operations	Warehouse Tenant	SSD 7628 CoC B29(c)
WT-4	Appropriate warning signage and traffic control will be installed and maintained to ensure that vehicles enter and exit the MLP East Precinct in a manner that does not impact on the safety of pedestrians and cyclists.	Operations	Warehouse Tenant	Best practice
WT-5	As per Appendix Kb of the MPES2 EIS, bicycle parking and end of trip facilities will be provided in accordance with the following rates at each warehouse and the freight village: • One bicycle rack per 10 staff/ employees • One personal locker for each bicycle parking space • One shower and change cubicle for up to 10 bicycle parking spaces • Two shower and change cubicles for 11 to 20 or more bike parking spaces are provided • Two additional showers and cubicles for each additional 20 bike parking spaces or part thereof. The design and security of bicycle facilities will comply with the minimum requirements of Australian Standard AS 2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities	Operations	Warehouse Tenant	SSD 7628 CoC B29(d)

ID	Management Measure	Timing	Responsibility	Reference
Shared Transport Initiatives				
WT-6	Assess the feasibility (by taking into account the results of the annual staff trip survey and in consultation with TfNSW) of providing a peak-hour express shuttle bus service to and from Liverpool Station via Moorebank Avenue, with a potential expansion to this route over time to include Holsworthy Railway Station and Glenfield Railway Station.	Annually	Estate Manager	EPBC Act CoA
WT-7	Conduct an annual review to determine the feasibility of reducing on-site car parking supply over-time (dependant on proportion of employees living locally and accessibility of public transport)	Annually	Operations Manager Warehouse/Area Manager Site SHEQ Manager/Advisor	EPBC Act CoA
WT-8	Utilise staff notice boards, newsletters and social media opportunities to inform staff of available sustainable transport options and facilities and allow them to sign onto initiatives such as carpooling/car share schemes	Annually	Estate Manager	EPBC Act CoA
WT-9	Undertake staff surveys to identify the travel mode share, use and demand of facilities, access records to inform future updates of this WTP	Annually	Site SHEQ Manager/Advisor	EPBC Act CoA
WT-10	Maintain a TAG that effectively informs staff of the following: • Safe and accessible cycling routes as well as end-of-trip facilities provided within the facility • Public transport modes and routes • Surrounding facilities nearby, including food, entertainment and shopping • Promote the cost savings of car share over commuting via private vehicle to staff of the MLP East Precinct The TAG will be updated annually at a minimum, or as required, when additional stages identified in Section 1.3 become operational, or construction work impacts the Facility's accessibility, to ensure the information is accurate and up-to-date.	Annually	Estate Manager	EPBC Act CoA SSD 7628 CoC B29(b)
WT-11	Promote participation in events such as "National Walk to Work Day"	Annually	Estate Manager	EPBC Act CoA
WT-12	Estate Manager to undertake the following activities: • Review WTP to ensure that the objectives are being met • Travel surveys have been conducted • WTP and TAGs will be updated to more effectively achieve sustainable travel targets	Annually	Estate Manager	EPBC Act CoA SSD 7628 CoC B29

ID	Management Measure	Timing	Responsibility	Reference
WT-13	A “walking and cycling buddy scheme” will be established to encourage increased participation in active transport as part of the future updates to the TAG.	Operations	Operations Manager Warehouse/Area Manager Site SHEQ Manager/Advisor	EPBC Act CoA SSD 7628 CoC B29
WT-14	Installation of a bus interchange / waiting at the MLP East Precinct site will be considered in consultation with TfNSW, provided demand is identified in the annual staff travel survey	Operations	Operations Manager Warehouse/Area Manager Site SHEQ Manager/Advisor	EPBC Act CoA
WT-15	The provision of future bus facilities including a 901 bus stop and an additional regular attractive public bus service near the MLP East Precinct site access point will consider the realignment of Moorebank Avenue and will be provided in consultation with TfNSW and if demand is identified for one in the MLP East Precinct annual staff travel survey	Operations	Operations Manager Warehouse/Area Manager Site SHEQ Manager/Advisor	EPBC Act CoA
WT-16	Investigate the viability of forming a steering group to oversee the development and management of the precinct wide WTP.	Operations	Operations Manager Warehouse/Area Manager Site SHEQ Manager/Advisor	EPBC Act CoA
WT-17	Provide a focus group for the MLP East Precinct if an assessment of warehouse tenants desire for a focus group is identified through the MLP East Precinct annual staff travel survey.	Operations	Operations Manager Warehouse/Area Manager Site SHEQ Manager/Advisor	EPBC Act CoA

7 REPORTING AND REVIEW

7.1 Reporting

Reporting requirements for this Workplace Travel Plan for monitoring, auditing and as required in the CoCs will be undertaken in accordance with the overarching OEMP [PREC-QPMS-EN-PLN-0001]. Reporting requirements applicable to this WTP are summarised in Table 7-1.

Table 7-1: WTP Reporting Requirements

Requirement	Area/Location	Responsibility	Frequency
Annual reporting of employee numbers to DP&E, TfNSW and RMS	MLP East Precinct	Site SHEQ Manager/Advisor	Annually for a period commencing one year from commencement of operation up to and including 5 years from occupation of final building. Annual reporting of employee numbers will be provided in the Biannual Trip Origin Destination Report (BTODR).

7.2 Review and Improvement

Review and improvement of this WTP and TAGS will be undertaken annually at a minimum, or as required under the following circumstances to ensure the information is accurate and up-to-date:

- As additional stages, as identified in Section 1.3, become operational
- As changes to bus services occur following outcomes of negotiations with the relevant authority
- Responses to annual travel surveys, if applicable.
- When construction work impacts the Facility's accessibility
- In accordance with the CoCs and Section 6.2 of the OEMP [PREC-QPMS-EN-PLN-0001]

Continuous improvement will be achieved by the ongoing evaluation of environmental management performance and effectiveness of this plan against environmental policies, objectives and targets.

A copy of the updated plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure, as outlined in Section 1.4.1 of the OEMP.

The annual WTP reviews will be implemented for the life of the operation of the MLP East Precinct.

7.3 Incidents

All workplace travel incidents will be reported and managed in accordance with Qube's Incident Reporting and Management Procedure (SHEMS-QM-13-PR-0126). Incidents are classified based on the incident's severity as shown in Section 4.6 of the OEMP [PREC-QPMS-EN-PLN-0001].

All incidents will be managed and reported according to Section 4.6 of the OEMP.

7.4 Complaints

All workplace travel complaints will be handled in accordance with Section 4.5.1 of the OEMP and the Community Communication Strategy (CCS).

7.5 Non-Compliance, Non-Conformances and Corrective Actions

All workplace travel non-compliances, non-conformances and resulting corrective actions are to be managed in accordance with Section 6.4 of the OEMP.

APPENDIX A EVIDENCE OF NEGOTIATIONS WITH RELEVENT AGENCIES TO SATISFY COC B29(E)

TECHNICAL NOTE

ARCADIS Design & Consultancy for natural and built assets

Date	10/04/2019
To	Ibrahim Awad
From	Divna Cvetojevic
Copy to	Nathan Cairney
Subject	Moorebank Precinct East Stage 2 – Public transport provisions component of the Workplace Travel Plan – SSD 7628 Condition of Consent B29(e)

1.0 Background and Purpose

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stages 1 and 2 of the Moorebank Precinct East (MPE) Project (SSD 6766 and SSD 7628 respectively), which comprise two stages of development under the MPE Concept Approval (MP10_0193), hereafter referred to the Moorebank Logistics Park (MLP) East Precinct.

State approval for MPE Stage 1 was originally received on 12 December 2016 and subject to appeal, with revised Conditions of Consent (CoC) issued from the Land and Environment Court on 13 March 2018; approval for MPE Stage 2 was received on 31 January 2018. The EPBC Act approval for the MPE Concept was granted by Commonwealth Department of the Environment and Energy (DotEE) in March 2014 (No. 2011/6229).

The MLP East Precinct includes the operation of the Rail Link, Import Export Terminal and warehousing and distribution facilities.

MPE Stage 2 CoC B29 requires the development of a Workplace Travel Plan (WTP) and states:

> *Prior to the issue of any Occupation Certificate, the Applicant must prepare a Workplace Travel Plan to the satisfaction of the Secretary.*
>
> *The Workplace Travel Plan must form part of the Operational Traffic and Access Management Plan, required by condition C3, and must:*
>
> a. *be prepared in consultation with TfNSW;*
> b. *outline facilities and measures to promote public transport usage, such as car share schemes and employee incentives;*
> c. *describe pedestrian and bicycle connections and linkages to and from the site from Moorebank Avenue and within the site including between warehouse and the freight village;*
> d. *describe end of trip facilities available on-site which must include under cover bike storage, showers and change facilities - the layout, design and security of bicycle facilities must comply with the minimum requirements of Australian Standard AS 2890.3 – 1993 Parking Facilities Part 3: Bicycle Parking Facilities*
> e. *include the results of negotiations with the relevant agencies/ authorities as required to facilitate the staged delivery of the public transport infrastructure including:*
>
> (i) *construction of a covered bus drop-off/ pick up facility within the site to encourage the use of buses for employees*
>
> (ii) *review and rationalisation of the locations of Route 901 bus stops in the vicinity of the site to match the proposed northern terminal entry location and enhance accessibility*

(iii) *peak period and SIMTA shift work responsive express buses to /from the site and Liverpool Station via Moorebank Avenue and Newbridge Roads with frequency dependent on the development of the site*

(iv) *peak period express buses to/ from the site and Holsworthy rail station via Anzac Road, Wattle Grove Drive and Heathcote Road with frequency dependent on the development of the site*

(v) *potential to extend the Route 901 bus through the site via the light vehicle road and increasing peak period bus service frequencies to better match the needs of existing and future employees of the locality with frequency dependent on the extent of development of the site*

(vi) *changes to existing bus stop locations and the identification of new bus stop locations if required*

f. *include provision of annual reporting of employee numbers to DP&E, Transport for NSW and RMS for a period commencing one year from commencement of operation up to and including 5 years from occupation of final building*

g. *The Applicant must ensure that the Workplace Travel Plan is implemented for the life of the development.*

The WTP required by this CoC was prepared by Arcadis in April 2019 (document reference number: PREC-QPMS-EN-PLN-0007). This Technical Note has been prepared to specifically address CoC B29 (e) of the CoC and its subparts and provides the background assessment required to inform the consultation with Transport for NSW (TfNSW) and other relevant agencies and authorities, the results of which will be appended to the WTP.

As the MLP East Precinct site will become operational incrementally as warehouses are constructed and tenanted, the public transport proposals and recommendations documented in this Technical Note are based on the projected staff movements and travel demand under the ultimate (i.e. fully operational) occupancy and operation of the MLP East Precinct.

2.0 Approach

The approach to addressing the CoC B29 (e) requirements for the MLP East Precinct included:

- Review of background information, including detailed assessment and demand forecasting undertaken during the preparation of the Environmental Impact Statement and existing bus and train timetable information
- Site inspection, which was carried out on Thursday 21 March during the AM peak period
- Demand analysis and assessment of the requirements of the CoC, providing recommendations for discussion with TfNSW and relevant agencies/ authorities.

This Technical Note provides the recommended approach for public transport services for the MLP East Precinct, which will form the basis of consultation and agreement with TfNSW and bus operators.

3. MLP East Precinct Overview

3.1 Employee Forecast and Travel Demand

The MLP East Precinct will operate 52 weeks of the year, seven days per week and 24 hours per day. Staff for the operation and maintenance of MLP East Precinct will work across three shifts per day, with administrative staff on-site from 8.30am to 5pm. The operational and maintenance staff shifts are:

- 6am to 2pm
- 2pm to 10pm
- 10pm to 6am.

These shifts are generally outside the general road network peak periods. The forecasted daily trip generation for the facility is approximately 3,993 two-way light vehicle movements each weekday, (as per the Environmental Impact Statement (EIS) (Arcadis, December 2016)).

During operations, most staff will arrive in the hour prior to the typical shift start time and depart in the hour after the typical shift end time. However it is anticipated that many will also arrive and depart in other periods to access the area surrounding the site (such as food outlets during meal breaks, or to carry out maintenance activities and deliveries).

Daily arrival and departure demands were estimated throughout the day based on traffic profiles recorded by tube counters placed on key roads in Eastern Creek in June and November 2015 (refer to Appendix K of the EIS, Arcadis, December 2016). Eastern Creek was selected for sample traffic surveys, since it is an area with comparable land uses (including warehousing) as the MLP East Precinct, providing representative arrival and departure profiles. The average inbound and outbound profile based on the surveys showed that:

- For sites generally operating two shifts per day, the peak arrival hourly demand of about 24 per cent of the daily arrival traffic was surveyed and the peak departure hourly demand of about 20 per cent of the daily departure volumes was observed
- For precincts, which contained numerous warehouses with different operating patterns the peak arrival and departure demands, do not all occur at the same time, resulting in a spread-out profile, with peak hour arrival and departure volumes of about 12 to 13 per cent observed.

Based on these observed profiles, an assumption on arrival and departure profile of staff vehicles surrounding shift start/ end times for MLP East Precinct is shown in Figure 1. The resultant peak hour arrival and departure demand is approximately 15 per cent of the respective daily arrival and departure demands and is slightly higher than the surveyed results for Eastern Creek.

Figure 1: Warehouse staff arrival and departure pattern

The arrival profiles provided in Figure 1 are used to determine the frequency and timeframes when public transport measures are implemented.

3.2 Existing Public Transport Provisions

The MLP East employee public transport mode share of approximately 30 per cent of all trips is currently considered feasible, based on the assumption that a significant proportion of employees live locally. All reasonable steps would be taken to encourage staff to use public transport, walk and cycle to reduce the dependence on travel to and from the site by private motor vehicle.

However, the current low public transport usage (two per cent) within the Moorebank catchment area is due to the MLP East Precinct currently being poorly serviced by public transport. Approximately 80 per cent of people surveyed travelled to work by private vehicle (driver and passenger), while two per cent of workers travelled by public transport. The remainder of trips comprised walking/ cycling trips (six per cent), indicating that a proportion of employees live locally. The remainder worked from home, did not travel, or the travel mode was not stated (six per cent).

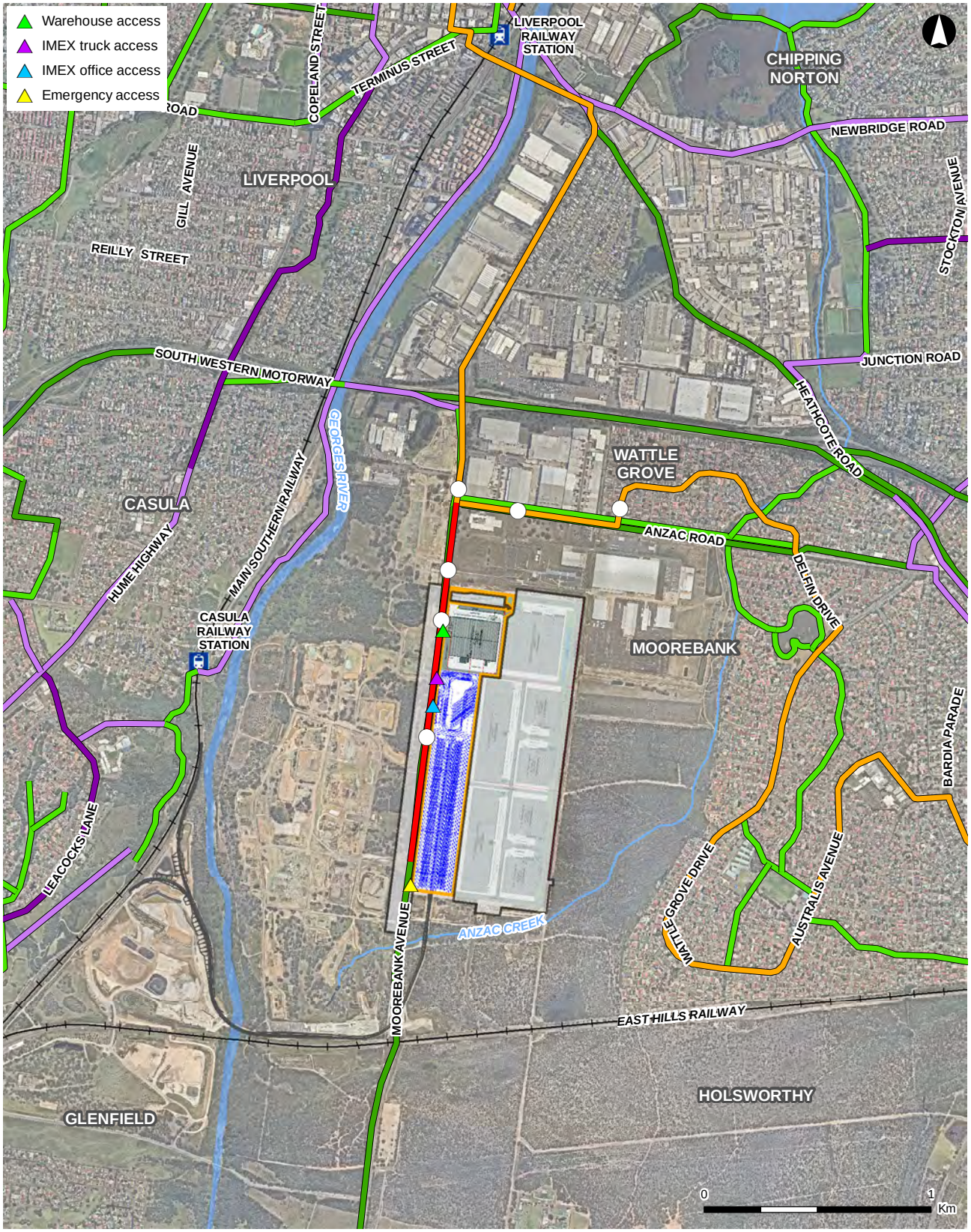
As shown in Figure 2, the MLP East Precinct is serviced by a single bus service (route 901). While bus stops are located on Moorebank Avenue, including the MLP East Precinct frontage, these are limited service bus stops, which are supported by a single 901 bus service during the AM and PM peak periods only. Regular service bus stops, are supported by all 901 route bus services, are located at the Moorebank Avenue/ Anzac Road intersection (north of Anzac Road) and along Anzac Road with all bus services stopping at these stops. The regular service bus stop (north of Anzac Road) is located approximately 750 metres north of the MLP East Precinct and closest warehouse, however, as all warehouses share the same entrance, the walking distance for staff at the other warehouses will be longer.

Overall, bus route 901 operates as a feeder service to the Liverpool and Holsworthy train stations. The train services provide good transit connectivity to major destinations in the South West Sydney area and the wider Sydney metropolitan region. However, due to the long walking distance from the MLP East Precinct to the 901 bus service's regular service bus stops, and only the limited peak period services bus stops being readily accessible to the MLP East Precinct, connectivity of the MLP East Precinct to Liverpool and Holsworthy train stations is considered to be limited.

A summary of the service details for each public transport service operating near the MLP East Precinct (bus and train) is provided in Table 1.

Table 1: Public transport services operating in the vicinity of the MLP Eat Precinct

Mode	Stop/ station	Route description	Significant destinations on route	Service frequency
Bus	Moorebank Avenue/ Anzac Road intersection	Route 901 (standard route), Liverpool to Holsworthy	Liverpool train station, Liverpool Westfield shopping centre, Wattle Grove shops, Holsworthy train station	30 mins (peak) 60 mins (off-peak)
	Moorebank Avenue (site frontage)	Route 901 (via precinct), Liverpool to Holsworthy		One service during each AM and PM peak
Train	Liverpool train station	T2 Inner West and South Line	Strathfield, Sydney CBD	30 mins (peak) 60 mins (off-peak)
		T3 Bankstown Line	Bankstown, Sydney CBD	15 mins (peak) 30 mins (off-peak)
		T5 Cumberland Line	Parramatta, Blacktown, Glenfield, Campbelltown	30 mins (peak) 30 mins (off-peak)
	Holsworthy train station	T2 Airport and South Line	Airport, Sydney CBD, Glenfield, Campbelltown	8 mins (peak) 20 mins (off-peak)



LEGEND

- MLP East Precinct construction area
- MLP East Precinct operational area
- Bus route 901
- Limited service bus route
- Existing railway

Liverpool Bike Plan (2017)

- Existing off road cycleway
- Existing on road cycleway
- Proposed off road cycleway
- Proposed on road cycleway

- Existing bus stop
- Rail station
- Watercourse
- Operational rail link

ARCADIS AUSTRALIA PACIFIC PTY LTD
ABN 76 104 485 289
Level 16, 580 George St | Sydney NSW 2000
P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001

Coordinate System: GDA 1994 MGA Zone 56
Aerial imagery supplied by nearmap (Dec, 2018)

1:25,000 at A4

Figure 4-1: Local public transport and pedestrian/cyclist network

4.0 Assessment of CoC Requirements

This section addresses the requirements of the CoC B29 item (e) and provides the recommendations for public transport provisions to service the MLP East Precinct.

(i) Construction of a covered bus drop off/ pick up facility within the site to encourage the use of buses for employees

The regular service bus stop (north of Anzac Road) is located approximately 750 metres north of the MLP East Precinct and closest warehouse (warehouse 1), which is greater than the generally accepted walking distance of 400 metres to a frequent bus service. Additionally, since all warehouses share the same access point, the walking distance for staff at the other warehouses will be longer.

The MLP East Precinct's internal road network includes two main internal roads, which provide the main east-west (Internal Road 1) and north-south (Internal Road 2) traffic movements throughout the MPE Stage 2 site. Two internal main roads will be connected to three service roads, which would provide vehicle access to warehouses, loading docks and car parking. Internal Road 2 would provide for traffic movements along the entire eastern perimeter of the facility and would have cul-de-sacs at both its northern and southern ends to allow vehicles to turn around.

At full operation of the MLP East Precinct, the internal roads will be two lanes wide (one lane in each direction) and wide enough to accommodate heavy vehicle turning movements, including B-doubles, as well as bus movements. Service roads also provide access to light vehicle parking for employees of the warehouses.

Based on an assessment of the ultimate development scenario, to effectively encourage public transport use for employees of the MLP East Precinct, a peak period bus service frequency of 15 minutes would be required during shift changeover times within acceptable walking distance (less than 400 metres) of the whole MLP East Precinct. As the site becomes operational incrementally and the employees' origins and destinations become evident, the most appropriate staged public transport arrangement and bus frequency will be determined and delivered. As documented in the WTP, the Estate Manager is responsible for carrying out a travel survey annually to enable the assessment of the effectiveness of the WTP in achieving the mode share targets. The example travel survey provided in Appendix D of the WTP will be effective for establishing the origins and destinations of employees and their mode choices and influences for how they travel.

The provision of covered bus drop-off and pick-up facilities within the site is intended to encourage public transport use by employees and could be accommodated along the internal road network. The preliminary location identified for a potential covered bus stop facility is between warehouses 3 and 4 on the eastern side of the MLP East Precinct site. This location is relatively central to the site and could be easily accessed by employees from the warehouses, which will generate the most trips for the MLP East Precinct.

The considerations for implementing a covered bus drop-off/ pick-up facility within the site in the recommended location between warehouses 3 and 4 will be discussed with TfNSW and relevant agencies during the consultation process and any agreements made will be reflected in the implementation of the facility. However, it is noted that for the proposed internal bus stop to be serviced by an existing public bus service may cause delays and reduce bus service efficiency (see item (v)) and may not adequately service the shift changeover periods, which occur outside general network peak periods.

(ii) Review and rationalisation of the locations of Route 901 bus stops in the vicinity of the site to match the proposed northern terminal entry location and enhance accessibility

As shown in Figure 2, the MLP East Precinct is serviced by a single bus service (route 901). While bus stops are located on Moorebank Avenue, including the MLP East Precinct frontage, these are limited service bus stops, which are supported by a single 901 bus service during the AM and PM peak

periods only. Regular service bus stops[1] are supported by all 901 route bus services, are located at the Moorebank Avenue/ Anzac Road intersection (north of Anzac Road) and along Anzac Road with all bus services stopping at these stops. The regular service bus stop (north of Anzac Road) is located approximately 750 metres north of the MLP East Precinct and closest warehouse, however, as all warehouses share the same entrance, the walking distance for staff at the other warehouses will be longer.

Due to poor public transport services in the area surrounding the MLP East Precinct, a very low percentage of workers residing in the area currently use public transport to travel to work. To improve bus transport access to the Facility and to provide a reasonable walking distance to all proposed warehouses and offices within the Facility, additional bus stops could be located near the Moorebank Avenue access to warehouses as illustrated in Figure 3.

The demand associated with rationalising the bus stops for route 901 and providing an additional regular bus service near the MLP East Precinct access points would be dependent on the origin of employees and would have to be assessed at various stages as the site becomes operational. As documented in the WTP, the Estate Manager is responsible for carrying out a travel survey annually to enable the assessment of the effectiveness of the WTP in achieving the mode share targets.

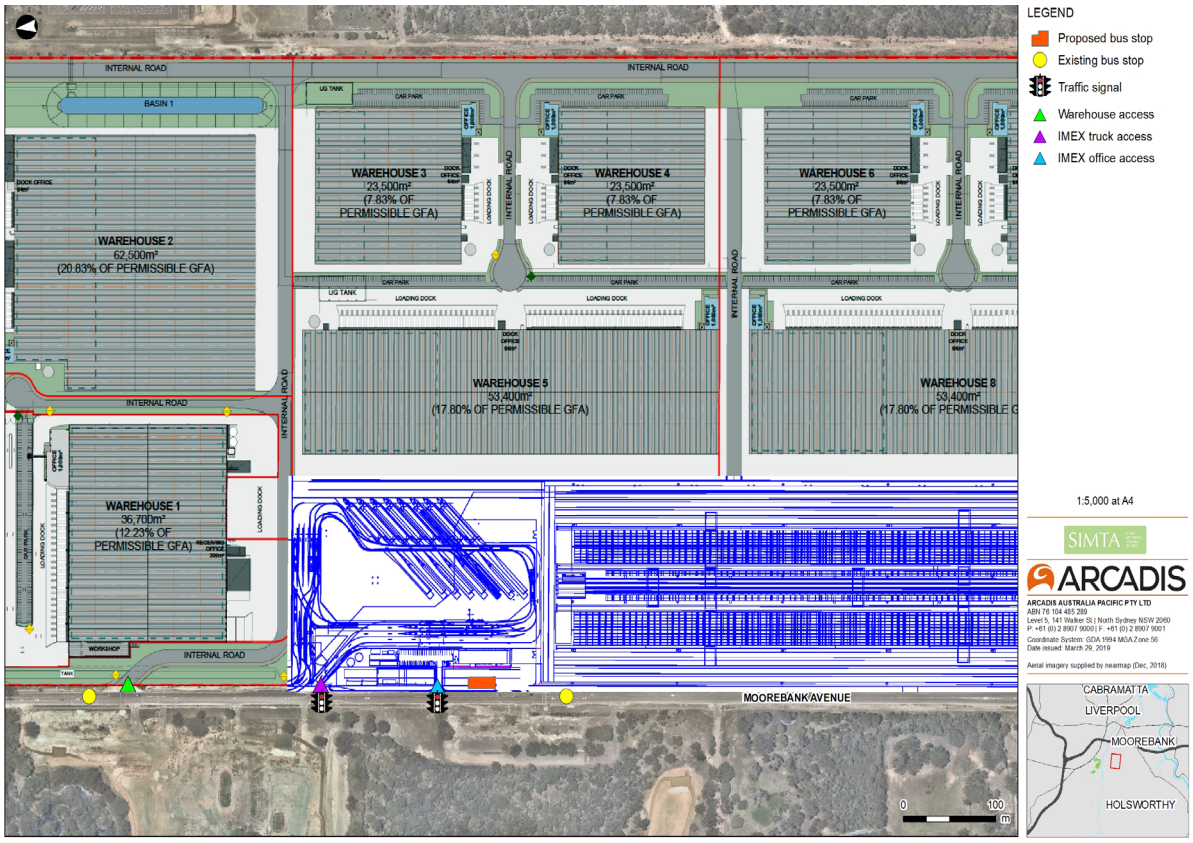


Figure 3: Existing and proposed bus route 901 stops

Generally, the existing pedestrian infrastructure in the area is considered adequate, with a sealed footpath provided on one side of Moorebank Avenue (the western side) with pedestrian crossing facilities located at signalised T-intersections along Moorebank Avenue. An off-road shared path (cycle/ pedestrian) will be located on the western side of Moorebank Avenue upgrade providing a

[1] The regular service stops operate on a more frequent basis on an approximate half hourly basis on Monday to Friday from 5:32am to 9:51pm, hourly basis on Saturday from 7:02am to 6:34pm and hourly basis on Sunday from 8:21am to 5:34pm.

connectivity to the MLP East Precinct and surrounding pedestrian infrastructure and proposed bus stops.

(iii) Peak period and MPE shift work responsive express buses to/ from the site and Liverpool Station via Moorebank Avenue and Newbridge Roads with frequency dependent on the development of the site

Bus route 901 generally operates as a feeder service to Liverpool Station. The train services at Liverpool Station provide good connectivity to major destinations in the South West Sydney area and the wider Sydney metropolitan region. However, due to the long walking distance from the MLP East Precinct to the 901 bus service's regular service bus stops, and only the limited peak period services bus stops being readily accessible to the MLP East Precinct, connectivity of the MLP East Precinct to Liverpool Station is considered to be limited.

Items (i) and (ii) of CoC B29 include implementing an additional bus stop facility within the site and a rationalisation of the bus stops along Moorebank Avenue, respectively. These measures would assist in providing better access from the whole MLP East Precinct to public bus services. However, these measures alone are unlikely to facilitate the shift work times associated with the operation of the MLP East Precinct. Therefore, with consideration of the arrival and departure demand for the shifts and origin of employees for the fully developed MLP East Precinct, the provision of an express shuttle bus service (additional to the existing 901 bus route) to and from Liverpool Station via Moorebank Avenue and Newbridge Roads is considered feasible to encourage mode shift on opening of the facility.

The proposed route to and from Liverpool Station is illustrated in Figure 4 will be confirmed and considerations for its implementation agreed with TfNSW and relevant agencies as part of the consultation process.

The combined impact of potential bus measures to contribute to achieving increased public transport usage for employees of the MLP East Precinct would be assessed as the site becomes operational incrementally. As documented in the WTP, the Estate Manager is responsible for carrying out a travel survey annually to enable the assessment of the effectiveness of the WTP in achieving the mode share targets.

Based on the anticipated arrival and departure demand profile, the introduction of peak arrival and departure period (two hours before and two hours after each shift) express shuttle buses with a proposed 15-minute frequency, is considered feasible and will be agreed with TfNSW as part of the consultation process

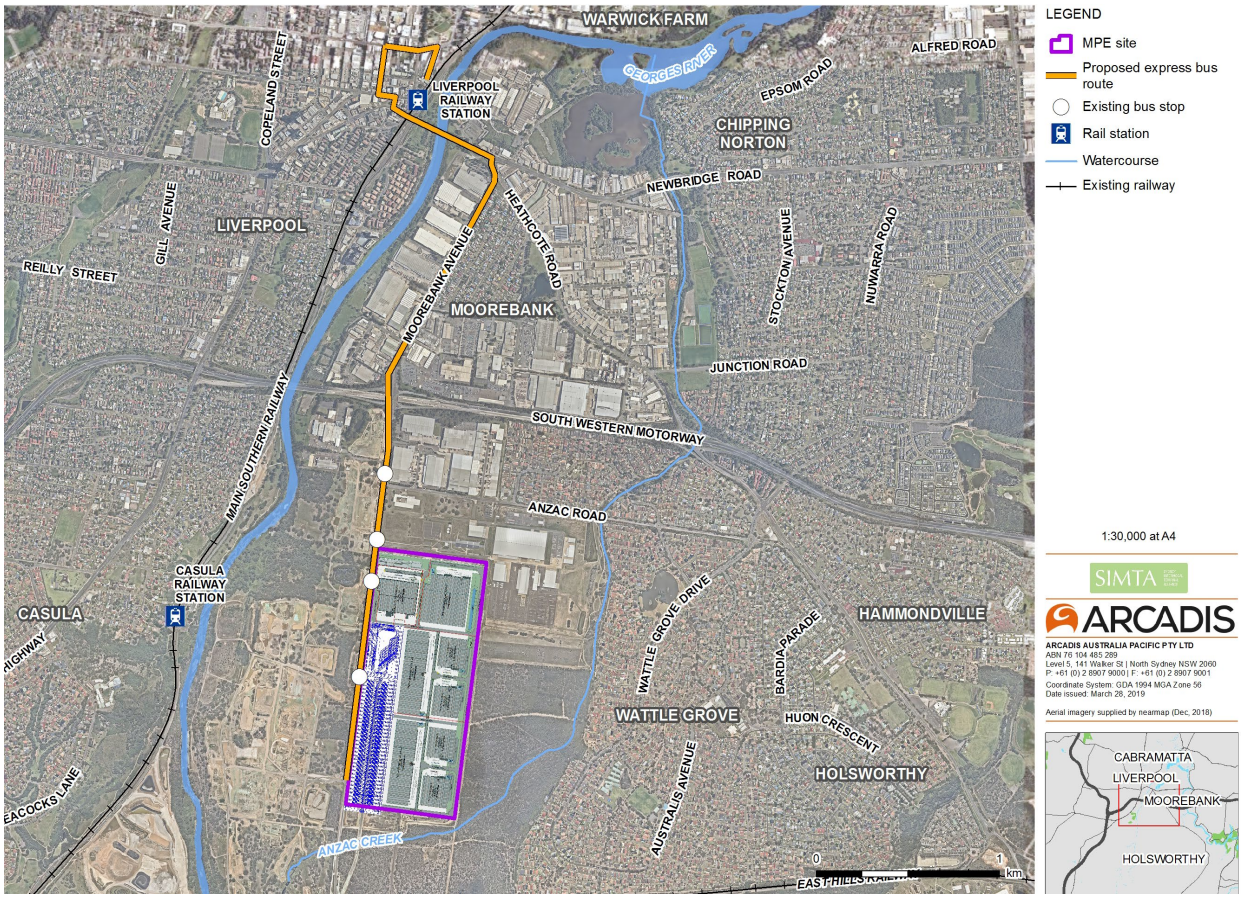


Figure 4: Proposed express shuttle bus route from/ to the site and Liverpool Station

(iv) Peak period express buses to/ from the site and Holsworthy rail station via Anzac Road, Wattle Grove Drive and Heathcote Road with frequency dependent on the development of the site

The frequency and extent of train services to and from Holsworthy Station are more limited than services at Liverpool Station. Therefore, a potential express shuttle bus service between MLP East Precinct and Holsworthy Station will be reviewed as an extension to the proposed express shuttle bus service to/ from Liverpool Station.

Based on the ultimate solution data assessment, the peak shift changeover periods express shuttle buses to/ from site and Holsworthy Station are considered feasible. However, based on the outcome of the annual staff travel surveys to be undertaken by the Estate Manager, the potential demand for an express shuttle bus service to/ from Holsworthy Station will be reviewed as the MLP East Precinct becomes operational.

The proposed express shuttle bus route presented in Figure 5 is considered the most appropriate to access Holsworthy Station and considerations for potentially implementing this service will be further discussed with TfNSW as part of the consultation process.

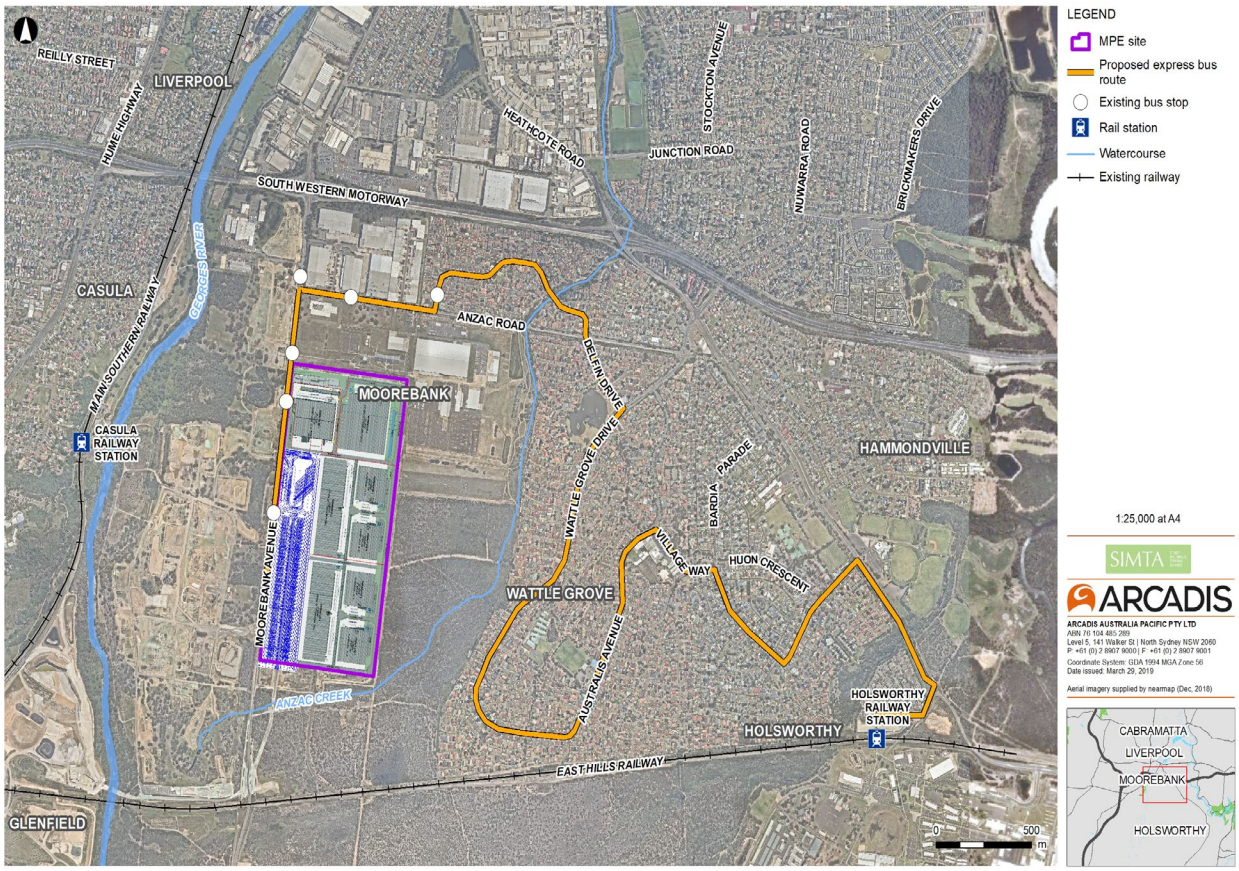


Figure 5: Potential express shuttle bus route from/ to the site and Holsworthy Station

(v) Potential to extend the Route 901 bus through the site via the light vehicle road and increasing peak period bus service frequencies to better match the needs of existing and future employees of the locality with frequency dependent on the extent of development of the site

Based on the proposed internal road network capacity and alignment assessment, there will be adequate internal road network to accommodate the potential extension of bus route 901 through the site during peak periods. However, based on the potential delays and possible impacts on the service efficiency, it is recommended to increase frequency of the 901 bus service along the existing route along the Moorebank frontage of the MLP East Precinct. It is also recommended to introduce new express shuttle bus services to and from Liverpool Station at the start of operation of the MLP East Precinct to reflect the shift changes, with the potential to extend the express shuttle bus services to Holsworthy Station as the need is realised.

The required regular assessment of the conditions and demands in the future development occupancy stages will inform of the specific public transport requirements and implemented options will be further amended based on the review results.

As part of the consultation process with TfNSW consideration will be given to potentially increasing the frequency of the 901-bus service and the proposed bus stops on Moorebank Avenue (refer to items (ii) and (vi)).

(vi) Changes to existing bus stop locations and the identification of new bus stop locations if required

As shown in Figure 2, the MLP East Precinct is serviced by a single bus service (route 901). While bus stops are located on Moorebank Avenue, including the MLP East Precinct frontage, these are limited service bus stops, which are supported by a single 901 bus service during the AM and PM peak periods only. Regular service bus stops[2], are supported by all 901 route bus services, are located at the Moorebank Avenue/ Anzac Road intersection (north of Anzac Road) and along Anzac Road with all bus services stopping at these stops. The regular service bus stop (north of Anzac Road) is located approximately 750 metres north of the MLP East Precinct and the closest warehouse, however, as all warehouses share the same entrance, the walking distance for staff at the other warehouses will be longer.

To improve bus transport access to the MLP East Precinct site and to provide a reasonable walking distance from bus services to all warehouses and offices within the MLP East Precinct site, an additional bus stop is proposed near the Moorebank Avenue/ MLP East Precinct site office signalised intersection and is presented in Figure 3, which would be serviced by the proposed express shuttle buses to/ from Liverpool Station.

In relation to the bus stops spacing, as a guide, bus stops are generally to be spaced at 200 to 400-metre intervals. The number of bus stops is kept to a practical minimum to reduce journey times and passenger delays. The proposed bus stops will be placed on the departure side of a pedestrian crossing to reduce the risk of passengers crossing the road in front of a stopped bus.

Bus stop design elements and civil construction requirements (kerb types, passenger waiting area and lighting) are in accordance with *AS 1428.1—2001 Design for Access and Mobility*.

5.0 Conclusion and Next Steps

Based on the requirement for the continued promotion of the public transport, all reasonable steps will be taken to encourage staff to use public transport, walk and cycle and reduce the dependence on travel to and from the site by private motor vehicle. The measures identified to encourage the use of sustainable transport modes for staff throughout the duration of operations of the MLP East Precinct are documented in the WTP.

To facilitate the public transport requirements of the MLP East Precinct and encourage a 30 per cent mode share to public transport, the following is recommended:

- Additional bus stops serviced by bus route 901 are installed on Moorebank Avenue near the IMEX admin office and warehouse site access
- Bus frequency increase to 15 minutes interval in peak times
- Introduction of an express shuttle bus service to/ from the MLP East Precinct to Liverpool Station to reflect shift change times, providing services through the facility to warehouses 3 and 4.
- As the MLP East Precinct becomes incrementally operational and the travel behaviour of employees is determined through the annual staff travel survey, consideration to be given to extending the express shuttle bus services to Holsworthy Station and through the facility to warehouses 3 and 4.

Consultation with TfNSW and relevant agencies will be undertaken to determine the considerations of the recommendations contained within this Technical Note and the implementation of the proposed measures confirmed.

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[2] The regular service stops operate on a more frequent basis on an approximate half hourly basis on Monday to Friday from 5:32am to 9:51pm, hourly basis on Saturday from 7:02am to 6:34pm and hourly basis on Sunday from 8:21am to 5:34pm.

APPENDIX B EXAMPLE TAG

MLP East Precinct Transport Access Guide

Your guide to accessing MLP East Precinct by active and public transport

MLP East Precinct is located close to a number of bus, rail and cycling services providing staff and visitors with access to public transport. This Transport Access Guide (TAG) provides basic information for getting to and from the Facility by public transport, walking, cycling and driving.

Travel by train

MLP East Precinct is a 3.7km walk from Liverpool Station, which provides services to Central, Richmond, Bankstown and Leppington across the Sydney Trains Network.

Hop on a bus

The regular 901 bus service is accessible from the bus stop near the corner of the Moorebank Avenue and Anzac Road intersection, 650 metres walk from the Warehousing entrance and 950 metres walk from the IMEX Terminal Administration Entrance. The limited 901 bus service is accessible from a bus stop just outside the Warehousing entrance and 150 metres walk from the IMEX Terminal Administration Entrance. See sydneybuses.info

Walking

Include walking in your trip to MLP East Precinct and increase your daily physical activity. Walk from home, work, bus stop or train station. Liverpool Station is 3.7km walk away, which achieves your 20,000 steps for the day!

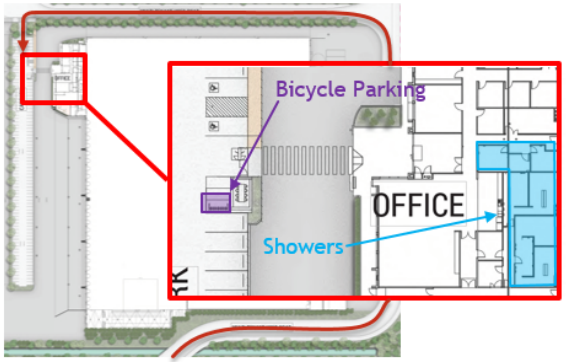
Driving

There is only a limited amount of parking spaces available. Carpooling or ride-sharing to work can help to reduce your travel costs, carbon footprint and improve workplace culture by getting you to know your colleagues better.

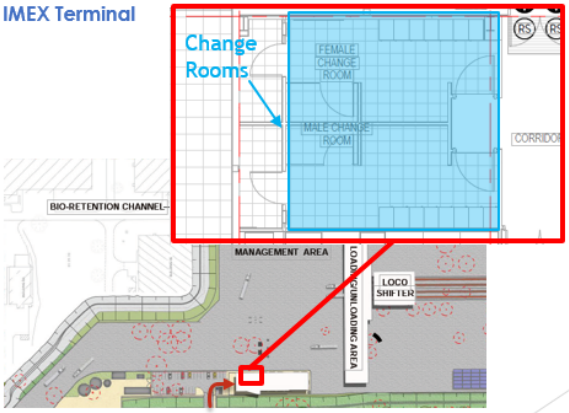
Get on your bike

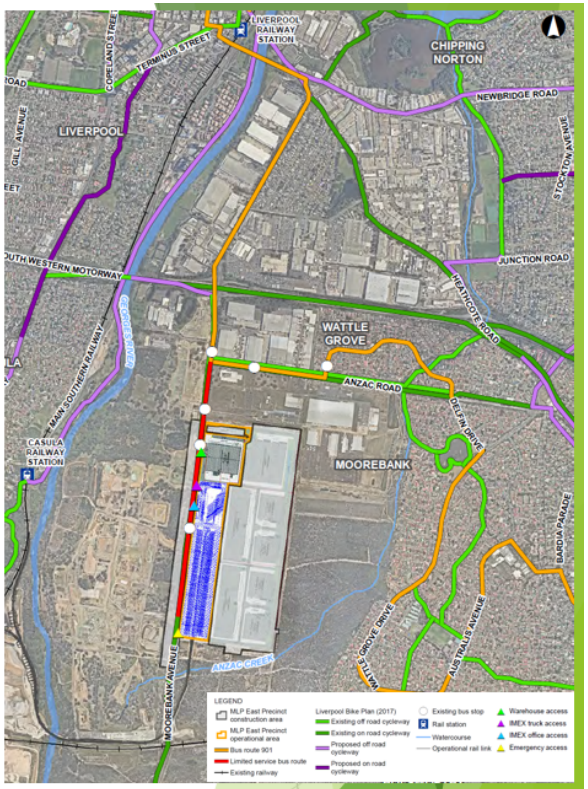
Improve your health and reduce greenhouse gas emissions by cycling, or combine cycling with taking public transport for part of your journey. Secure bicycle parking, showers and lockers are available within the MLP East Precinct for your use. See the plan below for how to access these facilities.

Warehouse 1



IMEX Terminal





Trip planning

Visit transportnsw.info or call 131 500 to plan your trip and access up-to-date timetables and maps. Or use the TripView app to select a public transport service.

Tickets and passes

Opal cards make travelling on multiple public transport types easy! Keep your Opal card topped up and tap on an off as you start and end your trip. You can purchase single trip Opal cards from train station ticket machines and bus drivers. Visit opal.com.au for more information.

APPENDIX C EXAMPLE STAFF TRAVEL SURVEY

STAFF TRAVEL SURVEY

Name ……..

Area of work (IMEX, Warehouse 1, 2 etc) ……

Q1. Which of the following do you identify as?

- ☐ Contractor
- ☐ Employee
- ☐ Visitor

Q2. What is your postcode? ……..

Q3. How did you travel here today?

- ☐ Walk only
- ☐ Bicycle
- ☐ Bus
- ☐ Train
- ☐ Light rail
- ☐ Combination of public transport
- ☐ Car driver
- ☐ Car passenger
- ☐ Other (please state) ……

Q4. Do you use the end-of-trip facilities (change rooms, showers, bike racks etc.) and if so how often?

……

……

……

Q5. If you did not arrive via public transport, why not?

……

……

……

……

……

……

Q5. Are you a shift worker? If so what are your shift times and how do you get to work during your different shift?

……

……

……

……

……

……

……

……

……

APPENDIX D EVIDENCE OF CONSULTATION

Mr Ibrahim Awad
Environmental Manager
Tactical Group
Level 15
124 Walker Street
North Sydney NSW 2060

Dear Mr Awad

Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Thank you for your correspondence dated 11 April 2019, requesting Transport for NSW (TfNSW) comments on the following reports:

- Construction Traffic & Access Management Plan B (CTAMP B)
- Operations Traffic & Access Management Plan (OTAMP)
- Bi-annual Trip Report
- Workplace Travel Plan (WTP)

It is advised that:

- Roads and Maritime Services will provide a separate response on the Construction Traffic & Access Management Plan B (CTAMP B) and Operations Traffic & Access Management Plan (OTAMP); and
- Details comments on the Bi-annual trip report and the Workplace Travel Plan (WTP) are included in **TAB A**.

If you require clarification on the above, please don't hesitate to contact Para Sangar, Senior Transport Planner on 0466 024 892.

Yours sincerely

16/5/2019

Mark Ozinga
Principal Manager, Land Use Planning and Development
Freight, Strategy and Planning

Objective Number CD19/03084

TAB A – Detailed Comments

Bi-Annual Trip Report

Section 5.1.2 – Traffic Surveys

- This section needs to clearly state the purpose of these traffic surveys and whether light and heavy vehicles will be surveyed;
- Peak periods of the development is not included for the survey period (5am-6am and 1pm-2pm);
- No information in relation to the sample size for light and heavy vehicles that would be captured for Origin-Destination surveys is provided; and
- The proposed Origin-Destination Surveys do not capture vehicle movements along the interchange ramps of M5 Motorway/Moorebank Avenue.

Workplace Travel Plan (WTP)

Section 1.5 - Objectives and Targets

The overall objective of the precinct-wide Workplace Travel Plan (WTP) should incorporate visitors as well as employees and the target mode share highlighted - 30% for public and active transport - should be set for an initial period of time not the lifetime of operations and targets should be reviewed and revised as appropriate during the monitoring and evaluation process.

Section 2.2.1 – EPBC Act Approval

The summary of mitigation measures includes the following:

- Consideration of the establishment of Glenfield Station to Liverpool Station express bus;
- Installation of a bus interchange and waiting area; and
- Consideration of the extension of Bus Route 901.

It is advised that

- Providing an attractive public bus route is not possible until Cambridge Avenue has been upgraded to eliminate flooding;
- Any bus route diversion needs to be logical and does not require the bus to double back on itself. Bus facilities for east and west Moorebank sites needs to ensure that in servicing both sites buses are not doubling back on themselves as well;
- If Cambridge Avenue upgrade is implemented, any on site diversions and bus facilities need also to be built to be compatible with a bus route linking Glenfield to Liverpool via Cambridge Avenue and Moorebank Avenue which services both sites rather than the 901 which would only ever be attractive for workers coming from Liverpool; and
- Future bus facilities need to consider the realignment of Moorebank Avenue.

Section 2.3 - Roles and Responsibilities

An important component of the overall WTP for the Moorebank Logistics Park – East precinct going forward will be the preparation of individual / organisational WTPs by each tenant/occupant. It should be a requirement of all tenants/occupants to develop and manage an individual WTP and contribute to the on-going development and management of the precinct-wide WTP.

It is recommended that:

- A Steering Group (comprising representatives from each organisation across the precinct) is formed to oversee the development and management of the precinct-wide WTP and individual WTPs; and

- A succinct one page summary of key components of the precinct-wide WTP/individual organisational WTPs is provided to include:

    - Statement demonstrating ongoing commitment of senior executive management across all workplaces across the Precinct to the:

        - Promotion of sustainable transport and operating practices; and

        - Ongoing development, implementation, monitoring, evaluation, reporting and management of a precinct-wide / individual organisational WTP.

    - Governance structure:

        - Details of precinct-wide Steering Group (interim arrangements until full occupation of precinct) and intent to form a Working Group comprising nominated Travel Plan coordinator/champion for the precinct / representative for each workplace/organisation.

- Agreed Action Plan:

        - As agreed by precinct-wide Steering Group, overview of WTP outcomes, goals and objectives, mode share targets and action plan including proposed measures, initiatives, monitoring, evaluation, reporting and stakeholder engagement strategies with indicative timeline and individual / group / agency responsible for actioning; and

        - Each tenant/organisation should prepare a summary, as detailed above, of its WTP, developed in close consultation with its occupants and visitors.

Section 6.3 – Management Measures

It is recommended that the following management measures are added:

- The Interim Steering Group needs to establish a stakeholder engagement strategy as early as possible, identifying and consulting with key partners at the earliest opportunity to assist with the progression of identified actions prior to occupation e.g. State government, local council, local community, transport operators.

- Travel Information Pack needs to be prepared to include an introductory statement from the Precinct management/ Steering Group promoting sustainable transport and operating practices and encouraging use of active and public transport. The document provides an opportunity to raise awareness of the WTP and individual organisation WTPs and the intent of the precinct management to include the whole precinct community in the on-going development, implementation and management of the wider and individual WTPs.

- The Travel Information Pack including the Transport Access Guide (TAG) and Travel Survey is prepared to inform and gain information from prospective tenants, employees and visitors prior to occupation. There is an opportunity to provide information to future users of the precinct during staff recruitment, procurement of servicing, maintenance, cleaning and caretaking, regular deliveries etc. It is recommended that the promotion of carpooling (and request to register interest in its establishment) is included in the TAG.
- On-going monitoring, education and awareness activities should be planned to promote sustainable travel from the outset. There is potential to establish a forum for interested employees who wish to participate in workplace / precinct-wide Travel Plan activities. The establishment of focus groups across precinct workplaces is another useful engagement method to gain a better understanding of transport challenges and opportunities facing occupants of the precinct
- Preferential parking provision is considered for staff / visitors who carpool with designated spaces allocated and signage displayed. Administration and management will need to be established.
- If not yet installed the car park should be future proofed to incorporate sufficient power and conduits to enable the installation of charging stations for Electric and Hybrid Vehicles and Connected and Autonomous vehicles.
- Consideration is to be given in collaboration with occupants of the precinct to the future repurposing of the car parking spaces to be removed as active and public transport use increases e.g. communal sports / recreation facilities.
- Quality end of trip facilities (including locker and secure storage facilities) should be installed to encourage greater take up of active transport as the precinct becomes more established. Such facilities will also encourage active transport during staff comfort breaks contributing to employee wellbeing. It is important that maintenance and replacement of such facilities is explicit in the Cycling and Pedestrian Access Sub Plan (not appended to WTP).
- There is an opportunity to establish a walking and cycling buddy scheme to encourage increased participation in active transport.

Appendix D - Staff Travel Surveys

- The travel survey questions workplace occupants and visitors about existing and preferred modes and seeks to gain a better understanding of any challenges and opportunities to the use of active and public transport to/from home to the precinct and during the working shift; and
- While the travel survey should not be too onerous to complete it should seek to gain as much information on existing/preferred transport mode and working practices and any challenges/opportunities e.g. shift times, scope for remote working, virtual meetings etc as this will help inform and develop targeted initiatives.

Technical Note

It is recommended that the proposals outlined in the Technical Note be considered in consultation with relevant agencies, operators and known occupants (tenants and employees) of the precinct as a matter of priority.

Workplace Travel Plan (Revision 006 dated 10 May 2019)

Status of comments from TfNSW

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
1.TfNSW	16-May-19	**Section 1.5 - Objectives and Targets** The overall objective of the precinct-wide Workplace Travel Plan (WTP) should incorporate visitors as well as employees and the target mode share highlighted - 30% for public and active transport - should be set for an initial period of time not the lifetime of operations and targets should be reviewed and revised as appropriate during the monitoring and evaluation process.	The target mode share of 30% is consistent with the EPBC Act Conditions of Approval. As identified in the Workplace Travel Plan (WTP), this is dependent on staff residence locations and available transport modes. This target will be reviewed and revised, as required, on an annual basis in conjunction with the findings of the annual staff travel survey. **A footnote to this effect has been added to the table to make this clearer.** ***TfNSW comments: Noted.***	21-May-2019
2.TfNSW	16-May-19	**Section 2.2.1 – EPBC Act Approval** The summary of mitigation measures includes the following: • Consideration of the establishment of Glenfield Station to Liverpool Station express bus	An express bus between Glenfield Station and Liverpool Station could be considered depending on the potential demand identified in the annual staff travel survey. **This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix B as this WTP is developed and consultation with TfNSW progresses** It should be noted that the existing T2 Inner West and Leppington Line and T5 Cumberland Line currently service these two stations. Staff travelling on these two lines will be able to disembark at Liverpool Station, where they will be able to catch the 901 Liverpool to Holsworthy bus service. ***TfNSW comments: Noted.***	21-May-2019
3.TfNSW	16-May-19	• Installation of a bus interchange and waiting area	The design and installation of any bus stops/interchanges and associated waiting area(s) are dependent on the outcomes of the demand for public transport initiatives as identified in the staff travel surveys and will be addressed in a future update to the	21-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
			WTP. **<u>As above, this is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix B as this WTP is developed</u>** ***TfNSW comments: Noted.***	
4.TfNSW	16-May-19	• Consideration of the extension of Bus Route 901	**Detailed within Appendix A of the WTP** The demand associated with rationalising the bus stops for route 901 and providing an additional regular bus service near the MLP East Precinct access points are dependent on the origin of employees and will be assessed as the Facility becomes progressively operational. **<u>As above, this is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix B as this WTP is developed</u>** The Estate Manager is responsible for carrying out a travel survey annually to enable the assessment of the effectiveness of the WTP in achieving the mode share targets. ***TfNSW comments: Noted.***	21-May-2019
5.TfNSW	16-May-19	**<u>It is advised that:</u>** • Providing an attractive public bus route is not possible until Cambridge Avenue has been upgraded to eliminate flooding;	Noted – will be considered during discussion on bus routes	21-May-2019
6.TfNSW	16-May-19	• Any bus route diversion needs to be logical and does not require the bus to double back on itself. Bus facilities for east and west Moorebank sites needs to ensure that in servicing both sites buses are not doubling back on themselves as well	Noted – this will be taken into consideration when any bus route diversion and the WTO updated as required	21-May-2019
7.TfNSW	16-May-19	• If Cambridge Avenue upgrade is implemented, any on site	Noted – The WTP will be updated to reflect that any	21-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
		diversions and bus facilities need also to be built to be compatible with a bus route linking Glenfield to Liverpool via Cambridge Avenue and Moorebank Avenue which services both sites rather than the 901 which would only ever be attractive for workers coming from Liverpool	rationalising associated with the establishment of a Glenfield Station to Liverpool Station express bus service will need to consider road upgrade timeframes by Campbelltown City Council to eliminate potential flooding risks.	
8.TfNSW	16-May-19	• Future bus facilities need to consider the realignment of Moorebank Avenue	Noted	21-May-2019
9.TfNSW	16-May-19	**Section 2.3 - Roles and Responsibilities** An important component of the overall WTP for the Moorebank Logistics Park – East precinct going forward will be the preparation of individual / organisational WTPs by each tenant/occupant. It should be a requirement of all tenants/occupants to develop and manage an individual WTP and contribute to the on-going development and management of the precinct wide WTP.	This is not a requirement of the CoC. ***TfNSW comments:*** ***The Condition of Consent may not be wholly prescriptive regarding the expected governance procedures and processes (including document content and structure) of the WTP.*** ***TfNSW's recommendations do however (rows 9, 10, 11, 12, 13-16, 17 and 18) offer best practice protocols and processes to promote a collaborative approach to future development and management of a precinct-wide WTP. Adopting the recommendations would provide the precinct management with valuable additional resources from across the precinct to assist with strategic direction, insights and data and 'on the ground' on-going promotion and support.***	21-May-2019
10.TfNSW	16-May-19	***It is recommended that:*** • **A Steering Group** (comprising representatives from each organisation across the precinct) is formed to oversee the development and management of the precinct-wide WTP and individual WTPs; and	This is not a requirement of the CoC. ***TfNSW comments: see comment above (Row 9)***	21-May-2019
11.TfNSW	16-May-19	• **A succinct one page summary of key components of the precinct-wide WTP/individual organisational WTPs is provided to include:** o Statement demonstrating ongoing commitment of	This is not a requirement of the CoC. ***TfNSW comments: see comment above (Row 9)***	21-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
		senior executive management across all workplaces across the Precinct to the: ▪ Promotion of sustainable transport and operating practices; and ▪ Ongoing development, implementation, monitoring, evaluation, reporting and management of a precinct-wide / individual organisational WTP. o Governance structure:- ▪ Details of precinct-wide Steering Group (interim arrangements until full occupation of precinct) and intent to form a Working Group comprising nominated Travel Plan coordinator/champion for the precinct / representative for each workplace/organisation.		
12.TfNSW	16-May-19	• **Agreed Action Plan**: o As agreed by precinct-wide Steering Group, overview of WTP outcomes, goals and objectives, mode share targets and action plan including proposed measures, initiatives, monitoring, evaluation, reporting and stakeholder engagement strategies with indicative timeline and individual / group / agency responsible for actioning; and o Each tenant/organisation should prepare a summary, as detailed above, of its WTP, developed in close consultation with its occupants and visitors.	This is not a requirement of the CoC. ***TfNSW comments: see comment above (Row 9)***	21-May-2019
13.TfNSW	16-May-19	**Section 6.3 – Management Measures** It is recommended that the following management measures are added:	See below ***TfNSW comments: see comment above (Row 9)***	21-May-2019
14.TfNSW	16-May-19	• The Interim Steering Group needs to establish a stakeholder engagement strategy as early as possible, identifying and consulting with key partners at the earliest opportunity to assist with the progression of identified actions prior to occupation e.g. State government, local council, local	This is not a requirement of the CoC. ***TfNSW comments: see comment above (Row 9)***	21-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
		community, transport operators.		
15.TfNSW	16-May-19	• Travel Information Pack needs to be prepared to include an introductory statement from the Precinct management/ Steering Group promoting sustainable transport and operating practices and encouraging use of active and public transport. The document provides an opportunity to raise awareness of the WTP and individual organisation WTPs and the intent of the precinct management to include the whole precinct community in the ongoing development, implementation and management of the wider and individual WTPs.	This is not a requirement of the CoC. ***TfNSW comments: see comment above (Row 9)***	21-May-2019
16.TfNSW	16-May-19	• The Travel Information Pack including the Transport Access Guide (TAG) and Travel Survey is prepared to inform and gain information from prospective tenants, employees and visitors prior to occupation. There is an opportunity to provide information to future users of the precinct during staff recruitment, procurement of servicing, maintenance, cleaning and caretaking, regular deliveries etc. It is recommended that the promotion of carpooling (and request to register interest in its establishment) is included in the TAG.	This is not a requirement of the CoC. ***TfNSW comments: See comment above (Row 9)***	21-May-2019
17.TfNSW	16-May-19	• On-going monitoring, education and awareness activities should be planned to promote sustainable travel from the outset. There is potential to establish a forum for interested employees who wish to participate in workplace / precinct-wide Travel Plan activities. The establishment of focus groups across precinct workplaces is another useful engagement method to gain a better understanding of transport challenges and opportunities facing occupants of the precinct	**Comment addressed in the following sections** Information relating to on-going monitoring, education and awareness activities is addressed in the following sections of the WTP: • Section 2.3; Table 2-5 • Section 6.1 • Section 6.2 • Section 6.3: Table 6-1 • Appendix B ***TfNSW comments: See comment above (Row 9)***	21-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
18.TfNSW	16-May-19	• Preferential parking provision is considered for staff / visitors who carpool with designated spaces allocated and signage displayed. Administration and management will need to be established.	Sufficient carspaces have already been allocated for each facility based on employee numbers. ***TfNSW comments: Promoting carpooling as a viable option to single occupant vehicular use and the marking of and allocation of priority parking spaces for carpoolers will help stimulate interest in this travel option and contribute to reducing car borne trips to/from precinct. Carpooling is referenced in the WTP - priority parking / placement of priority spaces is an incentive to encourage its use.***	21-May-2019
19. TfNSW	16-May-19	• If not yet installed the car park should be future proofed to incorporate sufficient power and conduits to enable the installation of charging stations for Electric and Hybrid Vehicles and Connected and Autonomous vehicles.	This is not a requirement of the CoC. ***TfNSW comments: For consideration / implementation when appropriate to future proof facility.***	21-May-2019
20. TfNSW	16-May-19	• Consideration is to be given in collaboration with occupants of the precinct to the future repurposing of the car parking spaces to be removed as active and public transport use increases e.g. communal sports / recreation facilities.	Noted. This will be added as an action for the future, based on the demand established from the review of the WTP.	21-May-2019
21.TfNSW	16-May-19	• Quality end of trip facilities (including locker and secure storage facilities) should be installed to encourage greater take up of active transport as the precinct becomes more established. Such facilities will also encourage active transport during staff comfort breaks contributing to employee wellbeing. It is important that maintenance and replacement of such facilities is explicit in the Cycling and Pedestrian Access Sub Plan (not appended to WTP).	**Comment addressed in the following sections** Information relating to the provision and maintenance of end-of-trip facilities is addressed in the following sections of the WTP: • Section 5.1 • Section 5.2 • Section 6.1 • Section 6.2 • Section 6.3: Table 6-1 • Appendix B Please note, the Cycling and Pedestrian Access Facilities Sub Plan (CPAFSP) is a sub-plan to the Urban Design and Landscape Plan (UDLP) and will not be appended to the	21-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
			WTP. ***TfNSW comments: Noted***	
22.TfNSW	16-May-19	• There is an opportunity to establish a walking and cycling buddy scheme to encourage increased participation in active transport.	Noted. This will be added as an action in the WTP.	21-May-2019
23.TfNSW	16-May-19	**Appendix D - Staff Travel Surveys** • The travel survey questions workplace occupants and visitors about existing and preferred modes and seeks to gain a better understanding of any challenges and opportunities to the use of active and public transport to/from home to the precinct and during the working shift; and	Noted.	21-May-2019
24.TfNSW	16-May-19	• While the travel survey should not be too onerous to complete it should seek to gain as much information on existing/preferred transport mode and working practices and any challenges/opportunities e.g. shift times, scope for remote working, virtual meetings etc as this will help inform and develop targeted initiatives.	Noted.	21-May-2019
25.TfNSW	16-May-19	**Technical Note** • It is recommended that the proposals outlined in the Technical Note be considered in consultation with relevant agencies, operators and known occupants (tenants and employees) of the precinct as a matter of priority.	This Technical Note provides the recommended approach for public transport services for the MLP East Precinct, which will form the basis of consultation and agreement with TfNSW and bus operators. Consultation with TfNSW has commenced. ***TfNSW comments: Noted***	21-May-2019

Tilley, Heather

From: Ibrahim Awad <iawad@tacticalgroup.com.au>
Sent: Saturday, 8 June 2019 8:15 AM
To: Para Sangar
Cc: Mark Ozinga; Nathan Cairney; Fei Chen
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Para

Thanks for your additional comments on the WTP and BTODR.

We have noted your comments and recommendations for our consideration in the future application and further development of the WTP and consider our consultation on this document for this pre-operational phase closed. A log of your comments and these consultations will be provided in the updated WTP for submission and approval by DPE.

With regards your further comments on the BTODR, I would suggest that a face-to-face meeting to discuss the technical details / surveys with our Consultant might be the best way to address and resolve these outstanding comments and I'd like to request a meeting with your team for 13-15 June to discuss. Could you please confirm the availability of your relevant staff to attend such a meeting and your preferred date/time/location for this meeting?

We look forward to the opportunity to meet and discuss this with you soon.

Thanks,
Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

TACTICAL GROUP

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Before printing this document, please consider the environment.

From: Para Sangar <Para.Sangar@transport.nsw.gov.au>
Sent: Friday, 7 June 2019 12:13 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Mark Ozinga <Mark.Ozinga@transport.nsw.gov.au>
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Ibrahim

Please find attached comments on the Tactical Group Response to TfNSW comments on the WTP and Biannual Report Framework.

Should you have any further queries, please contact me.

Regards
Para

Para Sangar
Senior Transport Planner
Customer Strategy and Technology
Transport for NSW

T 0466 024 892
Level 26, 477 Pitt Street, Haymarket, NSW 2008

SENSITIVE: NSW GOVERNMENT

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Friday, 7 June 2019 8:11 AM
To: Para Sangar
Cc: Mark Ozinga; Nathan Cairney; Fei Chen
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Para

Thanks for the update on this and we look forward to hearing from you today /early next week.

Regards,
Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Para Sangar <Para.Sangar@transport.nsw.gov.au>
Sent: Thursday, 6 June 2019 3:57 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Mark Ozinga <Mark.Ozinga@transport.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Ibrahim

Please note that I responded to you in relation to the status of TfNSW response via email dated on 31 May 2019 (A copy of the email message is attached).

Current status of TfNSW response is provided below:

- I have received internal comments for WTP and Biannual Report Framework. TfNSW executives are currently reviewing the TfNSW comments on the Tactical Group's response. I am aiming send our comments tomorrow/early next week.

- I am still waiting for comments from internal stakeholders for the OEMP.

Should you have any further queries, please contact me.

Regards
Para

Para Sangar
Senior Transport Planner
Customer Strategy and Technology
Transport for NSW

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NSW GOVERNMENT | Transport for NSW

SENSITIVE: NSW GOVERNMENT

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Thursday, 6 June 2019 11:20 AM
To: Para Sangar
Cc: Mark Ozinga; Nathan Cairney; Fei Chen
Subject: FW: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Para

We have still not received confirmation on your satisfaction with our response in which we have sought to address your comments on the WTP and BTODR (sent to you on 26 May 19 as per the below email) nor any further comments on the OEMP.

I've tried to follow up by email / phone on 26 May, 30 May, 3 June and 5 June but haven't been able to speak to you. We've planned to close out our consultation with TfNSW on these traffic management plans by tomorrow (Friday 7 June 19) and would be grateful to receive a confirmation from you that you are satisfied that we have addressed your comments and/ or otherwise a request to meeting to discuss / address any outstanding comments.

Please let me know if there's anything that we can do to assist in the close out of this consultation.

Thanks,
Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Ibrahim Awad
Sent: Sunday, 26 May 2019 12:10 PM
To: 'Para Sangar Sangarapillai' <Para.Sangar@transport.nsw.gov.au>
Cc: Mark Ozinga <Mark.Ozinga@transport.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Para

Please find attached our response to your comments on the BTODR and WTP.

We have already provided RMS with our response to the OTAMP and will be providing them with a response to the CTAMP-B and BTODR early this week.

Please let me know if you have any further comments on these plans and/ or would like to discuss over the phone or in person.

Thanks and regards,

Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Para Sangar Sangarapillai <Para.Sangar@transport.nsw.gov.au>
Sent: Thursday, 16 May 2019 2:50 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Mark Ozinga <Mark.Ozinga@transport.nsw.gov.au>
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Ibrahim

Please find attached a copy of the response letter for the above.

Should you have any further queries, please contact me.

Regards
Para

Para Sangar
Senior Transport Planner
Customer Strategy and Technology
Transport for NSW

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SENSITIVE: NSW GOVERNMENT

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Wednesday, 15 May 2019 3:47 PM
To: Para Sangar Sangarapillai
Cc: Mark Ozinga; Nathan Cairney; Dan Blyde; Fei Chen
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Para

Thanks very much for the update and we look forward to receiving your comments soon.

Regards,
Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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Before printing this document, please consider the environment.

From: Para Sangar Sangarapillai <Para.Sangar@transport.nsw.gov.au>
Sent: Wednesday, 15 May 2019 1:57 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Mark Ozinga <Mark.Ozinga@transport.nsw.gov.au>
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Ibrahim

This is to inform that the draft letter is currently reviewed by TfNSW executives. I will forward the signed letter once it is signed off.

If you have any further queries, please contact me.

Regards
Para

Para Sangar
Senior Transport Planner
Freight, Strategy and Planning
Transport for NSW

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SENSITIVE: NSW GOVERNMENT

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Friday, 10 May 2019 2:45 PM
To: Para Sangar Sangarapillai
Cc: Mark Ozinga; Nathan Cairney; Dan Blyde; Fei Chen
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Para

Thanks for the update. That's great news and we look forward to receiving your comments then.

Thanks and regards,

Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

TACTICAL GROUP

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Before printing this document, please consider the environment.

From: Para Sangar Sangarapillai <Para.Sangar@transport.nsw.gov.au>
Sent: Friday, 10 May 2019 12:53 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Mark Ozinga <Mark.Ozinga@transport.nsw.gov.au>
Subject: RE: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Ibrahim

Thank you for your email message.

I have received comments from most of the TfNSW internal stakeholders.

We are aiming to provide TfNSW response by middle of next week at this stage.

Should you have any further queries, please contact me.

Regards
Para

Para Sangar
Senior Transport Planner
Freight, Strategy and Planning
Transport for NSW

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Level 26, 477 Pitt Street, Haymarket, NSW 2008

SENSITIVE: NSW GOVERNMENT

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Thursday, 9 May 2019 4:15 PM
To: Para Sangar Sangarapillai
Cc: Mark Ozinga; Nathan Cairney; Steve Ryan; Dan Blyde; Fei Chen
Subject: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Para

I just called and left a message with regards the review of the above plans.

You mentioned last we spoke that you were expecting to receive internal comments this week. Could you please help us with an update on the status of these comments and let me know if it would help for us to meet your team in person to discuss / resolve any comments?

Please also let me know if there is anything else we can do to assist you / TfNSW in this consultation process.

Thanks and regards,

Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

TACTICAL GROUP

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From: Ibrahim Awad
Sent: Saturday, 4 May 2019 10:20 AM
To: para.sangar@transport.nsw.gov.au
Cc: 'mark.ozinga@transport.nsw.gov.au' <mark.ozinga@transport.nsw.gov.au>; Steve Ryan <sryan@tacticalgroup.com.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; 'Dan Blyde' <Dan.Blyde@qube.com.au>; 'VAN PUTTEN Laura E' <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Subject: TfNSW Consultations - Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Hi Para

Further to Dan's email, Laura Van Putten (copied in) has emailed me to say that she will be looking after the review of these plans at RMS and that they are also looking to get us comments this coming week. You might be able to contact Laura on this if you have not heard back from Rachel Cummings.

Please note that we are awaiting comment on the below plans, with the OTAMP and WTP being of critical importance to DPE to enable the commencement of operations of the Target Warehouse next month (June 19):

1. Construction Traffic & Access Management Plan B (CTAMP B)
2. Operations Traffic & Access Management Plan (OTAMP)
3. Bi-annual trip report
4. Workplace Travel Plan (WTP)

Please let me know if there is anything else that we can assist with.

Thanks and regards,

Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Dan Blyde <Dan.Blyde@qube.com.au>
Sent: Friday, 3 May 2019 1:42 PM
To: para.sangar@transport.nsw.gov.au
Cc: Ibrahim Awad <iawad@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Ozinga Mark <Mark.Ozinga@transport.nsw.gov.au>
Subject: Re: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) TfNSW Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Dear Para,

As discussed, RMS have told us they have received advice on the above plans from their internal stakeholders and are now dealing directly with DPE regarding the review and approval process. It would be greatly appreciated if you could liaise with Rachel Cumming ASAP so the TfNSW comments can either be incorporated or sent separately to us and DPE as soon as they are ready so we can finalise the consultation process.

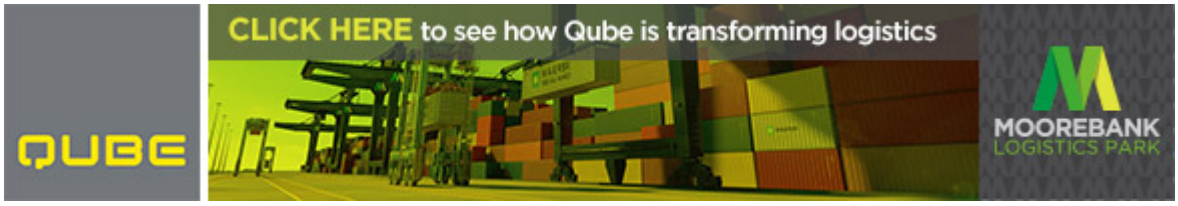
As mentioned on our call, closing out the consultation on these plans is becoming critical given that it is a planning requirement before the first train can run into the Moorebank site and is also needed for Target to occupy and operate its major distribution warehouse on our site. Appreciate your help on getting this completed.

Regards,

Dan

Dan Blyde | Senior Advisor - Corporate Affairs
Qube Holdings Limited

Fax: +61 2 9080 1999



On 29 Apr 2019, at 5:27 pm, Nathan Cairney <ncairney@tacticalgroup.com.au> wrote:

Dan,

This one is at least a little more positive, after many weeks of trying we have today confirmed that TfNSW are targeting responses to our request for consultation by 10 May. If there is anything you can do to help this along, obtaining some certainty on this date would be relieving.

Regards,
NATHAN CAIRNEY
DIRECTOR
<image012.jpg>

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E ncairney@tacticalgroup.com.au
W www.tacticalgroup.com.au

<image013.jpg>
<image005.jpg> Before printing this document, please consider the environment.

From: Ibrahim Awad
Sent: Monday, 29 April 2019 10:28 AM
To: para.sangar@transport.nsw.gov.au
Cc: mark.ozinga@transport.nsw.gov.au; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) TfNSW Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Para

Thanks for your call earlier and for confirming that you have now issued the plans for internal review / comment.

I note that you are coordinating the internal reviews and that you are expecting internal comments to be received by the end of this week, at which point you will then consult externally with RMS to seek their comments.

I also note that you will aim to get comments to us by the 10th May ’19, subject to the receipt / resolution of RMS comments.

Thanks again for your help on this and we look forward to hearing from you in due course.

Regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER
<image001.gif>

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<image003.jpg>

<image004.jpg> Before printing this document, please consider the environment.

From: Ibrahim Awad
Sent: Monday, 29 April 2019 10:07 AM
To: 'para.sangar@transport.nsw.gov.au' <para.sangar@transport.nsw.gov.au>; 'mark.ozinga@transport.nsw.gov.au' <mark.ozinga@transport.nsw.gov.au>
Cc: Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) TfNSW Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Para

I just called and left a message. I'm doing the weekly follow up on our consultations with TfNSW on the above plans.

Could you please let me know if this plan has now been assigned to one of your officers for review / comment and the contact details of that officer so that I can follow up?

Please also let me know if you have already reviewed and would like to discuss your comments over the phone or in person, or if there is anything else that we can do to help you in this process.

We look forward to hearing from you soon.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER
<image001.gif>

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<image003.jpg>

<image004.jpg> Before printing this document, please consider the environment.

From: Ibrahim Awad
Sent: Thursday, 18 April 2019 5:05 PM
To: 'para.sangar@transport.nsw.gov.au' <para.sangar@transport.nsw.gov.au>
Cc: 'mark.ozinga@transport.nsw.gov.au' <mark.ozinga@transport.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) TfNSW Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Para

I tried to call earlier on your mobile phone and have left a message.

I'm doing the weekly follow up on our consultations with TfNSW on the OEMP/sub-plans submitted to you for review and comment.

I wanted to ask if you'd had a chance to review the documents and/ or if you've identified an alternative contact person for us to follow-up with.

Could you please let me know if there is anything we can continue to help with and/ or if you'd like to discuss any further comments over the phone or in person?

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER
<image001.gif>

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<image003.jpg>

<image004.jpg> Before printing this document, please consider the environment.

From: Ibrahim Awad
Sent: Thursday, 11 April 2019 10:45 AM
To: 'para.sangar@transport.nsw.gov.au' <para.sangar@transport.nsw.gov.au>
Cc: 'mark.ozinga@transport.nsw.gov.au' <mark.ozinga@transport.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) TfNSW Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Para

Good to talk to you just then and thanks for the update on your review. We've made a note that you are still considering this and will be speaking to and / or coordinating with RMS on this.

As mentioned, if it would help, our contact at RMS for the same consultations on these plans is:

Rachel Cumming – rachel.cumming@rms.nsw.gov.au ph. 8849 2077

We look forward to hearing from you soon.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER
<image001.gif>

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W www.tacticalgroup.com.au

<image003.jpg>

<image004.jpg> Before printing this document, please consider the environment.

From: Nathan Cairney
Sent: Tuesday, 26 March 2019 5:37 PM
To: 'Mark.Ozinga@transport.nsw.gov.au' <Mark.Ozinga@transport.nsw.gov.au>; development@trasport.nsw.gov.au
Cc: bob.rutledge@transport.nsw.gov.au; Steve Ryan <sryan@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>; Ian Irwin <iirwin@tacticalgroup.com.au>; Ibrahim Awad <iawad@tacticalgroup.com.au>
Subject: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) TfNSW Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Mark,

I spoke to Tim Dewey on the phone today to discuss consultation for a number of documents for the Moorebank Logistics Park and Tim informed me that he no longer works in your team and you would be the best contact to start with. I'm hoping to organise a session for us to discuss the upcoming consultation requirements for the project and would like to confirm who the most appropriate contact would be for this.

In the meantime below is an extract of the conditions that relate to the documents that we expect to provide for consultation in the coming weeks, and attached is the first two of those documents for TfNSW's review and comment.

Please can you confirm who the appropriate contact would be for this consultation and suggest a suitable time that we may be able to meet with you to clarify any comments you or your team may have and assist in your understanding of the documents before making formal comments.

We would hope to be able to conclude consultation for the attached 2 documents by no later than 18 April 2019 to allow these documents to be submitted to DPE for their review and approval shortly

thereafter. If there is anything that we can do in addition to the above to support meeting that timeframe please don't hesitate to let us know so that we can action appropriately.

Documents to be provided and timing:

- MPE 2 CoC B2: CTAMP B for the upgrade of Moorebank Avenue – provided in the attached
- MPE 2 CoC B28: Biannual Trip Origin Destination Reporting Framework - provided in the attached
- MPE 2 CoC B26 (including MPE 1 OTAMP): Operational TAMP – to be provided in the coming week
- MPE 2 CoC B29: Workplace travel plan – to be provided in 3 weeks
- MPE 1 and 2 overall: OEMP can be provided for reference if TfNSW would like to receive a copy.

Extract of the relevant conditions:

<image002.png>
<image006.png>
<image007.png>

<image008.png>
<image009.png>

Regards,
NATHAN CAIRNEY
DIRECTOR
<image014.jpg>

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CPQQRT

<image015.jpg>
<image005.jpg> Before printing this document, please consider the environment.

<SSS2-QPMS-EN-PLN-0040_vB_clean.pdf><190313_Biannual Trip Origin Destination Report Framework_Final Draft_clean.pdf>

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Tilley, Heather

From: Ibrahim Awad <iawad@tacticalgroup.com.au>
Sent: Friday, 7 June 2019 8:54 AM
To: Tilley, Heather
Cc: Patel, Ketan; Fei Chen
Subject: FW: Consultation meeting with Liverpool Council - OTAMP, CTAMP B, WTP - Moorebank Logistics Park - East Precinct MPE Stage 2

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Heather

Copy of consultation close out with LCC on traffic plans in the below 2 emails – for your records and reference in the relevant plans.

Please let me know if you need anything further on this.

Thanks,
Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Ibrahim Awad
Sent: Friday, 7 June 2019 8:18 AM
To: 'Charles Wiafe' <WiafeC@liverpool.nsw.gov.au>
Cc: Stella Qu <QuS@liverpool.nsw.gov.au>; Luke Oste <OsteL@liverpool.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: Consultation meeting with Liverpool Council - OTAMP, CTAMP B, WTP - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Charles

Thanks for your further comments on this. We have noted these and will ensure that they are considered in further consultations between Qube and TfNSW on the bus routes / services upon commencement of operations. We will also provide you a revised copy of the WTP once consultation with TfNSW on this is complete.

We now consider our consultation with LCC on these traffic management plans (CTAMP-B, OTAMP and WTP) for the pre-operational stage closed and will submit these plans to DPE, together with a log of LCC, TfNSW and RMS consultations/comments for their approval.

Thanks again for your support in reviewing and coordinating these comments and inputs.

Regards,
Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Charles Wiafe <WiafeC@liverpool.nsw.gov.au>
Sent: Thursday, 6 June 2019 4:45 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Stella Qu <QuS@liverpool.nsw.gov.au>; Luke Oste <OsteL@liverpool.nsw.gov.au>
Subject: FW: Consultation meeting with Liverpool Council - OTAMP, CTAMP B, WTP - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Ibrahim,

Thank you for the responses/comments on the OTAMP and the draft Work Travel Plan (WTP).

Council notes that timing for road improvement works has been conditioned as part of the DA consent for MPE Stage 2.

Council has reviewed the draft WTP and notes that the critical issues are the provision of bus services to the site, including extension of Bus Route 901 and promotion of the establishment of Route 870, 871, and 872 bus. Council notes from the draft WTP, these services will not be provided prior to the commencement of operation of Stage 1 (IMEX, RALP, PIWE).

Therefore, Council recommends that as indicated in your response, the following bus services should be provided within months after the commencement of operation of Stage 1 (IMEX, RALP, PIWE):

- An express shuttle bus service to/from the Facility and Holsworthy Station during the peak shift changeover periods;
- Establishment implementation of Glenfield Station to Liverpool Station express bus;
- Installation of a bus interchange and waiting area within the site;

A copy of WTP report after a consultation with TfNSW should be submitted to Council for review.

Regards

Charles Wiafe
Service Manager Traffic and Transport

LIVERPOOL CITY COUNCIL | LIVERPOOL THE GREAT SOUTH WEST

02 8711 7452 | 0417 175 763 | WiafeC@liverpool.nsw.gov.au | www.liverpool.nsw.gov.au
Customer Service: 1300 36 2170 | 33 Moore Street Liverpool, NSW 2170, Australia

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From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Monday, 3 June 2019 1:43 PM
To: Charles Wiafe
Cc: Stella Qu; David Smith; Salih Suleiman; Luke Oste; Nathan Cairney; Fei Chen
Subject: Consultation meeting with Liverpool Council - OTAMP, CTAMP B, WTP - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Charles

Have you got a further update on the confirmation of the close out of LCC's comments on the above plans - as per your below email?

Thanks,
Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Charles Wiafe <WiafeC@liverpool.nsw.gov.au>
Sent: Sunday, 26 May 2019 8:26 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Murray Wilson <WilsonMu@liverpool.nsw.gov.au>; Stella Qu <QuS@liverpool.nsw.gov.au>; David Smith <SmithD@liverpool.nsw.gov.au>; Salih Suleiman <SuleimanS@liverpool.nsw.gov.au>
Subject: Re: Consultation meeting with Liverpool Council - OTAMP - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Ibrahim,

Thank you for the responses.

We would review and come back to you by the end of the week.

In the meantime, I note the Workplace Travel Plan (WTP), is yet to be prepared, arrangement to highlight the 5T load limit along Anzac Road has not been addressed, improvement works to minimise are yet to be carried out and a timeline for these works have also not been outlined.

Please rather than referring to a number of sections in the Plan, organise for the issues raised to summarised, and so we can complete our comments on the Plan.

Regards

Charles Wiafe
Service Manager Traffic and Transport

LIVERPOOL CITY COUNCIL | LIVERPOOL THE GREAT SOUTH WEST

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From: Charles Wiafe
Sent: 26 May 2019 20:15
To: Salih Suleiman

Cc: Murray Wilson; Stella Qu
Subject: Re: Consultation meeting with Liverpool Council - OTAMP - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Salih,

Please can you review the attached responses and advise me during the week whether ou agree with the responses provided.

Below are my initial comments.

From the information, we note the Workplace Travel Plan (WTP), is yet to be prepared., arrangement to highlight the 5T, load limit along Anzac Road has not bee addressed, and improvements works to minimise are yet to be carried out and a time line for these works have also not been outlined.

Rather than referring to a number of sections in the Plan, I consider that the report needs to be revised to address the issues raised .

Regards

Charles Wiafe
Service Manager Traffic and Transport
Liverpool City Council

Level 2, 33 Moore St, Liverpool NSW 2170
Phone 9821 9122
Fax 9821 9333

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Charles Wiafe
Service Manager Traffic and Transport

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From: Ibrahim Awad <iawad@tacticalgroup.com.au>
Sent: 26 May 2019 10:40
To: Charles Wiafe

Cc: Murray Wilson; David Smith; Stella Qu; Nathan Cairney; Fei Chen
Subject: Consultation meeting with Liverpool Council - OTAMP - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Charles

Please find attached our response to your comments on the above plan.

With regards your request for the Workplace Travel Plan (WTP), the relevant CoC requires us to develop this plan in consultation with TfNSW. We are in the final stages of this consultation and have also attached the latest draft of this plan for your reference.

Please let us know if you have any further comments and/ or would like to discuss over the phone or in person.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER
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From: Charles Wiafe <WiafeC@liverpool.nsw.gov.au>
Sent: Monday, 13 May 2019 6:11 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Murray Wilson <WilsonMu@liverpool.nsw.gov.au>; David Smith <SmithD@liverpool.nsw.gov.au>; Stella Qu <QuS@liverpool.nsw.gov.au>
Subject: FW: Action update - Consultation meeting with Liverpool Council - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Ibrahim,

Further our telephone discussion, this morning, below are our comments on the Operational Traffic and Access Management Plan (OPTM) for Moorebank Logistics Park – East Precinct. Please request your consultants to update and submit a revised OPTM for Council's information, and close off:

1. The OPTM needs to include the required mitigation or improvement measures, and timing lines for implementations, to minimise traffic impacts/congestion on the surrounding road network and intersections, including:

    - M5 Motorway/Moorebank Avenue intersection
    - Moorebank Avenue/Anzac Road intersection
    - M5 Motorway/Hume Highway intersection

- Anzac Road as 5T Load Limit road

2. The OPTM outlines the need for workplace travel plan. However a the plan is not attached..

3. The OPTM needs to provide details and timing for the implementation of the following public transport improvement works:

   a. Development and implementation of a travel behaviour change program
   b. Establishment and implementation of Holsworthy Station Express bus services
   c. Establishment implementation of Glenfield Station to Liverpool Station express bus
   d. Installation of a bus interchange and waiting area
   e. Bus priority works (establishment of designated bus lanes).
   f. Design and construction of walking and cycleways
   g. Extension of Bus Route 901
   h. Promotion of the establishment of Route 870, 871, and 872 bus

In the addition, the OPTM, needs to confirm additional bus services to the subject site, with the proposed bus routes/service frequency. The additional bus services should be provided to Council prior to the operation of stage 1 development.

4. Traffic volumes of light vehicles will increase along Anzac Road. Sections of the road, has no kerb and guttering, and increase traffic would require rehabilitation works. If the additional traffic is expected to use this road section the OPTM, should include rehabilitation of the road, prior to operation.

5. Anzac Road is 5T Load Limit road. The OPTM needs to included documented approach and strategies to restrict heavy vehicles from using the road.

6. The OPTMS needs to include an emergency response plan.

7. Impact of Construction Access – The OPTM needs to outline construction access arrangement and include a separate accesses for construction and operational activities.

8. Detailed drawings of all the proposed access arrangement including o the warehouse, IMEX truck access, IMEX office, and emergency access should be included in the OPTM and with copies to Council.

9. A time line to update the OPTM and associated consultation with Liverpool, and Campbelltown Council is to be included OPTM.

Should you wish to discuss these comments, please contact me again.

Regards

Charles Wiafe
Service Manager – Traffic and Transport
LIVERPOOL CITY COUNCIL
LIVERPOOL THE GREAT SOUTH WEST
33 Moore Street, Liverpool NSW 2170
P: 8711 7452 || **E:wiafec@liverpool.nsw.gov.au** | **W:** www.liverpool.nsw.gov.au

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Charles Wiafe
Service Manager Traffic and Transport

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From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Friday, 10 May 2019 9:28 AM
To: Charles Wiafe
Cc: Murray Wilson; David Smith; Nathan Cairney; Steve Ryan; Dan Blyde; Fei Chen
Subject: FW: Action update - Consultation meeting with Liverpool Council - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Charles

Good to talk just then.

Please see below and attached the information that was forwarded to Murray on the 29th April 2019 which details the traffic management plans/sections where your comments / concerns have been addressed (right hand column in attachment).

We are due to submit this to DPE shortly to enable them sufficient time to review / approve prior to the planned commencement of the Target warehouse in June next month.

Please let me know if there is anything else we can help with and/ or if you do not wish to comment further so that we can close this out.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER
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From: Ibrahim Awad
Sent: Thursday, 18 April 2019 2:30 PM
To: Murray Wilson <WilsonMu@liverpool.nsw.gov.au>
Cc: David Smith <SmithD@liverpool.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: Action update - Consultation meeting with Liverpool Council - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Murray

We have actioned some of the items discussed in our meeting on Mon 15 April 2019. These relate to the provision of references to the relevant sections in the OMEP/sub-plans which address issues/concerns raised by your team.

We will continue to close out the other actions from our end soon.

In the meantime, please let me know if you have any further comments.

Thanks and regards,

ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER
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Tilley, Heather

From: Fei Chen <fchen@tacticalgroup.com.au>
Sent: Thursday, 30 May 2019 1:51 PM
To: Tilley, Heather
Subject: FW: Workplace Travel Plan - Moorebank Logistics Park - East Precinct MPE Stage 2
Attachments: PREC-QPMS-EN-PLN-0007 - WTP_clean.pdf

FYI

Kind Regards,

FEI CHEN
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From: Cathy Kinsey <cathy.kinsey@campbelltown.nsw.gov.au>
Sent: Monday, 27 May 2019 9:04 PM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: Mark Wolczak <Mark.Wolczak@campbelltown.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: Workplace Travel Plan - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Ibrahim

I note that the Workplace Travel Plan (attached) still has no heavy vehicles allowed to use Cambridge Ave. As such, Campbelltown Council has no objection to the plan.

Regards

Cathy Kinsey
Co-ordinator Stormwater and Structural Design
Campbelltown City Council

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F: 02 4645 4111

www.campbelltown.nsw.gov.au

Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Monday, 27 May 2019 5:05 PM
To: Cathy Kinsey
Cc: Mark Wolczak; Nathan Cairney; Fei Chen
Subject: Workplace Travel Plan - Moorebank Logistics Park - East Precinct MPE Stage 2

Hi Cathy

We previously sent you the Operational Traffic & Access Management Plan (OTAMP) for review and approval and have noted your comments on this plan.

We are also required in the conditions of consent to develop a Workplace Travel Plan (WTP), in consultation with TfNSW, as a supplement to the OTAMP. The WTP is now complete and a copy is attached for your reference.

Please let me know if you have any comments that you'd like to discuss over the phone or in person and/ or otherwise if you do not wish to comment on this plan.

Thanks and regards,

Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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Before printing this document, please consider the environment.

Mr Ibrahim Awad
Environmental Manager
Tactical Group
Level 15
124 Walker Street
North Sydney NSW 2060

Dear Mr Awad

Moorebank Logistics Park MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) - B2 (CTAMP-B), B28 (Biannual Report Framework), B26 OTAMP & B29 WTP

Thank you for your correspondence dated 11 April 2019, requesting Transport for NSW (TfNSW) comments on the following reports:

- Construction Traffic & Access Management Plan B (CTAMP B)
- Operations Traffic & Access Management Plan (OTAMP)
- Bi-annual Trip Report
- Workplace Travel Plan (WTP)

It is advised that:

- Roads and Maritime Services will provide a separate response on the Construction Traffic & Access Management Plan B (CTAMP B) and Operations Traffic & Access Management Plan (OTAMP); and
- Details comments on the Bi-annual trip report and the Workplace Travel Plan (WTP) are included in **TAB A**.

If you require clarification on the above, please don't hesitate to contact Para Sangar, Senior Transport Planner on 0466 024 892.

Yours sincerely

16/5/2019

Mark Ozinga
Principal Manager, Land Use Planning and Development
Freight, Strategy and Planning

Objective Number CD19/03084

TAB A – Detailed Comments

Bi-Annual Trip Report

Section 5.1.2 – Traffic Surveys

- This section needs to clearly state the purpose of these traffic surveys and whether light and heavy vehicles will be surveyed;
- Peak periods of the development is not included for the survey period (5am-6am and 1pm-2pm);
- No information in relation to the sample size for light and heavy vehicles that would be captured for Origin-Destination surveys is provided; and
- The proposed Origin-Destination Surveys do not capture vehicle movements along the interchange ramps of M5 Motorway/Moorebank Avenue.

Workplace Travel Plan (WTP)

Section 1.5 - Objectives and Targets

The overall objective of the precinct-wide Workplace Travel Plan (WTP) should incorporate visitors as well as employees and the target mode share highlighted - 30% for public and active transport - should be set for an initial period of time not the lifetime of operations and targets should be reviewed and revised as appropriate during the monitoring and evaluation process.

Section 2.2.1 – EPBC Act Approval

The summary of mitigation measures includes the following:

- Consideration of the establishment of Glenfield Station to Liverpool Station express bus;
- Installation of a bus interchange and waiting area; and
- Consideration of the extension of Bus Route 901.

It is advised that

- Providing an attractive public bus route is not possible until Cambridge Avenue has been upgraded to eliminate flooding;
- Any bus route diversion needs to be logical and does not require the bus to double back on itself. Bus facilities for east and west Moorebank sites needs to ensure that in servicing both sites buses are not doubling back on themselves as well;
- If Cambridge Avenue upgrade is implemented, any on site diversions and bus facilities need also to be built to be compatible with a bus route linking Glenfield to Liverpool via Cambridge Avenue and Moorebank Avenue which services both sites rather than the 901 which would only ever be attractive for workers coming from Liverpool; and
- Future bus facilities need to consider the realignment of Moorebank Avenue.

Section 2.3 - Roles and Responsibilities

An important component of the overall WTP for the Moorebank Logistics Park – East precinct going forward will be the preparation of individual / organisational WTPs by each tenant/occupant. It should be a requirement of all tenants/occupants to develop and manage an individual WTP and contribute to the on-going development and management of the precinct-wide WTP.

It is recommended that:

- A Steering Group (comprising representatives from each organisation across the precinct) is formed to oversee the development and management of the precinct-wide WTP and individual WTPs; and

- A succinct one page summary of key components of the precinct-wide WTP/individual organisational WTPs is provided to include:

    - Statement demonstrating ongoing commitment of senior executive management across all workplaces across the Precinct to the:

        - Promotion of sustainable transport and operating practices; and

        - Ongoing development, implementation, monitoring, evaluation, reporting and management of a precinct-wide / individual organisational WTP.

    - Governance structure:

        - Details of precinct-wide Steering Group (interim arrangements until full occupation of precinct) and intent to form a Working Group comprising nominated Travel Plan coordinator/champion for the precinct / representative for each workplace/organisation.

- Agreed Action Plan:

        - As agreed by precinct-wide Steering Group, overview of WTP outcomes, goals and objectives, mode share targets and action plan including proposed measures, initiatives, monitoring, evaluation, reporting and stakeholder engagement strategies with indicative timeline and individual / group / agency responsible for actioning; and

        - Each tenant/organisation should prepare a summary, as detailed above, of its WTP, developed in close consultation with its occupants and visitors.

Section 6.3 – Management Measures

It is recommended that the following management measures are added:

- The Interim Steering Group needs to establish a stakeholder engagement strategy as early as possible, identifying and consulting with key partners at the earliest opportunity to assist with the progression of identified actions prior to occupation e.g. State government, local council, local community, transport operators.

- Travel Information Pack needs to be prepared to include an introductory statement from the Precinct management/ Steering Group promoting sustainable transport and operating practices and encouraging use of active and public transport. The document provides an opportunity to raise awareness of the WTP and individual organisation WTPs and the intent of the precinct management to include the whole precinct community in the on-going development, implementation and management of the wider and individual WTPs.

- The Travel Information Pack including the Transport Access Guide (TAG) and Travel Survey is prepared to inform and gain information from prospective tenants, employees and visitors prior to occupation. There is an opportunity to provide information to future users of the precinct during staff recruitment, procurement of servicing, maintenance, cleaning and caretaking, regular deliveries etc. It is recommended that the promotion of carpooling (and request to register interest in its establishment) is included in the TAG.
- On-going monitoring, education and awareness activities should be planned to promote sustainable travel from the outset. There is potential to establish a forum for interested employees who wish to participate in workplace / precinct-wide Travel Plan activities. The establishment of focus groups across precinct workplaces is another useful engagement method to gain a better understanding of transport challenges and opportunities facing occupants of the precinct
- Preferential parking provision is considered for staff / visitors who carpool with designated spaces allocated and signage displayed. Administration and management will need to be established.
- If not yet installed the car park should be future proofed to incorporate sufficient power and conduits to enable the installation of charging stations for Electric and Hybrid Vehicles and Connected and Autonomous vehicles.
- Consideration is to be given in collaboration with occupants of the precinct to the future repurposing of the car parking spaces to be removed as active and public transport use increases e.g. communal sports / recreation facilities.
- Quality end of trip facilities (including locker and secure storage facilities) should be installed to encourage greater take up of active transport as the precinct becomes more established. Such facilities will also encourage active transport during staff comfort breaks contributing to employee wellbeing. It is important that maintenance and replacement of such facilities is explicit in the Cycling and Pedestrian Access Sub Plan (not appended to WTP).
- There is an opportunity to establish a walking and cycling buddy scheme to encourage increased participation in active transport.

Appendix D - Staff Travel Surveys

- The travel survey questions workplace occupants and visitors about existing and preferred modes and seeks to gain a better understanding of any challenges and opportunities to the use of active and public transport to/from home to the precinct and during the working shift; and
- While the travel survey should not be too onerous to complete it should seek to gain as much information on existing/preferred transport mode and working practices and any challenges/opportunities e.g. shift times, scope for remote working, virtual meetings etc as this will help inform and develop targeted initiatives.

Technical Note

It is recommended that the proposals outlined in the Technical Note be considered in consultation with relevant agencies, operators and known occupants (tenants and employees) of the precinct as a matter of priority.

Tilley, Heather

From: Fei Chen <fchen@tacticalgroup.com.au>
Sent: Thursday, 30 May 2019 1:50 PM
To: Tilley, Heather
Subject: FW: Moorebank Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) RMS Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)
Attachments: Operational Traffic and Access Management Plan RMS Comments_Final.docx

FYI

Kind Regards,

FEI CHEN
GRADUATE PROJECT MANAGER

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From: Ibrahim Awad
Sent: Sunday, 26 May 2019 12:04 PM
To: VAN PUTTEN Laura E <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Cc: RATHAN Pahee <Pahee.RATHAN@rms.nsw.gov.au>; CUMMING Rachel <rachel.cumming@rms.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: RE: Moorebank Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) RMS Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Laura

Please find attached our response to your comments on the OTAMP.

We are working to finalise our response on the CTAMP-B and BTODR and will have these to you early this week.

Please let me know if you have any further comments on this plan and/ or would like to discuss over the phone or in person.

Thanks and regards,

Ibrahim

Regards,

IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: VAN PUTTEN Laura E <Laura.VAN.PUTTEN@rms.nsw.gov.au>
Sent: Wednesday, 15 May 2019 9:35 AM
To: Ibrahim Awad <iawad@tacticalgroup.com.au>
Cc: RATHAN Pahee <Pahee.RATHAN@rms.nsw.gov.au>; CUMMING Rachel <rachel.cumming@rms.nsw.gov.au>
Subject: Moorebank Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) RMS Consultation - B2 (CTAMP-B) and B28 (Biannual Report Framework)

Hi Ibrahim

Roads and Maritime has reviewed the following traffic and transport documents supplied by Tactical Group and submitted under SSD 7628 Moorebank Precinct East Stage 2 (MPE Stage 2) application to satisfy condition B2:

- Construction Traffic and Access Management Plan (CTAMP) – Phase B – SSS2-QPMS-EN-PLN-0040 - 12/03/2019
- Operational Traffic and Access Management Plan (OTAMP) – PREC-QPMS-EN-PLN-0009 - 9/4/2019
- Moorebank Precinct East Biannual Trip Origin Destination Report - PREC-ARC-TR-RPT-0001 – 13/03/2019

Roads and Maritime provides the following comments for consideration:

Construction Traffic and Access Management Plan (CTAMP)

- The CTMP needs to meet the requirements of RMS G10 specification see attached G10 specifications document. This includes but not limited to Staging Arrangement Plans, Traffic Control Plans (including temporary signal plans), Vehicle Movement Plans, Pedestrian Movement Plans, Design Drawings, Incident Management Plans etc. Traffic Control Plans and Swept Path Analysis appendices were not supplied. The missing appendices are to be provided in line with RMS requirements.

- The CTMP is to consider / address requirements within the SSD conditions.

- Safety In Design Workshop is to be arranged by the proponent prior to commencement of construction work. An independent WHS consultant is to facilitate the workshop and all effected stakeholders (not limited to) including RMS, TMC, Utilities Providers, Council etc are to attend.

- Trip Distribution figures with clear assumptions at each intersection within the study area should be provided (heavy vehicle breakdown to be included).

- SIDRA outputs are required. Table 19 & 20 Peak intersection performance results: The Level of Service(LoS) column does not corresponds to Delays as per the standard threshold values of LoS vs Average Delays. Please verify and revise accordingly.

- Section 3.1.6 what is the alternative route should the nominated route be unavailable?

- Section 3.2.1 states that the Baseline Peak hour traffic volumes are used from 2015 LMARI traffic model and updated to reflect 2017 data for revised traffic analysis. The traffic volumes should be based on current/recent surveys to simulate the current conditions.

- Section 3.2.4 how will diversions impact traffic impact reduction strategy (3.3.5)? What are the alternative routes proposed?

- Section 3.2.5: the proponent is to Identify the alternate route for pedestrian and bicycle paths during Moorebank Avenue road diversion works.

- Section 3.3.3 vehicle movements are unclear, more information required on access and direction.

- Section 3.3.9 TfNSW are to be included as a key stakeholder.

<u>Operational Traffic and Access Management Plan (OTAMP)</u>

- Similar to the CTMP updated traffic counts should be provided to simulate current conditions.
- Intersection capacity calculations should be provided with Sidra output files.
- Section 3.1.4.1 Provide the safety implications and proposed mitigations due to high percentage of heavy vehicles (56%) which might require special considerations in road geometry, width, grades and intersection layouts within the study area.
- What are the assumed network upgrades?
- Workplace travel plan not provided
- Access plans unclear
- What are the public transport services?
- What is the pedestrian/cycle detour paths?
- What is the parking management (on and off street)
- Access swept paths are required for the largest vehicles.

<u>Moorebank Precinct East Biannual Trip Origin Destination Report</u>

- Figure 2-2 on page 7 shows in red the HV access routes around the facility, in particular M5 (E and W of Moorebank Ave), and Hume Hwy. I would have thus expected that the OD survey would be designed in such a way as to identify which of these HV access routes are used by HVs to/from the facility. However, Fig 4-1 (I think it should be called Fig 5-1) on page 16 shows that the only OD survey points are along Moorebank Ave, Cambridge Ave and Anzac Ave. There are no OD survey sites on M5 or Hume Hwy so it will not be possible to determine which HV access routes have been used. This looks like a huge oversight and brings into question the rationale for the OD survey.

  Furthermore, Cambridge Ave and Anzac Ave are not shown in Fig 2-2 as HV access routes. Why are they being surveyed? Purely to detect breaches?

- On page 13 it is stated that the Operational Data Collection will involve trucks filled with RFID readers. Does this equipment also form the basis of the vehicle identification for the OD surveys? If not, what method will be used

to uniquely identify the HVs for the OD survey? Manual observation of number plates? (If so, how will this be done since the surveys extend beyond daylight hours?) Video cameras with number plate recognition software? Bluetooth readers? What level of accuracy can be expected?

- How will the OD data be tabulated / displayed? Appendix A – Reporting Table Templates outlines only the format for tabulation of operational data on vehicle & container volumes entering and leaving, gate opening periods and employee numbers. There is no reference to the presentation of OD data.

Should you have any questions or further enquiries in relation to this matter, my contact details are below or e: development.sydney@rms.nsw.gov.au.

It is emphasised that the comments provided above are informal and of a Pre-advice nature. They are not to be interpreted as binding upon Roads and Maritime and may change following formal assessment of a submitted development application from the appropriate consent authority.

Kind regards,

Laura van Putten

Land Use Assessment Officer
North West Precinct | Sydney Division
T 02 8849 2480
www.rms.nsw.gov.au

Roads and Maritime Services

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From:	Cathy Kinsey
To:	Ibrahim Awad; Mark Wolczak
Cc:	Nathan Cairney; Fei Chen
Subject:	RE: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation
Date:	Friday, 3 May 2019 8:37:09 AM

Hi Ibrahim

Sorry. Being out of the office gave me some catch up work. Apologies for the delay in response.

I can confirm that as long as the OTAMP requires all heavy vehicles to arrive at and depart the Intermodal site via the M5 and not use Cambridge Ave, that Campbelltown Council has no issues. I believe this is the case.

Regards

Cathy Kinsey
Co-ordinator Stormwater and Structural Design
Campbelltown City Council
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F: 02 4645 4111
www.campbelltown.nsw.gov.au
Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.

Description: Description: Brand

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]
Sent: Thursday, 2 May 2019 6:49 PM
To: Cathy Kinsey; Mark Wolczak
Cc: Nathan Cairney; Fei Chen
Subject: FW: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Hi Cathy

Hi Cathy

I'm doing the weekly Thursday follow up on our consultation with Campbelltown Council on the above plan.

I note that you were on leave the last time I tried to contact you.

I'm sure if you are back now, but if you are, could you please update us on the status of your review and/or let us know if you do not wish to review the document so that we can close out this consultation?

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Ibrahim Awad
Sent: Monday, 29 April 2019 11:12 AM
To: 'cathy.kinsey@campbelltown.nsw.gov.au' <cathy.kinsey@campbelltown.nsw.gov.au>; 'mark.wolczak@campbelltown.nsw.gov.au' <mark.wolczak@campbelltown.nsw.gov.au>
Cc: Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Hi Cathy

I'm doing the weekly follow up on our consultations with Campbelltown Council on the above plan.

Has your team had the chance to review the document and is there anything else that we can do to help in that process?

Please let me know if you have reviewed the document and would like to discuss over the phone or in person.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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From: Ibrahim Awad
Sent: Thursday, 18 April 2019 12:23 PM
To: 'cathy.kinsey@campbelltown.nsw.gov.au' <cathy.kinsey@campbelltown.nsw.gov.au>
Cc: 'mark.wolczak@campbelltown.nsw.gov.au' <mark.wolczak@campbelltown.nsw.gov.au>; 'kevin.lynch@campbelltown.nsw.gov.au' <kevin.lynch@campbelltown.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: FW: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Hi Cathy

I just called on the Council number and left a message for you.

I'm doing the weekly follow up on our consultations with Campbelltown Council on the OEMP/sub-plans submitted to you for review and comment.

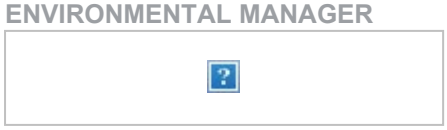
I note that you have already provided us with your comments on the Construction Traffic & Access Management Plan and that we are still awaiting your comments on the Operations Traffic & Access Management Plan which we are hoping to receive by the 29th April 2019.

Could you please let me know if there is anything we can continue to help with and/ or if you'd like to discuss any further comments over the phone or in person.

Thanks and regards,

Ibrahim

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER



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From: Ibrahim Awad

Sent: Thursday, 4 April 2019 3:38 PM
To: cathy.kinsey@campbelltown.nsw.gov.au
Cc: mark.wolczak@campbelltown.nsw.gov.au; kevin.lynch@campbelltown.nsw.gov.au; Nathan Cairney <ncairney@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>; Ian Irwin <iirwin@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>
Subject: Operational Traffic & Access Management Plan - Moorebank Logistics Park - MPE Stage 2 - B26 (SSD_7628) CCC Consultation

Dear Cathy

I'm working with Nathan Clairney on the planning & environmental approvals for the Moorebank Logistics Park.

I'd like to thank-you for your comments in the attached letter signed by Mark Wolczak (dated 2 April 2019) with respect to the 'Construction Traffic & Access Management Plan – Phase B' and confirm that we will have regard to your comments in the ongoing development of this project.

We are also required to consult with Campbelltown Council on the 'Operational Traffic & Access Management Plan' B26 (SSD7628). This document has now been completed and is attached here for your review and approval.

If it would help the consultation process, we would be pleased to meet with you to talk through the key operational traffic and access risks and proposed mitigations. Please let me know if you'd like to go ahead with this approach and your preferred meeting dates /time and suggested attendees.

We are hoping to finalise the consultations on this document by the 29th April '19 to allow these documents to be submitted to DPE for their review and approval shortly thereafter. If there is anything that we can do in addition to the above to support meeting that timeframe, please don't hesitate to let us know so that we can action accordingly.

You may also be interested to know that the Operations Environmental Management Plan (OEMP) for the Moorebank Precinct East has now been finalised and can made available to you upon request. The related sub-plans are still at various stages of development but can also be made available to you, upon request, and once complete.

Regards,
IBRAHIM AWAD
ENVIRONMENTAL MANAGER

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Before printing this document, please consider the environment.

From: Cathy Kinsey <cathy.kinsey@campbelltown.nsw.gov.au>
Sent: Wednesday, 3 April 2019 8:16 AM
To: Nathan Cairney <ncairney@tacticalgroup.com.au>
Cc: Ian Irwin <iirwin@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>; Ian Irwin <iirwin@tacticalgroup.com.au>; Steve Ryan <sryan@tacticalgroup.com.au>
Subject: RE: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) CCC Consultation - B2 (CTAMP-B) and other upcoming documents - Moorebank Intermodal

Hi Nathan

Please find correspondence from Council with respect to your development at the Intermodal. If you need anything else please let me know.

Regards

Cathy Kinsey
Co-ordinator Stormwater and Structural Design
Campbelltown City Council
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www.campbelltown.nsw.gov.au
Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.
Description: Description: Brand

From: Nathan Cairney [mailto:ncairney@tacticalgroup.com.au]
Sent: Tuesday, 2 April 2019 11:32 AM
To: Cathy Kinsey
Cc: Ian Irwin; Fei Chen; Ian Irwin; Steve Ryan
Subject: RE: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) CCC Consultation - B2 (CTAMP-B) and other upcoming documents - Moorebank Intermodal

Hi Cathy,

Nice to hear from you, we spoke quite a while ago about another Qube project in Minto. We agree with the point you have made below that “heavy vehicles to and from the site are still prohibited from using Cambridge Ave unless specifically requiring access to Glenfield Waste” and therefore consultation with Campbelltown is not necessary, however as the conditions require consultation we require your confirmation that you do not wish to be consulted.

If you can confirm that we can include this in our consultation log for this document.

Regards,
NATHAN CAIRNEY
DIRECTOR

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Before printing this document, please consider the environment.

From: Cathy Kinsey <cathy.kinsey@campbelltown.nsw.gov.au>
Sent: Tuesday, 2 April 2019 10:11 AM
To: Nathan Cairney <ncairney@tacticalgroup.com.au>
Subject: MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628) CCC Consultation - B2 (CTAMP-B) and other upcoming documents - Moorebank Intermodal

Hi Nathan

I will be the contact for Campbelltown Council.

My understanding is that this will have little impact on Campbelltown as heavy vehicles to and from the site are still prohibited from using Cambridge Ave unless specifically requiring access to Glenfield Waste. Can you please confirm that this is the case?

Regards

Cathy Kinsey
Co-ordinator Stormwater and Structural Design
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Campbelltown City Council acknowledges and respects the Dharawal people as traditional custodians of this land, and extends these respects to all Aboriginal Elders, past and present, and people from all Aboriginal nations.

Description: Description: Brand

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from RMS

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
RMS	15-May-2019	1. Similar to the CTMP updated traffic counts should be provided to simulate current conditions	This would require a variation to review the SIDRA models prepared as part of the approved EIS. For comparable projects, the approved EIS assessment has been acceptable to provide the basis of the OTAMP. It is not proposed to re-run the SIDRA analysis carried out for the approved SSDA. The development is progressing in accordance with the approved EIS yield and updating the analysis is not considered to be a requirement for the purpose of this report. The biannual data collection specified in the *Moorebank Precinct East – Biannual Trip Origin Destination Report, Framework for Data Collection and Reporting* includes regular data collection to get updated traffic information that could be compared with the EIS forecasts as required.	17/5/2019	See below		
		Notes/ actions from meeting 17/07/2019 • RMS confirmed that older data could be used as a basis for the assessment, provided it is factored up to at least 2018 **ACTION:** Arcadis to ensure the OTAMP and CTAMP base models and data are consistent.	Refer below	How was the data factored up? No indication in the report to indicate how the data was adjusted – see below further explanation on RMS reasons and concerns with the accuracy of data.	All of the modelling and factoring was carried out during the EIS phase. No change proposed. Noting RMS requirement to have this as a standalone document, the modelling approach and methodology is made in the EIS and reference to those documents is considered an acceptable approach in lieu of incorporating vast sections of the EIS into this management plan.	26/09/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
			Arcadis confirms that the OTAMP and CTAMP base models and data are consistent. Note, however, that the OTAMP uses AIMSUN modelling and the CTAMP uses SIDRA modelling Therefore, base models use different platforms.	16/8/2019	Why are the Base models different? Base models should be consistent to ensure a holistic approach is taken to the plans. How can the statement; *'OTAMP and CTAMP base models and data are consistent'* be made if the base models are not consistent? Further explanation is required to understand why the base models are not consistent.	This modelling approach was determined at the EIS stage. The traffic modelling was completed using AIMSUN and SIDRA. The original traffic demand and movement data was obtained from the AIMSUN base models. This data was then used within SIDRA to identify the intersection layouts that best accommodated the demand. The intersection parameters where then feed back into the AIMSUN model to complete the modelling exercise and assessment. The AIMSUN modelling was used to investigate the wider network impact as well as the performance of eight key intersections in the core modelling area. This platform was used as it is the platform used for the LMARI Model and mandated for use in traffic modelling of all future development applications by the MPE Concept Conditions of Approval. SIDRA was used to provide an indication of the impact on, and performance of, the intersection and a calibration exercise was conducted between SIDRA and AIMSUN. The use of SIDRA as a method to test the sensitivity of intersection design configurations is considered acceptable as the SIDRA model was calibrated to the AIMSUN model and was used solely for a sensitivity analysis in order to understand to potential changes in intersection performance. As AIMSUN doesn't allow for detailed testing of intersection layouts, AIMSUN was used to examine network performance and SIDRA used for design of signal plans.	26/09/2019
					Utilising different base models leads to inconsistent results in the modelling which reduces the accuracy of understanding the actual impacts on the road network. If the base model is able to accurately represent the existing situation, then future model predictions can be afforded a higher degree of confidence.	(As above)	26/09/2019
					The modelled network needs to correctly represent the physical and operational characteristics of the real world network.	The base models were validated and calibrated at the EIS stage to ensure that they were representative of the existing conditions.	26/09/2019
					RMS ultimately is concerned with the ensuring safe access to and from the site with the least impact to the road network.	Noted	26/09/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
					As this OTAMP (and CTAMP) will act as a base for any future interim plans it is important to ensure the base modelling provided is as close to the existing conditions as possible. Therefore Model validation should be undertaken to ensure that the impacts of this development are accurately documented. This will assist with interim OTAMPs and any mitigation works that may be required as a result of operations on the site before the required upgrades specified in B13 Table 1 are constructed (the main concern is the access on Moorebank Avenue and subsequent upgrade to 4 lanes).	The AIMSUN model was developed, calibrated and validated by Jacobs and subsequently updated by GTA Consultants (GTA). Roads and Maritime provided these models to Arcadis to undertake the operational traffic modelling for the project. Arcadis did not complete any further calibration and validation of the base models, as they remain unchanged from the model provided by Roads and Maritime.	26/09/2019
RMS	15-May-2019	2. Intersection capacity calculations should be provided with Sidra output files	As above	17/5/2019			
			Notes/ actions from meeting 17/07/2019 **ACTION:** Arcadis to provide SIDRA files for review.	Refer below			
			SIDRA files have been provided for review.	16/8/2019	2029 SIDRA files have been provided however 2019 base files have not. All SIDRA analysis files use in both OTAMP and CTAMP should be provided for RMS to review. The previous point outlines the importance of the accuracy of these files.	Base files to be provided to RMS.	26/09/2019
RMS	15-May-2019	3. Section 3.1.4.1 Provide the safety implications and proposed mitigations due to high percentage of heavy vehicles (56%) which might require special considerations in road geometry, width, grades and intersection layouts within the study area	A review is currently underway on the Moorebank Avenue Upgrade Works package to ensure the high percentage of heavy vehicles is considered appropriately. A draft Planning Agreement required under S7.4 of the EP&A Act is also in place between RMS and the Proponent. A Work Authorisation Deed (WAD) is currently being negotiated.	17/5/2019	This comment refers to a separate Planning Agreement for MPW and therefore is not to be included in justifications/discussions for MPE Stage 1&2.	The WAD is being executed under MPE Stage 2 (SSD 7628) CoC B14. CoC B14 requires a WAD to be executed for the infrastructure listed in CoC B13 which includes the Moorebank Avenue Upgrade. Considerations for road geometry, lane widths, grades and intersection layouts will be undertaken in consultation with RMS during the WAD process.	26/09/2019
			Notes/ actions from meeting 17/07/2019 • RMS is concerned with the safety of the heavy vehicle proportion using the road network external to the site • Safety will be addressed in the	Refer below	See below		

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
			Safety in Design workshop **ACTION:** Arcadis to review response to highlight design, vehicle booking system and other management measures **ACTION:** Tactical to provide RMS with the design plans separately for information. **ACTION**: DPIE have stated that they do not want design drawings within management plans. RMS to confirm approach with DPIE; Tactical to provide correspondence **ACTION:** Arcadis to revise access arrangement swept paths, clarifying location and overlaying on an aerial.				
			Section 3.2.3 Heavy Vehicle Booking System, 3.2.4 IMEX Heavy Vehicle Access and Egress and 3.2.5 Heavy Vehicle Accommodation address management measures for heavy vehicles to avoid build-up of queuing trucks on Moorebank Avenue during high traffic situations. Swept path analyses from designer Northrop	16/8/2019	Section 3.2.3 provides a very brief overview of how the checking system will operate. More information to be included in the report to appropriately explain the process. Ie. Do heavy vehicle need to access the site before being 'rejected' should they arrive early? Where do heavy vehicles 'wait' should they be 'rejected'? It is unknown from the brief information provided how the checking system will assist with vehicle queuing. More information is required to clarify.	Section 3.2.3 has been updated to provide further detail on the Vehicle Booking System.	26/09/2019
					Referring to the swept path analysis (Condition B10) provided from Northcorp **FIG 2.01 – 2.03: REV C**, the plans indicates that all traffic (light & heavy for Construction and operation) will be accessing and egressing the site from one central point which is contrary to the OTAMP. In addition from these plans it appears that Area 5 will be operational however there is no indication on the vehicle volume as a result of this area. It is understood most of these questions will be addressed under the Interim OTAMP should the Modification 1 to the conditions be finalised.	These issues will be addressed in compliance with the Final MOD Condition B26A. Refer to OTAMP Figure 1-1 which shows the four permanent Operational site accesses. Please note the following: **Not part of this OTAMP:** Area 5 will not be operational until Q4 2021. This OTAMP will be updated as each Area comes on line as presented in Section 1.3 of the OTAMP (Table 1-1). **Subsequent updates to this OTAMP:** Warehouses and Areas as the come online.	26/09/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
					However at this stage these modifications are not determined and there is currently no material that indicates what the impacts are on the surrounding road network (in particular Moorebank Ave) during the operation of Warehouse 1, Area 5 (no information on the use of this area) and IMEX. The concern is that it is unknown what the impacts are. For example the following questions are raised: - How long will the queue lengths be with only one access under operation for both construction and operational traffic. The plan indicates that the other accesses will not be provided until the diversion to Moorebank Avenue is complete. For example looking at the Mod1 changes : With rough calculations based on data provided in table for up to 150,000m2 of warehouse space & IMEX – The 'worst case' scenario peak operation period - up to 3029 (952 heavy & 2077 light) vehicle movements per day.	These issues will be addressed in compliance with the Final MOD Condition B26A.	26/09/2019
					Additional point outlined in the CTAMP comments – The 'worst case' scenario peak construction period up to 2,600 vehicle movements per day. How will this number of vehicle movements be dealt with during the construction of the temporary diversion road and Moorebank Avenue upgrades being assessed by RMS under the WAD process?	These issues will be addressed in compliance with the Final MOD Condition B26A.	26/09/2019
					Additional design points: - Turn paths should be a smooth, single radius and not have a 'kink' as currently demonstrated (in line with Austroads Std) - The turn paths should allow for simultaneous movements at the site access and throughout the internal road network. - Civil plans showing the interim arrangement should be provided to accurately show that vehicles can safely	These issues will be addressed in compliance with the Final MOD Condition B26A.	26/09/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
					access/egress the intermodal site from the singular access - The current signal arrangement requires vehicles turning left into the site to give way to right turn movements. No information has been provided to indicate what vehicle movement will be restricted. Will there be right turn movements permissible for light vehicles entering the site? What is the length of the left turn bay? - Moorebank Ave is a 2 lane road, any queuing onto Moorebank Avenue from spill out of the left turn bay or vehicles turning right into the singular site access will restrict the north/south through movements and will likely cause considerable delays to the surrounding network. - The TCS plans should be provided to show the phasing arrangements		
					RMS notes that Table 2-1 Conditions of Consent B10 states approved by PCA however Swept path plans require RMS & Secretary approval. Therefore does not demonstrate compliance with B10.	Updated Northrop swept path drawings to RMS. Swept paths are also required for CTAMP-B under the WAD process as confirmed by RMS. Compliance table text for Condition B10 updated.	26/09/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
RMS	15-May-2019	4. What are the assumed network upgrades	The Operational Traffic and Transport Impact Assessment (OTTIA) prepared by Arcadis December 2016, discusses the assumed network upgrades in relation to the MLP. S3 addressed the existing road network and noted that a number of regional intersections are beyond capacity already. To get the network model to converge properly in the later horizon years the intersection required upgrade. The upgrades are the responsibility of RMS as the Proponent has no / limited impacts in these areas Information relating to the assumed network upgrades has been summarised in Section 3.1.7 and Table 3-7 of the OTAMP.	17/5/2019	3.1.7 – assumed road network upgrades Have any of these upgrades been completed? Indicative timing of 2019 suggests that all these works are either constructed or under construction to be completed by 2019 which is not the case. In addition some of the 'assumed' upgrades are not committed or do not have planning consent. Therefore should not be included in the report and are not indicative of the current situation on the road network.	As outlined in the EIS Appendix Kb, the existing conditions modelling highlighted that there are a number of intersections across the broader road network that do not accommodate background traffic and anticipated background traffic growth, i.e. prior to consideration of any impacts of the Proposal or cumulative scenario related traffic. The projects identified in Table 3.8 outline those that have been planned or committed by Roads and Maritime and were included as part of the do-minimum network improvements within the base model provided by Roads and Maritime. The projects identified in Table 3.8 are projects that were identified by Arcadis as additional projects required to address the impacts of background and cumulative traffic. The indicative timing of 2019 was assumed within the project model, as these projects were identified as necessary prior to the commencement of the project.	26/09/2019
			Notes/ actions from meeting 17/07/2019 **ACTION:** Arcadis to include assumed upgrades in the report	Refer below	As above		
			It is confirmed that these assumed network upgrades have been considered in the assessment.	16/8/2019	As above		
RMS	15-May-2019	5. Workplace travel plan not provided	A Workplace Travel Plan (WTP) has been prepared, this can be provided to Roads and Maritime Service (RMS).	17/5/2019	WTP has been noted, – comments closed		
			Notes/ actions from meeting 17/07/2019 **ACTION:** Tactical to provide letter from TfNSW and WTP to RMS. **ACTION:** RMS to review the WTP in the context	Refer below	As above		

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
			of the OTAMP as outlined in Condition B26 (f).				
			The Workplace Travel Plan is appended to Rev 006 of the OTAMP. Letter from TfNSW provided to RMS.	16/8/2019	As above		
RMS	15-May-2019	6. Access plans unclear	The access arrangements are detailed in Section 3.2.2. Figures showing the access arrangements can be prepared as part of the updates to this plan.	17/5/2019	See below		
			Notes/ actions from meeting 17/07/2019 **ACTION:** Arcadis to revise access plans to include full-page figures, with improved presentation and details on lane widths, direction of travel, access to and from Moorebank Ave, etc.	Refer below	This request referred to the access arrangements for Operation before the diversion road has been completed. The plan provided by Northrop does not provide adequate information to undertake an informed review to ensure that these movements will be achieved safely and in line with Austroads stds. This information is still required. RMS notes that Table 2-1 Conditions of Consent B26 (c) states that the following sections address the requirement Section 3.2.2 Section 3.2.4; Table 3-14 Section 3.2.8 Section 3.2.9 Section 3.2.10 Section 3.2.19; Table 3-16; TA-5, TA-6 However none of these sections provide adequate detail on the access arrangements.	Updated Northrop drawings to be provided to RMS. The following sections have been updated to provide detail to further address CoC B26(c): Section 3.2.2 Section 3.2.4; Table 3-14 Section 3.2.8 Section 3.2.9 Section 3.2.10 Section 3.2.19; Table 3-16	26/09/2019
			Figures have been clarified and as much information as possible has been included. The lane widths and access arrangements will be determined by designer on Moorebank Avenue.	16/8/2019	RMS appreciates the information provided to date. However the original discussions around the access arrangements still remain a concern and do not demonstrate compliance with B26 (c.).	Refer to comment response above	26/09/2019
RMS	15-May-2019	7. What are the public transport services	Information relating to public transport services has been addressed in Section 4 of the WTP.	17/5/2019	WTP has been noted, – comments closed		
			Notes/ actions from meeting 17/07/2019 **ACTION:** Tactical to provide letter from TfNSW and WTP to RMS.	Refer below	WTP has been noted, – comments closed		

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
			Letter from TfNSW provided to RMS.	16/8/2019	WTP and letter from TfNSW has been noted, – comments closed		
RMS	15-May-2019	8. What is the pedestrian/cycle detour paths	The CPAFSP (Cycling and Pedestrian Access and Facilities Sub Plan), a sub-plan of the Urban Design and Landscape Plan (UDLP) address Cyclists and pedestrians will be able to access Warehouse 1 through the provision of shared paths from Moorebank Avenue. A shared path extends along the northern boundary of the MPE site, north of the freight village and north of the car park of Warehouse 2.	17/5/2019	It should be noted that the plans provided by Northrop do not indicate how the pedestrian/cycle movements will be accommodated during the interim. This should be outlined in the CTAMP and any WOEMPs	CTAMP-B addresses cycling and pedestrian access management required by CoC B2(g) The CPAFSP addresses cycling and pedestrian access required by Condition B141(d). Interim arrangement will be addressed in compliance with the Final MOD Condition B26A.	26/09/2019
			Notes/ actions from meeting 17/07/2019 Closed	N/A	See above – comments closed		
RMS	15-May-2019	9. What is the parking management (on and off street)	Information relating to parking management has been addressed in Section 1.1 of the OTAMP (Revision 4 dated 1 May 2019).	17/5/2019			
			Notes/ actions from meeting 17/07/2019 **ACTION:** Tactical to provide RMS with updated OTAMP plan.	Refer below			
			OTAMP Rev 6 provided to RMS for consideration.	16/8/2019	It is noted in section 5.1 that there will be 1,498 car parking spaces provided across the MPE.	Noted	
RMS	15-May-2019	10. Access swept paths are required for the largest vehicles.	Figure 3-4 shows the wider access routes to the site and figure 3-2 shows the route the heavy vehicles will take once in the IMEX. The screenshot below shows the swept paths into the emergency access point at the southern end of the site.	17/5/2019	The Swept path diagram (Condition B10) provided by Northrop appears to provide swept paths for 26m/25m? B-double however it is understood that the largest vehicle expected to access this site is in fact 36m. Please provide clarification on this matter.	Updated Northrop swept path drawings to RMS. Swept paths are also required for CTAMP-B under the WAD process as confirmed by RMS.	26/09/2019
			Notes/ actions from meeting 17/07/2019	Refer below	As above		

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
			• RMS requested swept paths to be carried out on the broader road network, based on existing alignment of Moorebank Avenue **ACTION:** Tactical/ Arcadis to provide reference to detailed design				
				16/8/2019			
RMS	13/09/2019	The following statement under 1.3 requires a Warehouse OEMP to be provided 1 month prior to occupation of any warehouse. Has a WOEMP been provided for the warehouses in Area 1 & 5 and IMEX?	No WOEMPs are required for IMEX as there are no Warehouse located there. A WOEMP has been prepared for Area 1 Warehouse 1 and has been lodged with DPIE. No works have commenced in Area 5 to date, as such a WOEMP has not been triggered.				26/09/2019
		In accordance with CoC C6 (SSD 7628) each warehouse tenant will also prepare a Warehouse OEMP (WOEMP) prior to occupation of the warehouse based on the requirements of the OEMP and sub-plans. The Secretary will be notified <u>one month prior to commencement</u> of operation of each new warehouse in accordance with CoC A18 (SSD 7628).	Noted				26/09/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Response Date	RMS response 13/09/2019	Arcadis Response.	Response Date
		These OEMP's should provide traffic management plans which indicate the breakdown of vehicle movements and provide any mitigation requirements as warehouses come on line.	Noted. All WOEMPs will be prepared in accordance with CoC C6 (SSD 7628).				26/09/2019

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from Cargo Movement Centre

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
CMC	13-May-2019	**Early Truck Arrivals:** Provide reference to the sections in the OTAMP / Emergency Response Plan and/ or further details that address how trucks that arrive early at the site (outside of set booking window) will be managed e.g. where will trucks go / park	Scenario #1: Truck arrives in the Moorebank area earlier than the appointment time: There are no Truck Marshalling areas for IMEX Terminal. As per the Driver Induction process and Driver's Code of Conduct, Drivers are requested not to wait in the immediate vicinity of MLP, especially where this will cause traffic and environmental inconvenience to the surrounding community. Scenario #2: Truck arrives at the IMEX Terminal earlier than the appointment time: The Driver makes a Truck Appointment booking in the VBS. Should a Driver arrive at the IMEX Terminal before the appointment time, including an early-arrival-tolerance time, the Driver is instructed to leave the terminal and to re-book another appointment.	23-May-2019
CMC	13-May-2019	**IMEX Terminal Operations Delays:** Provide reference to the sections in the OTAMP / Emergency Response Plan and/ or further details that address how automated gate failures / emergencies will be managed e.g. what happens if gate system loses capacity?	Scenario #1: Simultaneous Entry Autogate Failure. Should both Entry autogates fail simultaneously – despite the technical, communications, and power redundancy – manual gate operations will commence. The Yard Controller will interact with the Drivers, and use the TOS (Terminal Operating System) mobile data terminals to process the Truck Appointment. Scenario #2: Events Causing Minor Truck Loading Delays: The IMEX Terminal has adequate space for Truck marshalling once a Truck has legitimately arrived at the terminal. Scenario #3: Events Causing Major Truck Loading Delays or IMEX Terminal Closure: The VBS Truck Appoint process will be suspended. All imminent Truck Appointments will be cancelled, and the Driver notified and requested to re-scheduled the Appointment when terminal services are restored. The Yard Controller will open the Entry and Exit autogates to allow arriving trucks to enter, turn-around, and exit the terminal such that they do no cause congestion on Moorebank Road.	23-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
		Over-weight Trucks:	Scenario #1: Over-weight loading for multiple-container pickups that can be resolved by re-positioning the containers: At time of making the Truck Appointment, the Driver must accurately (1) declare the truck/trailer configuration; (2) nominate the container trailer loading position that will not cause an over-weight load. It is also assumed the consignor and shipping company ensured the container declared weight is true to the actual weight. When exiting the IMEX Terminal after picking up the containers, and after driving over the exit gate weighbridge, if the Driver is notified of an over-weight load, the Driver organises with the Yard Controller to re-position the load. After the load is repositioned, the Truck re-exits the terminal and drives over the weighbridge to check the over-weight load has been resolved. Scenario #2: Over-weight load that cannot be immediately resolved: At time of making the Truck Appointment, the Driver must accurately (1) declare the truck/trailer configuration; (2) nominate the container trailer loading position that will not cause an over-weight load. It is also assumed the consignor and shipping company ensured the container declared weight is true to the actual weight. When exiting the IMEX Terminal after picking up the containers, and after driving over the exit gate weighbridge, if the Driver is notified of an over-weight load that cannot be immediately resolved, the Driver organises with the Yard Controller to remove the containers. The Driver organises with the Yard Controller to deconsolidate the load at a later time. The likelihood of this scenario occurring is negligible (based on feedback from the Port Botany container terminal operators), due to the other controls in the supply chain process.	23-May-2019
		Queuing on Moorebank Road:	Scenario #1: Simultaneous Arrival of Trucks: The Yard Controller will regularly monitor the Entry gate activity, including queuing on Moorebank Road. The IMEX Terminal can accommodate six (6) B-doubles in the Entry roadway. Should the simultaneous arrival of Trucks for the Appointment Timeslot cause the Trucks to queue on Moorebank Road, the Yard Controller will open the autogate to allow sufficient Trucks in and process the Truck Appointment manually in the TOS (Terminal Operating System).	23-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
			The timeslot appointment parameters will be reviewed to reduce/eliminate the likelihood of this event from re-occurring. Scenario #2: Truck Entry Gate Delay: The Yard Controller will regularly monitor the Entry gate activity, including queuing on Moorebank Road. The Yard Controller is in contact with the Drivers at the Entry gate via the gate intercom. Should a Truck Entry issue occur that causes delay at the Entry autogate, the Yard Controller will open the autogate to allow the Truck in and resolve the issue, without holding up the other Trucks entering the terminal.	
CMC	13-May-2019	**Conditions of Consent Reporting:** Provide reference to the sections in the OTAMP / Emergency Response Plan and / or further details on how operational delays in the terminal will be managed e.g. management of truck bookings? Provide reference to the sections in the OTAMP / Emergency Response Plan and / or further details on how operational delays in the terminal will be managed e.g. management of truck bookings?	Report #1: TEU Containers Received and Dispatched: Show Received_40_Foot_Container_Count, Received _20_Foot Container_Count, Received_TEU_Container_Count, Dispatched_40_Foot_Container_Count, Dispatched _20_Foot Container_Count, Dispatched _TEU_Container_Count By Appointment_Date Where Appointment_Date is between the_previous_ 6_months *Source from TOS* Report #2: Heavy Vehicle Activity Show Appointment_Reference_Number, Vehicle_Arrival_Date/Time, Vehicle_Departure_Date/Time, Appointment_TurnAround_Time, Trailer_Configuration_Type, Received_TEU_Container_Count, Dispatched_TEU_Container_Count By Appointment_Date Where Appointment_Date is between the_previous_ 6_months *Source from TOS* Of Note: the Appointment_TurnAround_Time starts when the Truck progresses through the Entry OCR portal, which is located approximately 80m after the IMEX Terminal boundary, and 40m before the Entry AutoGate. Report #3: Light Vehicle Southerly Entry & Egress Show Arriving_Vehicle_Count, Departing_Vehicle_Count By Activity_Date, By Activity_Hour	23-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
			Where Activity_Date is the Representative Date and is between the_previous_6_months, and where vehicle entry is from the South or vehicle egress is to the South *Source from Manual Survey*	
CMC	13-May-2019	Provide Cargo Movement Centre with a 'commitment statement' confirming the actions that will be taken if the above incidents occur.	Not currently included	23-May-2019

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from LCC

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
LCC	14-May-2019	The OPTM needs to include the required mitigation or improvement measures, and timing lines for implementations, to minimise traffic impacts/congestion on the surrounding road network and intersections, including: • M5 Motorway/Moorebank Avenue intersection • Moorebank Avenue/Anzac Road intersection • M5 Motorway/Hume Highway intersection • Anzac Road as 5T Load Limit road	**Comment addressed in the following sections.** Information relating to the minimisation of traffic impacts/congestion on the road network has been provided within the Operational Traffic and Access Management Plan (OTAMP) (Revision 4 dated 1 May 2019). Please refer to the following sections: • Section 3.2.3 • Section 3.2.4; Table 3-14 • Section 3.2.5 • Section 3.2.6; Figure 3-4 • Section 3.2.8 • Section 3.2.9 • Section 3.2.10 • Section 3.2.14 • Section 3.2.17 • Section 3.2.18; Table 3-15 • Section 3.2.19; Table 3-16 • Section 4.1; Table 4-1 • Section 4-5 • Section 4-6 • Appendix B: Driver's Code of Conduct Mitigation measures and timelines for implementation that relate to construction activities are detailed within the relevant Construction Traffic and Access Management Plans (CTAMP) and will not be addressed within this OTAMP.	15/5/2019
LCC	14-May-2019	2) The OPTM outlines the need for workplace travel plan. However a the plan is not attached.	**Comment addressed:** A Workplace Travel Plan (WTP) has been prepared, this can be provided to Liverpool City Council (LCC).	15/5/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
LCC	14-May-2019	3) The OPTM needs to provide details and timing for the implementation of the following public transport improvement works:	**Comment addressed:** This information is detailed in Appendix A of the WTP and Section 6.3.	15/5/2019
LCC	14-May-2019	(a) Development and implementation of a travel behaviour change program	**Comment addressed:** Refer to Section 6 of the WTP.	15/5/2019
LCC	14-May-2019	(b) Establishment and implementation of Holsworthy Station Express bus services	**Comment addressed in Appendix A of the WTP:** Based on the ultimate solution data assessment, an express shuttle bus service to/from the Facility and Holsworthy Station during the peak shift changeover periods is considered feasible. However, this will be dependent on the outcome of the annual staff travel surveys, which will be undertaken by the Estate Manager during operations. The potential demand for an express shuttle bus service to/from Holsworthy Station will be reviewed as the Facility progressively becomes operational.	15/5/2019
LCC	14-May-2019	(c) Establishment implementation of Glenfield Station to Liverpool Station express bus	An express bus between Glenfield Station and Liverpool Station could be considered depending on the potential demand identified in the annual staff travel survey. **This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses**	15/5/2019
LCC	14-May-2019	(d) Installation of a bus interchange and waiting area	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses** The design and installation of bus stops/ interchange and associated waiting area(s) are dependant on the outcomes of consultation with TfNSW and the demand for public transport initiatives as identified in the staff travel surveys. This will be addressed in a future update to the WTP as consultation with TfNSW progresses.	15/5/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
LCC	14-May-2019	(e) Bus priority works (establishment of designated bus lanes).	**Comment addressed** Establishing dedicated bus lanes is not feasible, as this will impact on operations, specifically heavy vehicle accessibility to the Facility. Additionally, the frequency of buses proposed to service the site are unlikely to warrant the implementation of additional bus priority facilities.	15/5/2019
LCC	14-May-2019	(f) Design and construction of walking and cycleways	**Walking and cycleways addressed in UDLP and WTP** This particular comment relates to the design and construction of walking and cycleways. The Urban Design and Landscape Plan sub-plan "*Cycling and pedestrian access and facilities sub plan*" and Section 4 and 5 of the WTP show the walking and cycleways address the walking and cycleways for use during operation	15/5/2019
LCC	14-May-2019	(g) Extension of Bus Route 901	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses** The demand associated with rationalising the bus stops for route 901 and providing an additional regular bus service near the MLP East Precinct access points are dependent on the origin of employees and will be assessed as the Facility becomes progressively operational.	15/5/2019
LCC	14-May-2019	(h) Promotion of the establishment of Route 870, 871, and 872 bus	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses**	15/5/2019
LCC	14-May-2019	In addition, the OPTM, needs to confirm additional bus services to the subject site, with the proposed bus routes/service frequency. The additional bus services should be provided to Council prior to the operation of stage 1 development.	**This is currently being addressed separately in consultation with TfNSW and the outcomes of the consultation will be included in Appendix A as the WTP is developed and consultation with TfNSW progresses**	15/5/2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
			The feasibility of the additional bus services, route and frequency are dependent on the outcomes of the annual staff travel surveys and ongoing consultation with TfNSW. This information will not be available prior to the commencement of operation of Stage 1 (IMEX, RALP, PIWE).	
LCC	14-May-2019	4) Traffic volumes of light vehicles will increase along Anzac Road. Sections of the road has no kerb and guttering, and increase traffic would require rehabilitation works. If the additional traffic is expected to use this road section the OPTM, should include rehabilitation of the road, prior to operation.	**Comment addressed in Section 3.2.17 of the OTAMP** The Conditions of Consent identify the dilapidation process prior to construction and the requirements to repair public infrastructure that has been damaged by carrying out the development. Qube has requested that the requirement to rectify roads in the area impacted by construction activities for MPE Stage 1 and MPE Stage 2 be deferred to after the completion of MPE Stage 2. A formal request to DP&E was made in accordance with MPE Stage 1 CoC G2 which allows for the secretary to alter timing of rectification works	15/5/2019
LCC	14-May-2019	5) Anzac Road is 5T Load Limit road. The OPTM needs to include documented approach and strategies to restrict heavy vehicles from using the road.	**Comment addressed in the OTAMP (Revision 4 dated 1 May 2019)** Refer to the following sections: • Section 3.2.6; Figure 3-4 • Section 3.2.10 • Section 3.2.14 • Section 3.2.19; Table 3-16 • Section 4-5 • Section 4-6 • Appendix B: Driver's Code of Conduct	15/5/2019
LCC	14-May-2019	6) The OPTMS needs to include an emergency response plan.	An Emergency Response Plan (ERP) has been prepared as a standalone document. The ERP and OTAMP will not be combined.	15/5/2019
LCC	14-May-2019	7) Impact of Construction Access – The OPTM needs to outline construction access arrangement and include a separate accesses for construction and operational activities.	**Comment addressed in Figure 1-1 and Section 3.2.2 of the OTAMP** There is a single entrance point from Moorebank Avenue to access the site for both operation and ongoing construction activities. The	15/5/2019

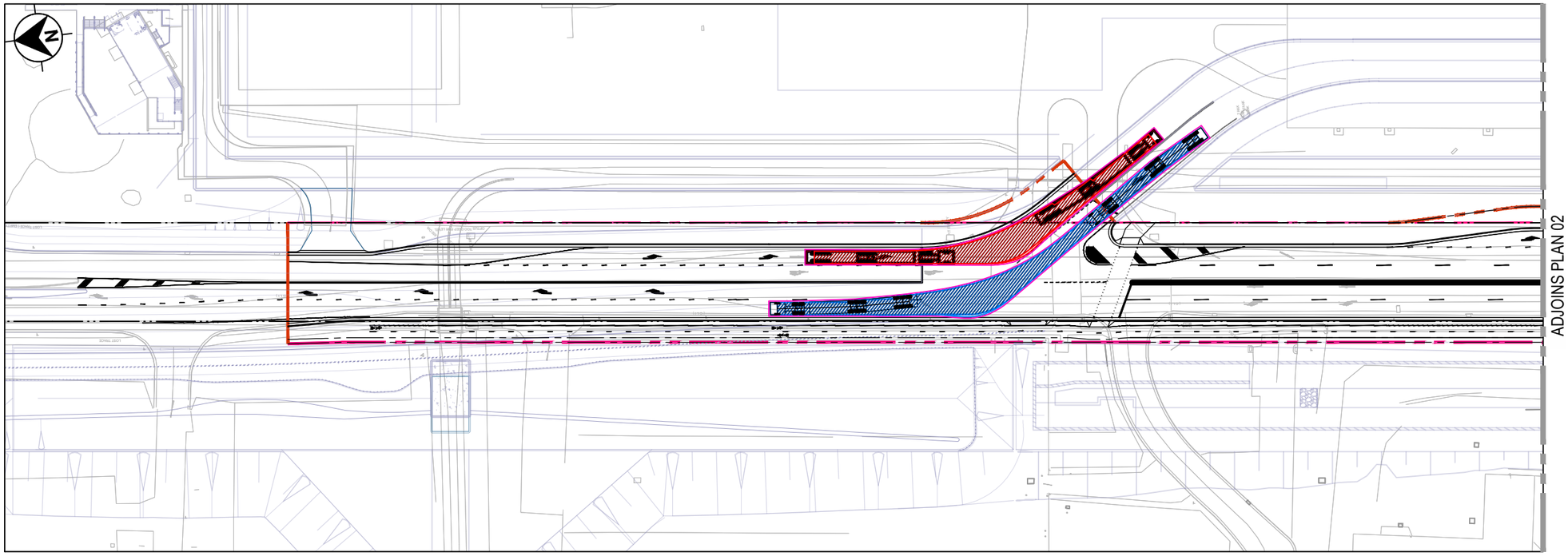
Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
			Warehouses will make use of the same access point. There are no plans to provide a separate access for construction traffic as there is no suitable location to provide a separate access point of Moorebank Avenue	
LCC	14-May-2019	8) Detailed drawings of all the proposed access arrangement including the warehouse, IMEX truck access, IMEX office, and emergency access should be included in the OPTM and with copies to Council	**Access arrangements are addressed in Section 3.2.2 of the OTAMP**	15/5/2019
LCC	14-May-2019	9) A time line to update the OPTM and associated consultation with Liverpool, and Campbelltown Council is to be included OPTM.	**Consultation is addressed in Section 1.6** Section 1.6; Table 1-3 identifies the status of consultation with the applicable agencies, including Liverpool City Council and Campbelltown City Council. **Timelines for updating the OTAMP are detailed in Section 1.3. The proposed staging of the delivery of the operational plans was approved by DP&E on 21/05/2019** Section 1.3 outlines the proposed strategy for updating the OTAMP as operation of the site progresses and is currently being reviewed by the DP&E. Due to the ongoing consultation requirements of the WTP, a timeframe cannot be provided for items 3(a-h) above. As significant milestones are reached, such as the provision of a new bus route, an updated copy of the WTP can be provided for Council's records.	15/5/2019

Operational Traffic and Access Management Plan (Revision 003 dated 9 April 2019)

Status of comments from Liverpool City Council

Stakeholder	Initial Comment Date	Comment	Arcadis /Qube Response	Initial Response Date
LCC	26-May-2019	I note the Workplace Travel Plan (WTP), is yet to be prepared	A Work Place Travel has been prepared	28-May-2019
LCC	26-May-2019	Arrangement to highlight the 5T load limit along Anzac Road has not been addressed, improvement works to minimise are yet to be carried out and a timeline for these works have also not been outlined	Both management plans effectively prohibit the use of large vehicles on Anzac road, but the weight is not specifically referenced. Section 3.1.4.1 of the OTAMP states "*No container trucks would travel to the MLP East Precinct via Anzac Road (east of Yulong Close) or Cambridge Avenue. The design of the IMEX Terminal and Warehouse access points precludes heavy vehicles turning right into the MLP East Precinct, or left onto Moorebank Avenue.*" Section 3.1.9 discusses the upgraded Anzac Road/ Moorebank Avenue intersection from a three leg to a four-leg intersection. This upgrade is in part to accommodate the MPW Stage 2 Proposal entrance. This intersection is to be developed as part of the MPW Stage 2 Proposal however is subject to funding discussions between SIMTA and RMS The CTAMP-B states that "*No heavy vehicles will use Anzac Road*.", included in Section 3.1.6.	28-May-2019

APPENDIX D SWEPT PATHS



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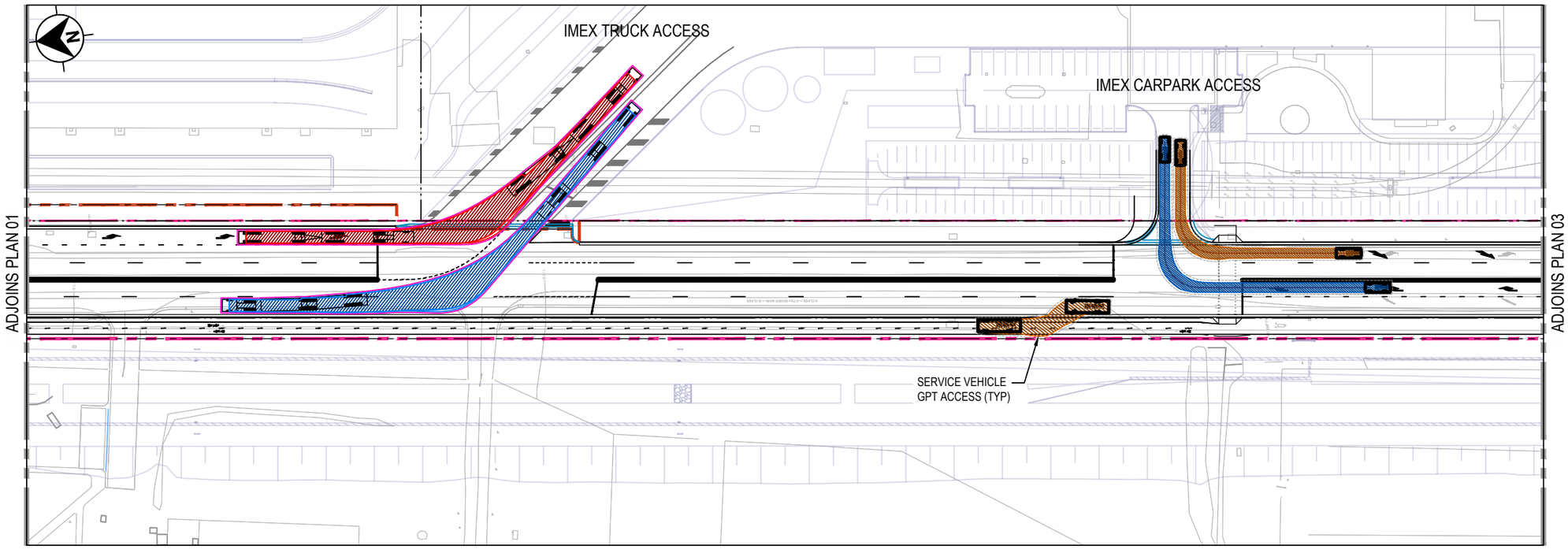

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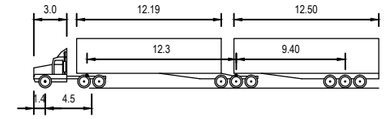

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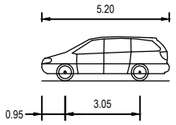
OVERALL BODY HEIGHT	4.300m
MIN BODY GROUND CLEARANCE	0.540m
TRACK WIDTH	2.500m
LOCK-TO-LOCK TIME	6.00s
KERB TO KERB TURNING RADIUS	15.000m

PASSENGER VEHICLE (5.2m)



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MIN BODY GROUND CLEARANCE	0.295m
TRACK WIDTH	1.840m
LOCK-TO-LOCK TIME	4.00s
KERB TO KERB TURNING RADIUS	6.300m

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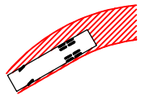

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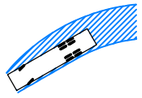

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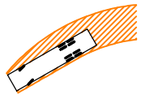

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MAINTENANCE VEHICLE

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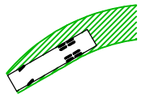

VEHICLE, VEHICLE ENVELOPE

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DESIGN LOT CODE

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CO-ORDINATE SYSTEM	HEIGHT DATUM
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DRAWINGS / DESIGN PREPARED BY

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Sydney
Level 11 345 George Street, Sydney NSW 2000
Ph (02) 9241 4188 Fax (02) 9241 4324
Email sydney@northrop.com.au ABN 81 094 433 100

PLOT DATE / TIME: 5 Aug 2019 - 12:34PM
PLOT BY: APaciben

	NAME	DATE
TITLE		
DRAWN	D.CHAPMAN	02.08.19
DRG CHECK	A.RIVETT	02.08.19
DESIGN	A.RIVETT	02.08.19
DESIGN CHECK	G.COLLINS	02.08.19
DESIGN MNGR	G.COLLINS	02.08.19
PROJECT MNGR	M.RICHARDS	02.08.19

DRAWING No. MAUW-NRP-CV-DWG-7101

CLIENT BMD

PREPARED FOR TACTICAL GROUP

MOOREBANK AVENUE WORKS
MOOREBANK AVENUE UPGRADE WORKS (MAUW)

A3

TURNING PATH PLAN SHEET 01

RMS REGISTRATION No. DS 2019/000519

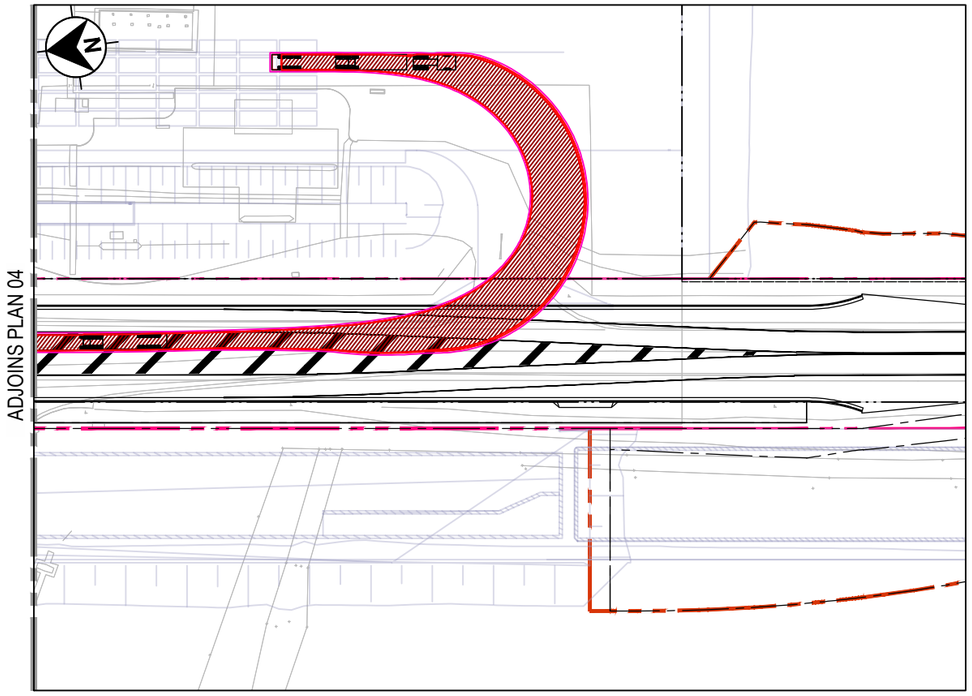
PART

ISSUE STATUS: DETAILED DESIGN

EDMS No.

SHEET No. 7101

ISSUE 04



PLAN 05 - IMEX EMERGENCY EXIT
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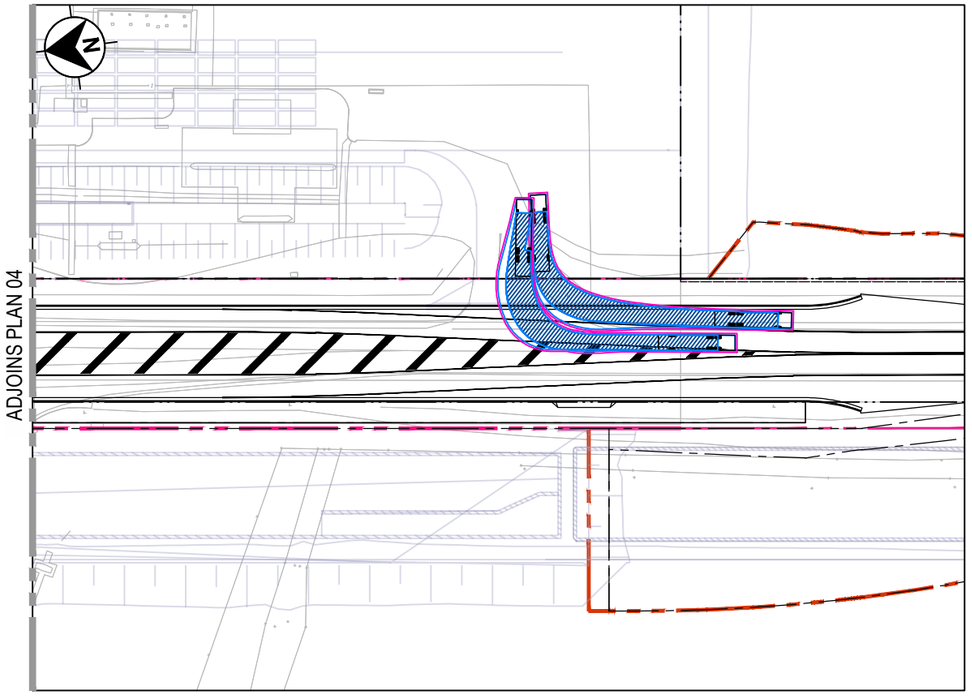

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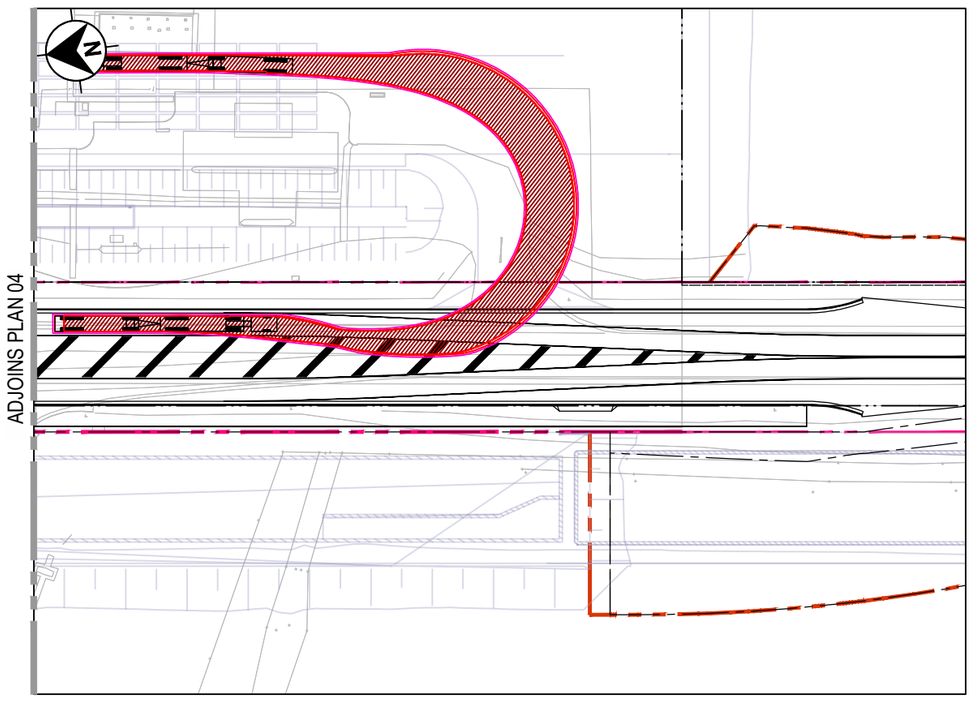

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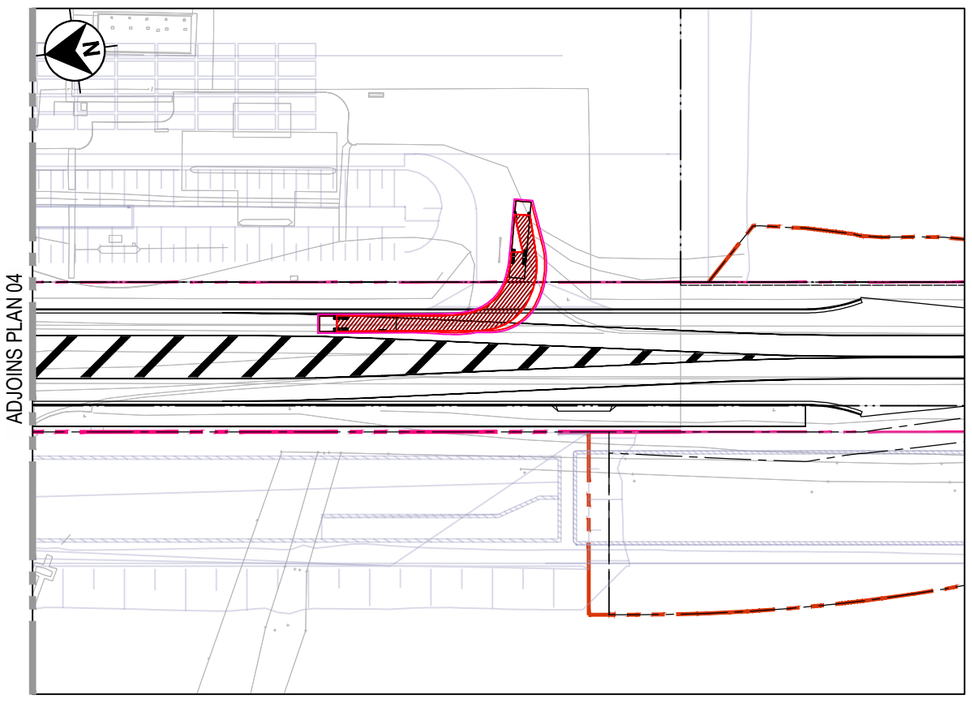

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DESIGN VEHICLE LEGEND

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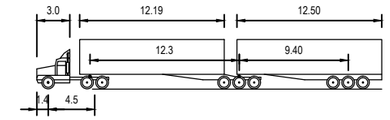

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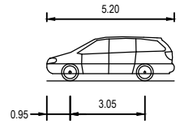
LOCK-TO-LOCK TIME	6.00s
KERB TO KERB TURNING RADIUS	15.000m

PASSENGER VEHICLE (5.2m)



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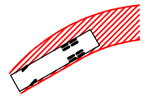

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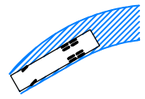

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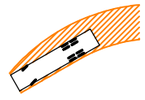
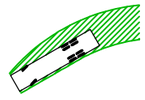


VEHICLE, VEHICLE ENVELOPE

MAINTENANCE VEHICLE

VEHICLE, VEHICLE BODY AND VEHICLE CLEARANCE



VEHICLE, VEHICLE ENVELOPE

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DESIGN LOT CODE

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PLOT BY: APaciben

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03	04.04.19	RMS 50% SUBMISSION	GC	MR
02	07.12.18	85% SUBMISSION	GC	MR
01	16.11.18	85% SUBMISSION	GC	MR

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CO-ORDINATE SYSTEM: MGA56
HEIGHT DATUM: AHD

DRAWINGS / DESIGN PREPARED BY

NORTHROP
Sydney
Level 11 345 George Street, Sydney NSW 2000
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DRG CHECK	A.RIVETT	02.08.19
DESIGN	A.RIVETT	02.08.19
DESIGN CHECK	G.COLLINS	02.08.19
DESIGN MNGR	G.COLLINS	02.08.19
PROJECT MNGR	M.RICHARDS	02.08.19

CLIENT: BMD

PREPARED FOR: TACTICAL GROUP

MOOREBANK AVENUE WORKS
MOOREBANK AVENUE UPGRADE WORKS (MAUW)

A3

TURNING PATH PLAN SHEET 02

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