

Biannual Trip Origin Destination Report

01 May 2023 – 31 October 2023

Moorebank Precinct East 29/07/2024 P1065r08



Info@asongroup.com.au +61 2 9083 6601 Suite 17.02, Level 17, 1 Castlereagh Street, Sydney, NSW 2000

Document Control

Project No	P1065	
Project	Moorebank Precinct East	
Client	Qube Property Management Services Pty Limited	
File Reference	1065r08v2_BTODR Nov 2023	

Revision History

Revision No.	Date	Details	Author	Approved by
-	24/01/2024	Draft		
I	26/02/2024	Issue I		
II	29/07/2024	Issue II		

This document has been prepared for the sole use of the Client and for a specific purpose, as expressly stated in the document. Ason Group does not accept any responsibility for any use of or reliance on the contents on this report by any third party. This document has been prepared based on the Client's description of its requirements, information provided by the Client and other third parties.



Contents

Glossary

1	Intr	oduction	1
	1.1	Introduction	1
	1.2	Purpose	1
	1.3	Scope	2
	1.4	Period of Reporting	2
2	Shi	pping Container Transport	3
3	Tru	ck Gate Opening Periods	4
	3.1	Period of Opening	4
	3.2	Exceptions to Full Time Opening	4
	3.3	Actual Hours of Opening	4
4	Tra	ffic Volumes	5
	4.1	MPE Main Access	5
5	Ori	gin-Destination Results	6
	5.1	Survey Locations	6
	5.2	Amendments to Survey Locations	6
6	Em	ployee Numbers	12
7	Sur	nmary	13

Contents Continued

Figures		
Figure 1: Origin-Destination Gates Figure 2: Visual of Average OD Movements - All Vehicles Figure 3: Visual of Average OD Movements - Light Vehicles Figure 4: Visual of Average OD Movements - Heavy Vehicles Figure 5: Visual of Average OD Movements - Articulated Heavy Vehicles		
Tables		
Table 1: Breakdown of Operational Status Within MPE Table 2: Shipping Container Transport Table 3: Breakdown of Operational Status Within MPE Table 4: Truck Gate Opening Period Exceptions Table 5: Average Daily Traffic Volumes Table 6: OD Survey Gates Table 7: Average OD Movements – All Vehicles Table 8: Average OD Movements – Light Vehicles Table 9: Average OD Movements – Heavy Vehicles Table 10: Average OD Movements – Articulated Heavy Vehicles Table 11: OD Survey Gates	2 3 2 5 6 8 9 10 11	
APPENDICES		

Appendix A. BTODR Framework Report



Glossary

Acronym	Description	
BTODR	Biannual Trip Origin Destination Report	
GFA	Gross Floor Area	
IMEX	IMEX (Import-Export) Intermodal Terminal	
MLP	Moorebank Logistics Park	
MPE	Moorebank Precinct East	
OD	Origin - Destination	
QUBE	Qube Property Management Services Pty Limited	
RMS	Roads & Maritime Services	
SSD	State Significant Development	
TA	Transport Assessment	
TEU	Twenty Foot Equivalent Units	
TfNSW	Transport for New South Wales	
SIMTA	Sydney Intermodal Terminal Alliance	

Reference Documents

Abbreviation	Document
BTODR Framework Report	Moorebank Precinct East -Biannual Trip Origin Destination Report Framework for Data Collection and Reporting, (Arcadis, August 2019)
BTODR Report May 2023	Biannual Trip Origin Destination Report, Moorebank Precinct East, Ref:1065r07 (Ason Group, August 2023)
MPE Stage 1 - TAIA	SIMTA Intermodal Terminal Facility Stage 1 Traffic & Accessibility Impact Assessment (Hyder Consulting, March 2015)
MPE Stage 2 - OTTIA	Moorebank Precinct East Stage 2 Proposal - Operational Traffic and Transport Impact Assessment (Arcadis, December 2016)
MPE Stage 2 – RtS	Moorebank Precinct East Stage 2 Proposal – Response to Submission - Appendix C3: Consolidated Traffic Table (Arcadis, July 2017)

1 Introduction

1.1 Introduction

Ason Group has been commissioned by Qube Property Management Services Pty Limited to prepare an initial BTODR for MPE (including IMEX), as outlined within the development consents SSD 7628 and SSD 6766. This report has been prepared following Condition B28 of SSD 7628, which has been provided below;

Condition 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:

- 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.

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.

As such, this report has been prepared on the basis of a review of the documentation provided and relevant publicly available documentation associated with the staged redevelopment of the MPE. Additionally, the reference BTODR Framework report (at **Appendix A**) forms the basis and format of this report and has been prepared to the satisfaction of Transport for NSW.

The BTODR is a document ultimately intended for when MPE is fully operational. Currently MPE has a mixture of lots where warehouses are operational or under construction; therefore, there are challenges to collect the full extent of data envisaged at this stage. Accordingly, this BTODR has been compiled on the basis of the data available at this time, with a view to achieving as best as possible the objectives of the BTODR.

1.2 Purpose

This BTODR addresses the relevant requirements of the Project Approvals and other guidelines and standards applicable during operations of MPE. The BTODR is proposed to keep an accurate record of the shipping containers and vehicle arrivals / departures against approved volumes.



1.3 Scope

For the purpose of the BTODR, the scope of this report shall include:

- Review of the number of twenty-foot equivalent shipping containers dispatched and received.
- Review the number of days in the period that the truck gate was open for despatching trucks and detail
 any exceptions to the actual hours of operation.
- Record the number of vehicles accessing MPE.
- Outline the vehicle origin and destinations based on a cordon in the surrounding round network.
- Comment on the employee numbers at MPE.

This report has assumed selected OD cordons (as outlined within **Figure 1**) which will apply to all classes of vehicles (while also covering the IMEX, warehousing facilities and any other uses such as the freight village).

1.4 Period of Reporting

As mentioned above, the main objective of the BTODR is to report on traffic once MPE is completed and fully operational. At this stage, MPE is only partially operational and has a number of areas within the Site that are under construction.

TABLE 1: BREAKDOWN OF OPERATIONAL STATUS WITHIN MPE

Tenanted Area	Operational		
	1 Nov 2022 – 30 Apr 2023	1 May 2023 – 31 Oct 2023	
IMEX	Yes	Yes	
WH 1	Yes	Yes	
WH 3A	Yes	Yes	
WH 3B	Yes	Yes	
WH 4A	Yes	Yes	
WH 4B	Yes	Yes	
WH 5	Yes Yes		
WH 6	No	No	
WH 7	No No		
WH 8	No No		

Note: Those in **bold** are the changes from the precious reporting period.

The reporting periods assessed by this BTODR – based on available data – are outlined below:

Shipping Container Transport: 1 May 2023 – 31 October 2023
 Truck Gate opening period: 1 May 2023 – 31 October 2023

Traffic Volumes:
 Origin / Destination Numbers:
 27 November 2023 – 1 December 2023
 27 November 2023 – 1 December 2023

Employee Numbers: 1 May 2023 – 31 October 2023



2 Shipping Container Transport

This section provides the total number of actual TEUs dispatched and received during the reporting period. The analysis is based on the operational data from logistical schedules.

The information outlined below has been sourced by Tactical, BMD, Qube Logistics, Knight Frank who are currently operating in some form within MPE. **Table 2** presents the total TEUs received and dispatched from the IMEX terminal.

TABLE 2: SHIPPING CONTAINER TRANSPORT

Reporting Period	Month	Total Containers Received / Dispatched	Cumulative Total for Period
Period 6	Nov-2022	5,923	5,923
	Dec-2022	4,246	10,169
	Jan-2023	2,204	12,373
	Feb-2023	1,046	13,419
	Mar-2023	1,334	14,753
	Apr-2023	619	15,372
Period 7	May-2023	900	900
	Jun-2023	921	1,821
	Jul-2023	1,295	3,116
	Aug-2023	1,609	4,725
	Sep-2023	1,585	6,310
	Oct-2023	1,789	8,099

3 Truck Gate Opening Periods

3.1 Period of Opening

The BTODR Framework requires reporting on the number of days in a specific period that the truck gate was operational. In response, the period of time where the gate was operational has been in **Table 3**.

TABLE 3: BREAKDOWN OF OPERATIONAL STATUS WITHIN MPE

Reporting Period	Period of Opening	
Period 6	1 November 2022 – 30 April 2023	
Period 7	1 May 2023 – 31 October 2023	

3.2 Exceptions to Full Time Opening

Further to the above, the BTODR Framework requires reporting on any periods when the gates were not open. In response, **Table 4** outlines the timeframes and reasons for when no containers left IMEX by truck.

TABLE 4: TRUCK GATE OPENING PERIOD EXCEPTIONS

Reporting Period	Period of Closure	Reason for Closure
Period 6	No Closures during this period	-
Period 7	No Closures during this period	-

3.3 Actual Hours of Opening

At present, the general truck gate daily opening times are outlined below.

Monday – Friday: 4:00am – 3:00am
 Saturday: 4:00am – 4:00pm

Sunday: Closed

These times changed from the previous period of reporting.

4 Traffic Volumes

4.1 MPE Main Access

Traffic data has been collected to identify the volumes of light and heavy vehicles accessing MPE from the current main access on Moorebank Avenue. **Table 5** summarises the average daily volumes from the data collected.

TABLE 5: AVERAGE DAILY TRAFFIC VOLUMES

Reporting Reporting Period Dates		Vehic	eles In	Vehicles Out	
Period	Dates	Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 6	22 May 2023 - 26 May 2023	1,050	443	1,042	444
Period 7	27 Nov 2023 - 1 Dec 2023	897	354	894	352

5 Origin-Destination Results

5.1 Survey Locations

OD surveys have been undertaken to understand the distribution of MPE traffic on the surrounding road network. To meet the requirements of the BTODR, the OD surveys have recorded traffic volumes across a 24-hour period, with the locations of the survey and corresponding gate numbers presented on **Figure 1** and outlined below.

TABLE 6: OD SURVEY GATES

Gate Number	Gate Location
OD1	Moorebank Avenue, about 350 metres north of the M5 South Western Motorway
OD2	Eastbound off-ramp of M5 Interchange
OD3	Eastbound on-ramp of M5 Interchange
OD4	Westbound on-ramp of M5 Interchange
OD5	Westbound off-ramp of M5 Interchange
OD6	Moorebank Avenue, about 300 metres south of the M5 South Western Motorway
OD7	Anzac Road
OD8	Defence Joint Logistics Access
OD9	IMEX/MPE Main Access
OD10	Cambridge Avenue
OD11	Moorebank Avenue, south of Cambridge Avenue

5.2 Amendments to Survey Locations

During a previous reporting period of the BTODR (Period 4: 1 May 2022 – 31 October 2022), concerns were raised by the Department of Defence (DoD). DoD owns and manages sensitive properties within proximity of the Moorebank Intermodal (IMT) and were concerned about the potential for security issues for their property and/or personnel arising from traffic survey data that is routinely collected for the IMT using video camera technology. The main concern of DoD relates to the security of personnel arriving/departing from their lands and the potential for the driver and/or their vehicles being identified from the video footage.

The DoD outlined the 2 intersections that are of significance, being:

- OD8: Access intersection of the Defence Joint Logistics Unit (DJLU) with Moorebank Avenue
- OD11: Moorebank Avenue intersection with Cambridge Avenue The southern approach of Moorebank Avenue effectively provides the rear access to the Holsworthy Military Barracks

Ason Group were instructed to remove OD and CIC survey from both intersections, therefore for this reporting period of the BTODR, OD8 and OD 11 have been removed, as noted in **Table 6** and **Figure 1**.



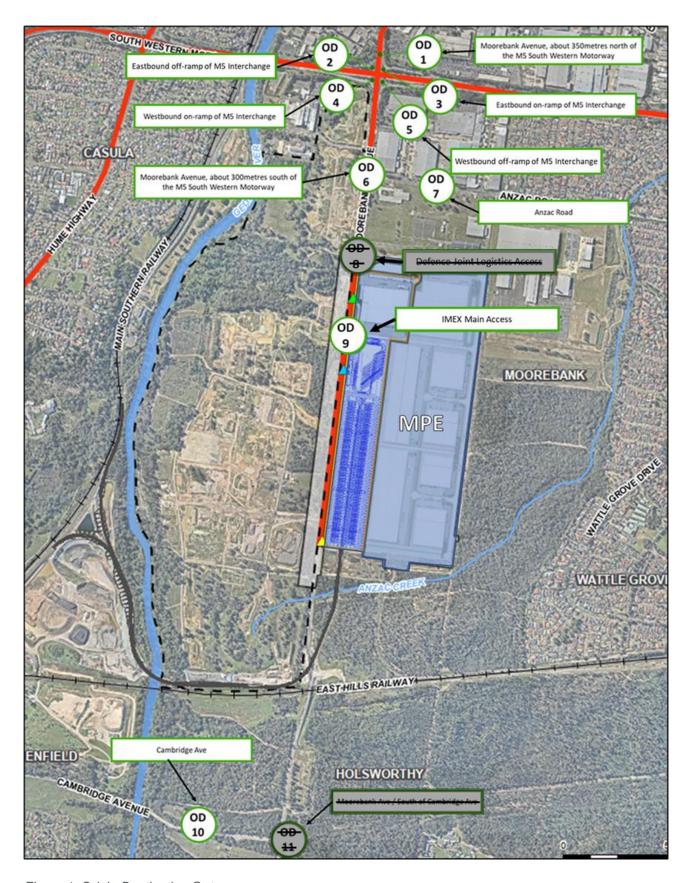


Figure 1: Origin-Destination Gates

The data of the OD surveys have been collated and is presented on the following tables for the relevant vehicle classes, as well as graphically on the following figures.



TABLE 7:	AVERAGE	OD MOVEMENTS	- ALL VEHICLES

		To Station								
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	458	9,725	0	3,182	1,051	209	1,531	16,155
2	15,103		0	299	0	4,670	1,606	424	2,086	24,188
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	1,855	0	1,855	0		2,830	860	200	1,312	8,912
6	3,738	0	3,195	3,899	0		3,782	1,001	5,099	20,714
7	1,015	0	822	1,176	0	2,977		90	2,068	8,148
9	213	0	459	498	0	1,126	0		120	2,416
10	830	0	2,359	1,350	0	4,548	2,100	148		11,336
Total	22,753	0	9,148	16,947	0	19,334	9,399	2,073	12,216	91,869

Below is a visual representation of the OD Movements within Figure 2.

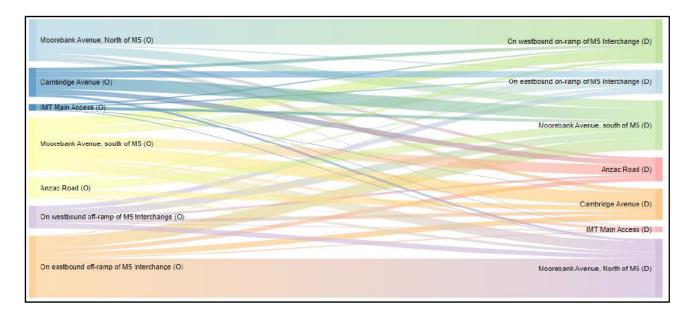


Figure 2: Visual of Average OD Movements - All Vehicles

TABLE 8: AVERAGE OD MOVEMENTS - LIGHT VEHICLES

	To Station									
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	328	8,310	0	2,881	982	162	1,475	14,140
2	13,598		0	266	0	4,202	1,492	317	2,009	21,884
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	1,714	0	1,714	0		2,568	803	162	1,271	8,232
6	3,452	0	2,885	3,406	0		3,456	719	4,863	18,780
7	911	0	746	1,011	0	2,667		90	2,019	7,444
9	140	0	356	321	0	806	0		88	1,711
10	793	0	2,319	1,293	0	4,406	2,052	102		10,965
Total	20,609	0	8,349	14,607	0	17,530	8,785	1,552	11,724	83,156

Below is a visual representation of the OD Movements within Table 8

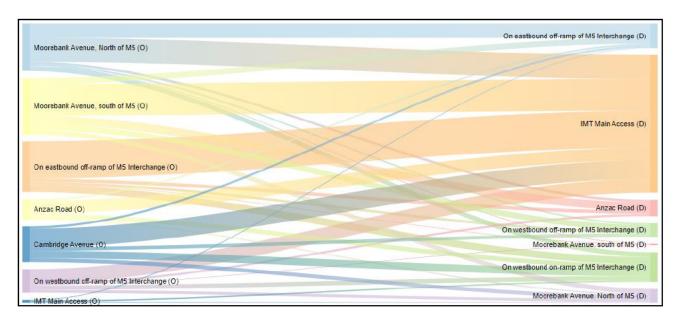


Figure 3: Visual of Average OD Movements - Light Vehicles

TABLE 9:	AVERAGE OD	MOVEMENTS	-HEAVY VEHICLES	
----------	-------------------	------------------	-----------------	--

				1	Γο Statio	n				
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	91	948	0	253	68	38	54	1,452
2	1,099		0	28	0	329	98	61	74	1,689
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	114	0	114	0		199	49	26	40	544
6	232	0	253	339	0		278	184	226	1,513
7	87	0	62	128	0	264		0	43	585
9	46	0	69	96	0	199	0		28	438
10	33	0	33	47	0	118	45	40		316
Total	1,611	0	622	1,588	0	1,361	539	349	466	6,536

Below is a visual representation of the OD Movements within Table 9.

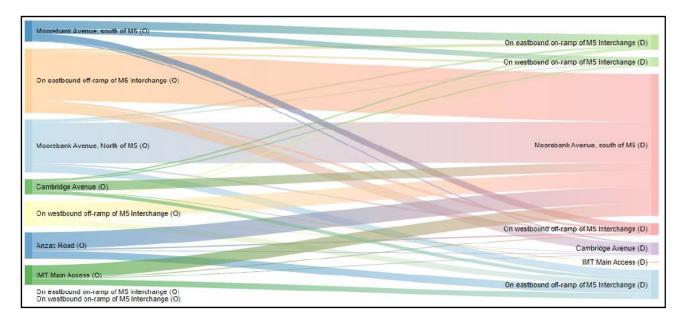


Figure 4: Visual of Average OD Movements - Heavy Vehicles

	- ARTICULATED HEAVY VEHICLES

					To Statio	า				
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	39	466	0	48	1	9	2	564
2	405		0	5	0	140	15	46	4	614
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	26	0	26	0		63	7	12	0	135
6	54	0	56	154	0		48	98	10	421
7	17	0	15	36	0	46		0	6	119
9	27	0	35	81	0	121	0		3	268
10	4	0	6	10	0	25	4	6		55
Total	533	0	177	752	0	442	76	171	25	2,177

Below is a visual representation of the OD Movements within Table 10.

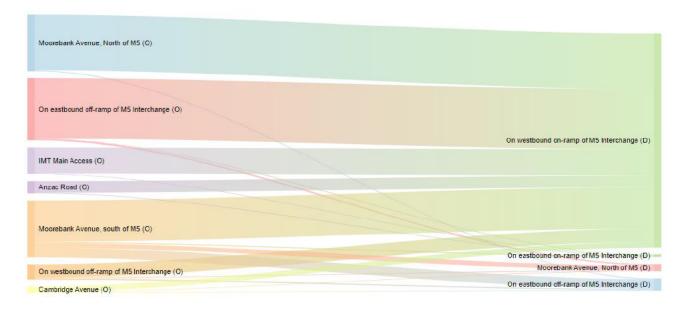


Figure 5: Visual of Average OD Movements – Articulated Heavy Vehicles

6 Employee Numbers

To corroborate data provided within the Workplace Travel Plan and minimise the need for additional reporting, **Table 11** presents relevant information on employee numbers for each of the sub-area's within MPE.

TABLE 11: OD SURVEY GATES

Reporting Periods	Month	IMEX	Rail Link	Tenanted Area	
Period 6	01 Nov 2022	61	9	WH 1	150
	30 Apr 2023			WH 3A	15
				WH 3B	38
				WH 4A	12
				WH 4B	32
				WH 5	110
Period 7	01 May 2023	61	9	WH 1	100
	- 31 Oct 2023			WH 3A	15
	0.00.2020			WH 3B	36
				WH 4A	12
				WH 4B	36
				WH 5	78

Note: Any information not received from individual tenants have been marked with an *. This report will be updated if/when the information is provided.

7 Summary

The data provided within this report has been collected in accordance with the BTODR Framework report and enables a comparative assessment of traffic accessing the Site and future growth in operational activities.

All data is a fair and accurate representation of the operational traffic for MPE and its surrounding road network. This data has been collected for the reporting period between 1 May 2023 and 31 October 2023.



Appendix A. BTODR Framework Report

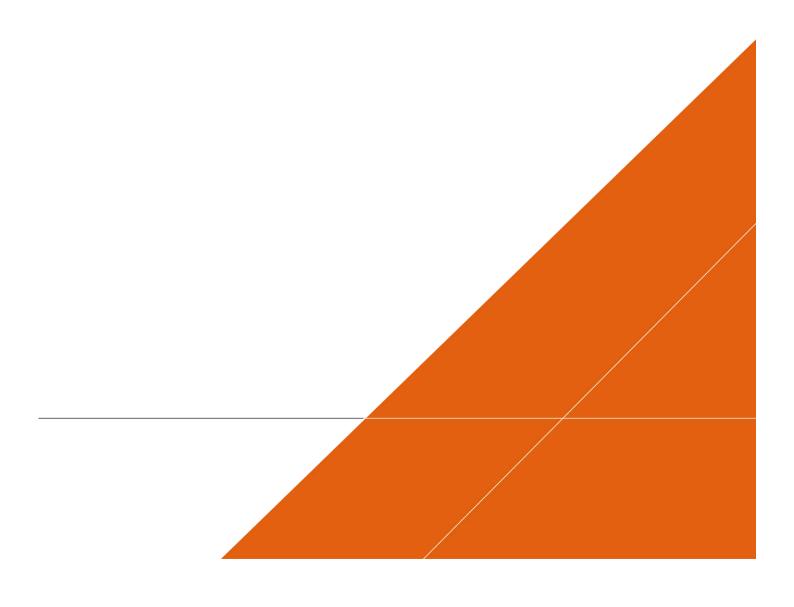




MOOREBANK PRECINCT EAST -BIANNUAL TRIP ORIGIN DESTINATION REPORT

Framework for Data Collection and Reporting

27 AUGUST 2019



CONTACT



NICOLE VUKIC Manager Transport Planning and Traffic Engineering

T +61 2 8907 3932
M +61 417 233 935
E Nicole.Vukic@arcadis.com

Arcadis Level 16, 580 George Street Sydney NSW 2000

QUBE

MOOREBANK PRECINCT EAST - BIANNUAL TRIP ORIGIN DESTINATION REPORT

Framework for Data Collection and Reporting

Author	Jerry Xiang	
Checker	Nicole Vukic	
Approver	Ketan Patel	
Report No	PREC-ARC-TR-RPT-000	1
Date	27/08/2019	
Revision Text	008	

This report has been prepared for Qube in accordance with the terms and conditions of appointment for Moorebank Precinct East dated 7 October 2016. Arcadis Australia Pacific Pty Limited (ABN 76 104 485 289) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.

REVISIONS

Revision	Date	Description	Prepared by	Approved by
001	28/11/18	Issued for client review	JX	NV
002	13/03/19	Revised and issued for client review	NV	KP
003	5/06/19	Revised to address agency comment	NV	NV
004	14/06/19	Revised to address further agency comment	MWR	KP
005	28/06/19	Revised to address further agency comments	KP	NV
006	29/07/19	Revised to address further agency comments	NV	KP
007	15/08/19	Consultation table updated to close out agency comments	MWR	JC

Revision	Date	Description	Prepared by	Approved by
008	27/08/19	Updated to close out RMS consultation	NV	AL

CONTENTS

1 INTRODUCTION
1.1 Background1
1.1 Scope and Purpose1
1.2 Consultation
2 PROJECT DESCRIPTION6
2.1 Site Location6
2.2 Site Operations6
2.3 Heavy Vehicle Access Routes6
3 REPORTING FRAMEWORK9
3.1 Frequency of Reporting9
3.2 Report Structure9
3.3 Process
4 ROLES AND RESPONSIBILITIES
5 DATA COLLECTION FRAMEWORK14
5.1 Data Collection Scope and Methodology14
5.2 Using the Data in the Report
APPENDIX A REPORTING TABLE TEMPLATES1
APPENDIX B EVIDENCE OF CONSULTATION1
APPENDIX B EVIDENCE OF CONSULTATION1
APPENDIX B EVIDENCE OF CONSULTATION
LIST OF TABLES
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)
LIST OF TABLES Table 1-1: CoCs of SSD 7628 (MPE Stage 2)

ACRONYMS AND DEFINITIONS

Acronym	Meaning
CoC	Conditions of Consent
DJLU	Defence Joint Logistics Unit
DP&E	Department of Planning and Environment
EP&A Act	Environmental Planning and Assessment Act 1979
IMEX	Import-Export
MLP	Moorebank Logistics Park
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
RFID	Radio-Frequency Identification
RMS	Roads and Maritime Services
Secretary	Secretary under the EP&A Act, or nominee
SIMTA	Sydney Intermodal Terminal Alliance
SSD	State Significant Development
TfNSW	Transport for New South Wales
the Moorebank Precinct	Moorebank Intermodal Precinct

1 INTRODUCTION

1.1 Background.

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stage 2 of the MPE Project (SSD 7628), which together comprises the second stage of development under the MPE Concept Consent (MP10_0193). Operations are due to commence in April 2018.

This Biannual Trip Origin and Destination Report addresses the relevant requirements of the Project Approvals, including the Environmental Impact Statement (EIS), Revised Statement of Commitments (RSoC), Response to Submissions (RtS) and Minister's Conditions of Consent (CoC), and guidelines and standards applicable during operations of the MLP East Precinct.

1.1 Scope and Purpose

Condition of Consent (CoC) B28 of SSD 7628 requires that a *Biannual Trip Origin and Destination Report* is prepared. Table 1-1 and Table 1-2 details the applicable CoC.

Table 1-1: CoCs of SSD 7628 (MPE Stage 2)

CoC	Requirement	Document Reference			
Primary	Primary Conditions				
	The Applicant is to prepare a Biannual Trip Origin and Destination Report each six months following the commencement of any operation (in a format agreed with TfNSW and RMS) that advises:				
	the number of actual and standard twenty-foot equivalent shipping containers despatched and received during the period;	Section 3 Section 5			
B28	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 and exceptions to this and advise actual hours of operation;	Section 3 Section 5 Note that there is no truck gate at the warehouse entrance however a truck gate is in operation at the IMEX entrance where truck			
	c. records of vehicle numbers accessing the site;	numbers will be monitored.			
	and	Section 5			
	d. representative vehicle origin and destinations, based on a cordon in the surrounding network.	Section 5			
	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.	This document provides a framework for recording and reporting on the data required for the <i>Biannual Trip Origin and Destination Report</i>			

CoC	Requirement	Document Reference	
	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.	Section 3.1	
	The cordon count at (d) above will:	Section 5.1	
	apply to all classes of vehicles; and		
	 cover the intermodal terminal, the warehousing facility and any other uses such as the freight village. 		
Second	Secondary Conditions		
B89	Heavy road freight vehicles are not permitted to use Moorebank Avenue south of the East Hills Railway corridor. A main gate monitoring system (eg CCTV) shall be installed to identify heavy vehicles turning left from the terminal site onto Moorebank Avenue, or turning right from Moorebank Avenue to the terminal site. The Secretary may at any time request the Applicant to provide a heavy vehicle monitoring report for the prior 12 month period.		

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

CoC	Requirement	Document Reference		
Secondary Conditions				
	The Applicant shall prepare a six-monthly report to the Secretary with the results of container and vehicle monitoring for a period of 3 years, or as otherwise agreed with the Secretary, from the commencement of operation of the IMEX terminal. The Secretary shall consider the need for further reporting following a review of the results for year 3. The report shall include:	Section 3.1		
G11	a) The number of twenty foot equivalent units	Section 3		
	dispatched and received during the period	Section 5		
	 A record of heavy vehicle entry by date and approximate time; and 	Section 5		
	c) The number of light vehicles turning right into the terminal site from Moorebank Avenue and turning left from the terminal site onto Moorebank Avenue for a representative day	Section 5		
G14	Heavy road freight vehicles are not permitted to use Moorebank Avenue south of the East Hills Railway corridor. A main gate monitoring system (eg CCTV) shall be installed to identify heavy vehicles turning left from the terminal site onto Moorebank Avenue, or turning right from Moorebank Avenue to the terminal site. The Secretary may at any time request the Applicant to provide a heavy vehicle monitoring report for the prior 12 month period.			

This report has been prepared to provide a framework for recording and reporting on the data required for the *Biannual Trip Origin and Destination Report*, which will be used to agree a format for the six-month reports with TfNSW and RMS. This report assumes that the condition is related to the impact of 20-foot equivalent shipping containers and does not address other heavy vehicles associated with operations, such as garbage trucks and maintenance vehicles.

1.2 Consultation

The Framework for Biannual Trip Origin Destination Report has been prepared to the satisfaction of Transport for NSW (TfNSW) and Roads and Maritime Services (RMS). Following the development of this draft framework, the document will be issued to the Secretary for review and comment.

Table 1-3: Consultation Summary

Agency	Date	Person Contacted	Comment	Status
	26/3/19	TfNSW Representative	Draft report 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
	3/5/19	TfNSW Representative	Email to follow up on progress of review	Open
	4/5/19	TfNSW Representative	Email to follow up on progress of review	Open
	9/5/19	TfNSW Representative	Email to follow up on progress of review	Open
Transport for NSW (TfNSW)	10/5/19	MLP Representative	Email noting that TfNSW is to provide comments early next week	Open
	15/5/19	MLP Representative	Email noting that TfNSW is drafting a letter including comments on the report	Open
	16/5/19	MLP Representative	Letter from TfNSW including comments on the report	Open
	26/5/19	TfNSW Representative	Email with attachment provided in response to TfNSW's comments	Open
	30/5/19	TfNSW Representative	Email to follow up on progress of review	Open
	6/6/19	TfNSW Representative	Email to follow up on progress of review	Open
	6/6/19	MLP Representative	Email noting that TfNSW is to provide further comments early next week	Open

	7/6/19	TfNSW Representative	Email to confirm satisfaction of timeframe for comment review	Open
	7/6/19	MLP Representative	Email with attachment provided in response to TfNSW's comments	Open
	13/06/19	TfNSW Representative	Meeting to discuss final comments	Open
	17/06/19	TfNSW Representative	Minutes of meeting submitted for review	Open
	28/06/19	TfNSW Representative	Updated document submitted demonstrating comments incorporated	Open
	12/07/19	MLP Representative	Email with further comments	Open
	7/08/19	TfNSW Representative	Updated document submitted demonstrating comments incorporated	Open
	13/08/19	MLP Representative	Email with further comments	Open
	15/08/19	TfNSW Representative	Updated document submitted demonstrating comments incorporated	Open
	16/08/19	TfNSW Representative	Email with final RMS comments	Closed
	26/3/19	RMS representative	Draft plan emailed for review and comment	Open
	4/4/19	RMS representative	Email to follow up on progress of review	Open
	11/4/19	RMS representative	Email to follow up on progress of review	Open
	18/4/19	RMS representative	Email to follow up on progress of review	Open
Roads and	26/4/19	RMS representative	Email to follow up on progress of review	Open
Maritime Service	2/5/19	RMS representative	Email to follow up on progress of review	Open
(RMS)	3/5/19	MLP representative	Email advising that a new contact point for RMS	Open
	9/5/19	RMS representative	Email to follow up on progress of review	Open
	14/5/19	RMS representative	Email to follow up on progress of review	Open
	15/5/19	MLP representative	Email from RMS providing comments on the report	Open
	26/5/19	RMS representative	Email noting that response to RMS review would be provided in the coming days	Open

3/6/19	RMS representative	Email noting that response to RMS review would be provided in the coming days	Open
3/6/19	MLP representative	Email to confirm satisfaction of timeframe for response	Open
4/6/19	RMS representative	Email with attachment provided in response to RMS's comments	Open
12/6/19	MLP representative	Email providing comments to previous responses	Open
13/06/19	MLP representative	Email providing additional comments to previous responses	Open
29/06/19	RMS representative	Response to comments and updated document submitted demonstrating comments incorporated	Open
22/07/19	MLP representative	Email providing comments on updated document	Open
07/08/19	RMS representative	Email providing updated document to confirm close out of comments	Open
09/08/19	RMS representative	Email and phone call to follow up on progress of close out.	Open
16/08/19	TfNSW Representative	Email with final RMS comments	Closed

2 PROJECT DESCRIPTION

2.1 Site Location

The MPE Project site, is located approximately 27 kilometres south-west of the Sydney Central Business District (CBD) and approximately 26 kilometres west of Port Botany and includes the former Defence National Storage and Distribution Centre (DNSDC) site. The MPE site is situated within the Liverpool Local Government Area, in Sydney's south west subregion, approximately 2.5 kilometres from the Liverpool city centre.

Figure 2-1 illustrates the MPE site location and local context.

2.2 Site Operations

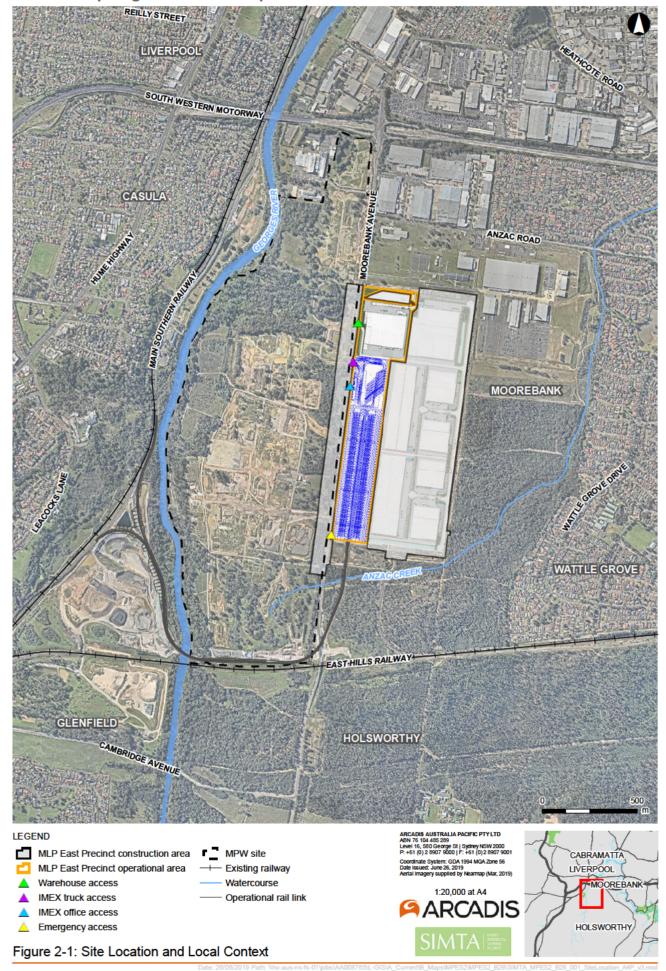
The operational activities associated with the MLP East Precinct site, which are likely to result in vehicle movements into and out of the site are detailed as follows:

- Import Expert (IMEX) Terminal, operating 24 hours, seven days per week:
 - Rail loading/ unloading and container processing
 - Truck processing and holding
 - Maintenance activities, such as vegetation management, electrical infrastructure, civil and drainage work, signalling and track maintenance
- Rail link, operating 24 hours, seven days per week to support the IMEX terminal activities:
 - Maintenance activities, such as vegetation management, electrical infrastructure, civil and drainage work, signalling and track maintenance
- Common or non-tenanted areas:
 - 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
 - Maintenance activities, such as internal roads, utilities services, fire protection systems, drainage, fencing and signage, bush fire hazard reduction and pest and vegetation control
 - Waste management
- Warehousing operational activities (24 hours, seven days per week), which will be dependent on the individual tenant and will be detailed in the respective Warehouse Operational Environmental Management Plans.

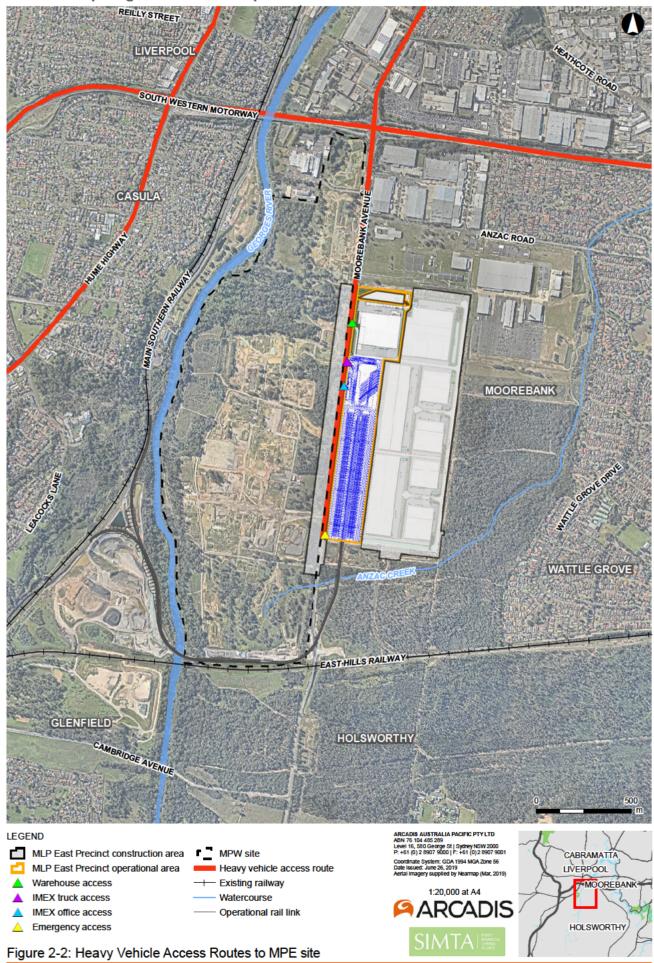
2.3 Heavy Vehicle Access Routes

Figure 2-2 illustrates the heavy vehicle access routes to/ from the MPE site during the operation of the proposed facilities.

Biannual Trip Origin Destination Report Framework



Biannual Trip Origin Destination Report Framework



3 REPORTING FRAMEWORK

3.1 Frequency of Reporting

The Biannual Trip Origin and Destination Report is to be prepared every six months, starting six months from the commencement of operation. The report will be submitted within one month of its preparation throughout the operation of the MLP East Precinct, unless otherwise agreed by the Secretary, TfNSW and RMS.

3.2 Report Structure

The outline and structure of the *Biannual Trip Origin Destination Report* is provided in Table 3-1.

Appendix A provides templates for presenting the data analysis required for each section within the report.

Table 3-1: Report Outline and Structure

Section	Description
Introduction	This section will include the following subsections: Introduction Purpose Scope Period of Reporting.
Shipping container transport	This section provides the total number of actual and standard 20- foot equivalent shipping containers dispatched and received during the period. This analysis will be primarily based on the operational data from logistical schedules. This section will include the following subsections: Shipping containers received Shipping containers dispatched. This data will be presented using a combination of tables (refer to template in Appendix A) and graphs.
Truck gate opening periods	This section will detail the number of days in the period that the truck gate was open for dispatching trucks 24 hours a day, seven days a week and detail and exceptions to this and advise actual hours of operation. This analysis will be based on the operational data from logistical schedules and on-site monitoring (refer to Section 5.1.1). This section will include the following subsections: Period of opening Exceptions to full time opening Actual hours of opening. This data will be presented in a table (refer to template in Appendix A) with commentary of the results under each subsection.

Section	Description
	This section will record the number of vehicles (split by Austroads light and heavy vehicle classification) accessing the site. This analysis will be based on logistical schedules, on-site monitoring and gate data (for the IMEX). Vehicles accessing the warehouse will be required to be recorded.
Traffic volumes	This section will include the following subsections:
	Total vehicles accessing the site for reporting period.
	The total vehicles accessing the site will be presented in tables (refer to template in Appendix A) and graphs. The mid-block traffic volume profiles will be presented in graphs.
	This section will provide representative vehicle origins and destinations (split by Austroads light and heavy vehicle classification), based on the cordon identified for the site.
	This section will include the following subsections:
Origin-destination results	Approach distribution (origin)
	Departure distribution (destination).
	The data will be presented on plans indicating approach/ departure routes with the proportion of the total vehicles arriving/ leaving the MPE site.
Employee numbers	The Workplace Travel Plan requires Annual reporting of employee numbers to DP&E, TfNSW and RMS. To minimise the requirement for an additional report, employee numbers will be also included in Biannual Trip Origin Destination Report
Summary	Provides an overview of the findings reported above

3.3 Process

The process for preparing the *Biannual Trip Origin Destination Report* is illustrated in Figure 3-1.

Data collection (refer to Section 4) Commission traffic surveys in accordance with Section 4 of the Framework for Data Collection and Reporting Collate operational data from logistical schedules/ on-site monitoring. Data verification and analysis Review and verify data Where data is incomplete provide qualification Analyse data. Reporting (refer to Section 5) Prepare a report every six months of operation, to include: Number of shipping containers Number of days the truck gate was open 24/7 Number of vehicles accessing the site Origin-destination analysis Submission Submission Submission Submit report to the Secretary, TfNSW and RMS within one month of its preparation

Figure 3-1: Biannual trip origin destination reporting process

4 ROLES AND RESPONSIBILITIES

An overview of the key roles for the MLP East Precinct are provided in Figure 4-1. The responsibilities for the preparation and submission of the *Biannual Trip Origin Destination Report* and implementation of this framework for each of the key roles are outlined in Table 4-1.

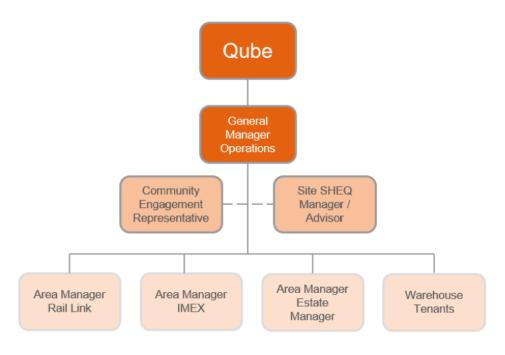


Figure 4-1: Key roles for MLP East Precinct

Table 4-1: Key roles and responsibilities

Role	Responsibility
	 Accountable for the operational activities and performance of the MLP East Precinct
	 Provide sufficient resources to implement, develop and maintain the Biannual Trip Origin Destination Report and framework throughout the operating life of the MLP East Precinct
General Manager Operations	 Define, document and communicate roles, responsibilities and authorities of all personnel to facilitate data collection, analysis and reporting
	Review and approve changes to the framework and Biannual Trip Origin Destination Report
	 Based on the outcome of the review and validation of the data collected to support the development of the Biannual Trip Origin Destination Report, endorse the data as fit for purpose.
Area Managers: • IMEX	Responsible for the implementation of the Biannual Trip Origin Destination Report and framework within the areas of responsibility
Rail LinkEstate Manager	 Provide operational data to support the Biannual Trip Origin Destination Report, including logistical schedules and on-site monitoring data

Role	Responsibility					
	Communicate the requirements of the Biannual Trip Origin Destination Report and framework and obligations to the operational team					
	 Monitor operations against the requirements of the CoC, collect data and maintain records required to inform the Biannual Trip Origin Destination Report 					
	 Where required, implement changes to activities to manage ongoing operation to the satisfaction of TfNSW and RMS 					
	Report issues pertaining to the preparation of the Biannual Trip Origin Destination Report to the General Manager Operations.					
	Act as the primary contact point for TfNSW and RMS in relation to the Biannual Trip Origin Destination Report					
	 Provide advice on matters specified in the CoC relating to the IMEX, Rail Link and Estate operations 					
	 Review and implement Biannual Trip Origin Destination Report and framework and monitoring programs required under the CoC 					
Site Safety, Health, Environment and Quality Manager / Advisor	 Monitor operations against the Biannual Trip Origin Destination Report and framework to evaluate compliance with the CoC 					
(Site HSEQ Manager / Advisor)	 Commission surveys and collate data required to carry out analysis and produce the Biannual Trip Origin Destination Report 					
	 Commission (if required), coordinate and manage resources to carry out the data collection, analysis and preparation of the Biannual Trip Origin Destination Report 					
	 Maintain the register of data collection and reports issued. 					
Community Engagement	Act as the 'control tower' for all public communications and be the central contact to keep nearby residential receivers informed of monitoring/ surveys					
Representative	 Communicate community concerns to the Qube Environmental Representative in relation to vehicle movements within the surrounding road network. 					
Individual Tenants	Support the compliance with the CoC and provide data and information to Qube to inform the development of the Biannual Trip Origin Destination Report as required.					

5 DATA COLLECTION FRAMEWORK

5.1 Data Collection Scope and Methodology

The following intersection, mid-block and origin-destination (OD) surveys should be carried out concurrently.

5.1.1 Operational Data Collection

Other Operational Data

The following operational data will be obtained from the logistical schedules or via onsite monitoring:

- Total vehicles accessing the site (B28 [c])
- Number of shipping containers (20-foot equivalent) dispatched and received by the site (B28 [a])
- Truck gate opening periods (B28 [b]).

IMEX Gate Data Collection

The IMEX accesses will be gated and data will be recorded to determine the number of vehicles entering and exiting the site (classified in accordance with Austroads vehicle classifications). In accordance with MPE Stage 1 (SSD 6766) CoC F6, a vehicle booking system will be implemented with all trucks fitted with Radio-Frequency Identification (RFID) readers. Road Operators will pre-book the Truck Visit with IMEX using 1-Stop, and data on road operator, container, truck details, and arrival and departure time(s). This data will be rechecked again on exit from the terminal to confirm load manifests.

Further detail on this process will be included within the Operational Traffic Management Plan developed in consultation with the Cargo Movement Coordination Centre.

The gate data will also be used to determine the periods during which the gates were open for the reporting period. The Area Managers will be responsible for recording the reasons for any potential periods of gate closure.

Warehouse Access Data Collection

The warehouse access will not be gated. Therefore, data will need to be collected to record the number of vehicles entering and exiting the site (classified in accordance with Austroads vehicle classifications) through the installation of permanent tube counters or detector loops.

Logistical Schedules

Logistical schedules maintained by the Area Managers will need to record the total number of 20-foot equivalent shipping containers that are received and dispatched by the MPE site for the reporting period.

5.1.2 Traffic Surveys

Traffic surveys will be commissioned to provide representative vehicle origins and destinations for the MPE site for a cordon area (see Figure 5-1) of the surrounding road network (B28 [d]). This requires collection of:

- Origin-destination (OD) surveys
- Intersection surveys at access points and key intersections.

OD Surveys

OD surveys will be undertaken 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.

OD surveys will be required as follows:

- During the following network peak periods on a typical weekday (not within two weeks before or after school holidays):
 - Peak morning period (7am to 9am)
 - Evening period (4pm to 6pm)
- During the following expected traffic peak periods for facility operations based on shift patterns and peak heavy vehicle movements Monday to Sunday:
 - 4:30am to 6:30am
 - 8am to 10am
 - 1pm to 3pm
 - 8pm to 11pm

Therefore, the OD surveys will be undertaken during the following times on weekdays:

- 4:30am to 6:30am
- 7am to 10am
- 1pm to 3pm
- 4pm to 6pm
- 8pm to 11pm.

The survey company commissioned to carry out the OD surveys is required to capture all vehicles passing the OD stations. A detailed report will be prepared by the survey company to summarise:

- The data collection process
- Data processing and analysis approach
- Outputs
- Data errors and expansion factors adopted to address incomplete data sets.

Intersection Surveys

Intersection turn counts are to be surveyed at the key 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.

Intersection surveys will be required for:

- Network peak morning period (7am to 9am) and evening period (4pm to 6pm) on a typical weekday (not within two weeks before or after school holidays)
- Expected facility peak periods of 4:30am to 6:30am, 8am to 10am, 1pm to 3pm, and 8pm to 10pm Monday to Sunday

- Classification counts in accordance with Austroads vehicle classifications
- 15-minute intervals
- Peak hour identified and reported.

The survey at the Moorebank Avenue/ M5 South Western Motorway is a full interchange survey with the through lanes on the M5 South Western Motorway recorded as well as the movements at the traffic signals.

5.1.3 Survey Locations

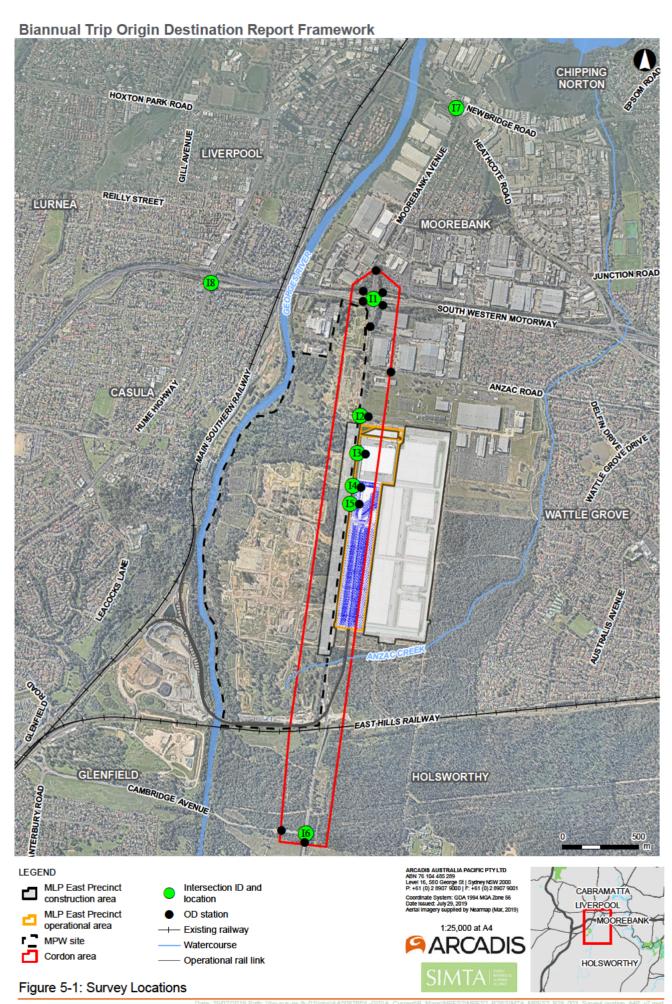
The suggested locations of the survey are provided in Figure 5-1, including:

- OD surveys at the following stations:
 - Moorebank Avenue, about 350 metres north of the M5 South Western Motorway
 - Moorebank Avenue, about 300 metres south of the M5 South Western Motorway
 - Moorebank Avenue, south of Cambridge Avenue
 - M5 South Western Motorway on and off ramps to and from Moorebank Avenue
 - Cambridge Avenue
 - Anzac Road
 - Site accesses at MPE warehouse access, MPE IMT truck access and MPE IMT staff access.
- Intersection surveys:
 - I1 Moorebank Avenue/ M5 South Western Motorway interchange (full interchange survey to include M5 South Western Motorway through lanes)
 - I2 Moorebank Avenue/ Defence Joint Logistics Unit (DJLU) access
 - I3 Moorebank Avenue/ MPE warehouse access
 - I4 Moorebank Avenue/ MPE IMT truck access
 - I5 Moorebank Avenue/ MPE IMT staff access
 - I6 Moorebank Avenue/ Cambridge Avenue
 - I7 Moorebank Avenue/ Newbridge Road
 - I8 M5 South Western Motorway/ Hume Highway.

The OD survey locations were determined in consultation with a survey company to adequately capture the vehicle movements generated by the site for a recommended survey cordon, which includes the M5 South Western Motorway as well as RMS and TfNSW. The recommended cordon is considered appropriate to provide a representative OD pattern for the site.

Given that the Hume Highway is designed to accommodate substantial heavy vehicle movements, it is considered too far for the recommended cordon and heavy vehicles generated by the site would be absorbed in the existing traffic volumes on this part of the network.

OD stations have been included on Cambridge Avenue and Anzac Road to capture the travel patterns of all vehicles generated by the site. These stations would also identify any heavy vehicles using these routes, which are not designated heavy vehicle routes.



5.2 Using the Data in the Report

Providing Comparable Data

Data collection in accordance with this framework and carrying out surveys using methodology specified in Section 5.1 enables a comparative assessment of traffic accessing the site and growth in operational activities for the MPE facility.

Within the report, the data should be presented to provide a comparison between the current six-month period and preceding period. Table templates are provided in Appendix A, which will be used to present the data collected for each reporting period to satisfy CoC B28.

Data Completeness

Where data is incomplete, or data collection is flawed, the report will provide qualifying commentary, including:

- · Reason for missing/ erroneous data
- Impact on the analysis of the data
- Mitigation implemented for addressing the shortfall in data collection (if any).

Data Validation

All data collected will be reviewed and validated to confirm it is fit for purpose in addressing the requirements of the CoC.

Data Provision

All traffic survey data files will be provided to Transport for NSW and RMS, in addition to the summaries documented in the reporting tables.

APPENDIX A REPORTING TABLE TEMPLATES

Shipping Container Transport

Total number of shipping containers received/ dispatched by month

Reporting period	Month	Total containers received/ dispatched	Cumulative total for period		
	January				
	February				
Period 1 2019	March				
Pellod 1 2019	April				
	May				
	June				

Truck Gate Opening Period

Truck gate closure record

Date	Period of closure	Reason for closure

Traffic Volumes

Traffic volumes accessing site by month

Deporting		Vehicles in		Vehicles out	
Reporting period	Month	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles
	January				
Davied 4 2010	February				
Period 1 2019	March				
	April				

Poporting		Vehicles in		Vehicles out	
Reporting period	Month	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles
	May				
	June				

Traffic volumes accessing site by week

Traine volumes decessing the by week							
Reporting		Vehicles in		Vehicles out			
period	Week	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles		
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
Period 1 2019	11						
	12						
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						

Reporting period	Week	Vehicles in		Vehicles out	
		Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles
	22				
	23				
	24				
	25				
	26				
	24				

OD Surveys All Vehicles (count of matched plates)

		To station						
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total	
OD1								
OD2								
OD3								
OD4								
OD5								
OD6								
Total								

OD Surveys Light Vehicles (count of matched plates)

		To station					
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total
OD1							
OD2							
OD3							
OD4							
OD5							

	To station	
OD6		
Total		

OD Surveys Rigid Heavy Vehicles (count of matched plates)

		To station						
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total	
OD1								
OD2								
OD3								
OD4								
OD5								
OD6								
Total								

OD Surveys Articulated Heavy Vehicles (count of matched plates)

	To station						
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total
OD1							
OD2							
OD3							
OD4							
OD5							
OD6							
Total							

Employee Numbers

Employee numbers per area of the site

Reporting period	Month	IMEX	Rail Link	Tenanted area				
	January							
	February							
Period 1 2019	March							
1 6110d 1 2013	April							
	May							
	June							

APPENDIX B 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 ongoing 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.



Before printing this document, please consider the environment.

From: Para Sangar < <u>Para.Sangar@transport.nsw.gov.au</u>>

Sent: Friday, 16 August 2019 11:10 AM

To: Ibrahim Awad <iawad@tacticalgroup.com.au>

Cc: Mark Ozinga < <u>Mark.Ozinga@transport.nsw.gov.au</u>>; Laura Van putten

<<u>Laura.VAN.PUTTEN@rms.nsw.gov.au</u>>

Subject: RE: TfNSW Consultations - B28 (Biannual Trip Report Framework) - Moorebank Logistics

Park MPE Stage 2 (SSD 7628)

Hi Ibrahim

Further to my email message below, TfNSW has consulted with RMS to finalise our comments on the above report. RMS has advised the following:

"Roads and Maritime has no further comments for consideration subject to the following minor changes:

- The intersection count at M5 / Hume Hwy also needs to count the movements down on the **M5 through lanes**, not just the movements up top, at the signals. This is really a full "interchange" count, not just an "intersection" count. Please ensure the wording is updated to guarantee that a full interchange count is undertaken.
- Roads and Maritime requests that the actual traffic survey data files are provided, not simply tabulated summaries in reports."

It would be appreciated if you could amend the report to reflect the above and send it back to us for TfNSW and RMS sign off.

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: Para Sangar

Sent: Tuesday, 13 August 2019 11:33 AM

To: Ibrahim Awad **Cc:** Mark Ozinga

Subject: RE: TfNSW Consultations - B28 (Biannual Trip Report Framework) - Moorebank Logistics

Park MPE Stage 2 (SSD_7628)

Hi Ibrahim

Thank you for providing the amended report for comment.

Further to our telephone conversation today, please amend the row highlighted in yellow in the attached table to reflect the changes made in the report in relation to OD surveys proposed on the M5/Moorebank Avenue interchange ramps.

Should you have any further gueries, 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: Wednesday, 7 August 2019 6:41 PM

To: Para Sangar

Cc: Mark Ozinga; Nathan Cairney; Fei Chen

Subject: RE: TfNSW Consultations - B28 (Biannual Trip Report Framework) - Moorebank Logistics

Park MPE Stage 2 (SSD_7628)

Hi Para

Please find attached the updated consultation response table and BTODR addressing your additional comment in the below email.

Can you please confirm that you are satisfied we have addressed your comment so that we can move to close out our consultation on this Report and submit to DPIE for approval?

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

Thanks. **Ibrahim**

Regards, **IBRAHIM AWAD ENVIRONMENTAL MANAGER**

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

T +61 2 8907 0700 M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u> W www.tacticalgroup.com.au





Before printing this document, please consider the environment.

From: Para sangar Sangarapillai < <u>Para.Sangar@transport.nsw.gov.au</u>>

Sent: Friday, 12 July 2019 10:49 AM

To: Ibrahim Awad < <u>iawad@tacticalgroup.com.au</u>>

Cc: Mark Ozinga < Mark.Ozinga@transport.nsw.gov.au>

Subject: RE: TfNSW Consultations - B28 (Biannual Trip Report Framework) - Moorebank Logistics

Park MPE Stage 2 (SSD 7628)

Hi Ibrahim

Thank you for sending the revised report for comments.

It is noted that Section 5.1.2 (page 15) of the attached report includes the following without further details:

"Therefore, the OD surveys will be undertaken during the following times;"

It is also noted that the survey period 8pm-10pm does not cover the movements of workers leaving the site. A copy of spreadsheet that includes further details is attached for your information.

If you have any further details, 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: Saturday, 29 June 2019 8:52 AM

To: Para Sangar

Cc: Mark Ozinga; Nathan Cairney; Fei Chen

Subject: RE: TfNSW Consultations - B28 (Biannual Trip Report Framework) - Moorebank Logistics

Park MPE Stage 2 (SSD_7628)

Hi Para

We have received approval from Qube to expand the OD survey as requested in your consultation comments and our recent meeting. In summary, the changes include expanding the OD survey to include the surrounding network, directional split, 'on and off ramps' for the M5, and development peak hours/traffic.

Please find attached the following:

- Revised MoM with the changes requested in your email below
- Updated BTODR with details of the expanded OD survey (marked in track changes)
- Final pdf copy of the BTODR

Could you please confirm that you are satisfied with these changes so that we can present this agreed framework to DPE?

We will also forward a copy of these changes to RMS as they have also requested an expansion of the OD survey for very similar reasons.

Thanks and regards,

Ibrahim

Regards, **IBRAHIM AWAD ENVIRONMENTAL MANAGER**

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au



Before printing this document, please consider the environment.

From: Para Sangar < <u>Para.Sangar@transport.nsw.gov.au</u>>

Sent: Tuesday, 25 June 2019 12:19 PM

To: Ibrahim Awad < <u>iawad@tacticalgroup.com.au</u>> **Cc:** Mark Ozinga < <u>Mark.Ozinga@transport.nsw.gov.au</u>>

Subject: FW: TfNSW Consultations - B28 (Biannual Trip Report Framework) - Moorebank

Logistics Park MPE Stage 2 (SSD_7628)

Hi Ibrahim

Thank you for sending the draft minutes of meeting.

Please remove the last point as shown in the attached document.

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: Monday, 17 June 2019 2:03 PM

To: Para Sangar

Cc: Mark Ozinga; Nathan Cairney; Patel, Ketan; Vukic, Nicole; Fei Chen

Subject: TfNSW Consultations - B28 (Biannual Trip Report Framework) - Moorebank Logistics Park

MPE Stage 2 (SSD_7628)

Hi Para

Once again, thank-you for making time last Thursday to meet with us to discuss your outstanding comments on the BTODR.

Please find attached the draft Minutes of Meeting. Could you please let me know if we've missed anything and/ or otherwise if you have any corrections?

Thanks,

Ibrahim



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

T +61 2 8907 0700 M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au





Before printing this document, please consider the environment.

From: Para Sangar < <u>Para.Sangar@transport.nsw.gov.au</u>>

Sent: Wednesday, 12 June 2019 10:00 AM

To: Ibrahim Awad < <u>iawad@tacticalgroup.com.au</u>>

Cc: Mark Ozinga < Mark.Ozinga@transport.nsw.gov.au >

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 Ibrahim

Thank you for your email message.

I have already sent an invitation for the meeting that has been scheduled to occur tomorrow (Thursday 13 June 2019).

Please accept the meeting invitation.

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: 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

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**

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

T +61 2 8907 0700 M +61 426 832 993

iawad@tacticalgroup.com.au W www.tacticalgroup.com.au



Before printing this document, please consider the environment.

From: Para Sangar < <u>Para.Sangar@transport.nsw.gov.au</u>>

Sent: Friday, 7 June 2019 12:13 PM

To: Ibrahim Awad < <u>iawad@tacticalgroup.com.au</u>> **Cc:** Mark Ozinga < <u>Mark.Ozinga@transport.nsw.gov.au</u>>

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
TACTICAL

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au



Before printing this document, please consider the environment.

From: Para Sangar < <u>Para.Sangar@transport.nsw.gov.au</u>>

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**

T 0466 024 892 Level 26, 477 Pitt Street, Haymarket, NSW 2008



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**

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

T +61 2 8907 0700 M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u> W www.tacticalgroup.com.au



Before printing this document, please consider the environment.

From: Ibrahim Awad

Sent: Sunday, 26 May 2019 12:10 PM

To: 'Para Sangar Sangarapillai' < Para.Sangar@transport.nsw.gov.au> **Cc:** Mark Ozinga < <u>Mark.Ozinga@transport.nsw.gov.au</u>>; 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**

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au





Before printing this document, please consider the environment.

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**

T 0466 024 892 Level 26, 477 Pitt Street, Haymarket, NSW 2008



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**

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u> W www.tacticalgroup.com.au





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 < <u>iawad@tacticalgroup.com.au</u>>

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

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, 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**

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au





Before printing this document, please consider the environment.

From: Para Sangar Sangarapillai < <u>Para.Sangar@transport.nsw.gov.au</u>>

Sent: Friday, 10 May 2019 12:53 PM

To: Ibrahim Awad < <u>iawad@tacticalgroup.com.au</u>>

Cc: Mark Ozinga < <u>Mark.Ozinga@transport.nsw.gov.au</u>>

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**

T 0466 024 892 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



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

T +61 2 8907 0700

M +61 426 832 993

E iawad@tacticalgroup.com.au W www.tacticalgroup.com.au





Before printing this document, please consider the environment.

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 <<u>sryan@tacticalgroup.com.au</u>>; Nathan Cairney
<u>ncairney@tacticalgroup.com.au</u>>; '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**

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

T +61 2 8907 0700

M +61 426 832 993

E iawad@tacticalgroup.com.au

W www.tacticalgroup.com.au





Before printing this document, please consider the environment.

From: Dan Blyde < Dan. Blyde@gube.com.au >

Sent: Friday, 3 May 2019 1:42 PM To: para.sangar@transport.nsw.gov.au

Cc: lbrahim Awad <<u>iawad@tacticalgroup.com.au</u>>; Fei Chen <<u>fchen@tacticalgroup.com.au</u>>; 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>

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

M +61 499 555 817

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>

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au

<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>

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au

<image003.ipg>

<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/subplans 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>

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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au

<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>

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

T +61 2 8907 0700 M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>
W <u>www.tacticalgroup.com.au</u>

<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'

<<u>Mark.Ozinga@transport.nsw.gov.au</u>>; <u>development@trasport.nsw.gov.au</u>

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>

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

M +61 499 555 817

E ncairney@tacticalgroup.com.au

W www.tacticalgroup.com.au

CPQQRT

<image015.ipg>

<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>

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss. damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

This email is intended only for the addressee and may contain confidential information. If you receive this email in error please delete it and any attachments and notify the sender immediately by reply email. Transport for NSW takes all care to ensure that attachments are free from viruses or other defects. Transport for NSW assume no liability for any loss, damage or other consequences which may arise from opening or using an attachment.



Consider the environment. Please don't print this e-mail unless really necessary.

Biannual Trip Origin Destination Report (Revision 002 (Final Draft) dated 13 March 2019)

Status of comments from TfNSW

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
TfNSW	16-May-19	Section 5.1.2 – Traffic Surveys		21-May-2019
TfNSW	16-May-19	This section needs to clearly state the purpose of these traffic surveys and whether light and heavy vehicles will be surveyed;	Section 5.1.2 has been updated to state what the surveys are intended to capture based on our understanding of the intent of the condition. It also specifies which surveys will capture light and/ or heavy vehicle movements.	21-May-2019
			TfNSW comments: Condition 28 (d) states that representative vehicle origin and destinations based on a cordon in the surrounding road network. This section needs to demonstrate that the development peak periods for light and heavy vehicles have been considered to identify representative vehicle origin and destinations.	
			The survey scope has been extended to include the development peak periods (capturing shift changes and forecast heavy vehicle peaks) as well as the general network peak periods.	13 June 2019
TfNSW	16-May-19	Peak periods of the development is not included for the survey period (5am-6am and 1pm-2pm);	It is understood that surveys are intended to provide a representative OD for the site. It is recommended that to capture the overall network peak, the surveys are carried out in standard peak periods.	21-May-2019
			TfNSW comments: Condition 28 (d) states that representative vehicle origin and destinations based on a cordon in the surrounding road network. Missing development peak periods during the survey would not provide representative vehicle origin and destinations and therefore, the proposed survey period does not satisfy condition 28(d).	
			The survey scope has been extended to include the development peak periods (capturing shift changes and forecast heavy vehicle peaks) as well as the general network peak periods.	13 June 2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response
TfNSW	16-May-19	No information in relation to the sample size for light and heavy vehicles that would be captured for Origin- Destination surveys is provided; and	y vehicles that would be captured for Origin- capture all vehicles in the OD surveys. The OD survey result	
			TfNSW comments: Prior to the OD surveys, please confirm that it is intended to capture 100% (or close as close as possible) of the light and heavy vehicles.	
			It is the intention to capture as close as possible to 100% of vehicles passing through the OD stations. Any expansion factors required to correct missed vehicles will be recorded in the report prepared by the survey company. This has been specified in the <i>Biannual Trip Origin Destination Report</i> . Arcadis notes that TfNSW would not mandate that 100% of vehicles were captured in the OD survey.	13-June-2019
TfNSW	16-May-19	The proposed Origin-Destination Surveys do not capture vehicle movements along the interchange ramps of M5 Motorway/Moorebank Avenue.	Advice from the survey company indicated that locating cameras on the ramps is highly undesirable. Therefore, the locations of the OD stations were determined to capture each of the movements required to inform the monitoring of the traffic generated by the site.	21-May-2019
			No further updates to the document are proposed.	
			TfNSW: Please reflect the changes made in the report in relation to OD surveys proposed on the M5/Moorebank Avenue interchange ramps.	
			Following further consultation with TfNSW, the survey scope was modified to include the entry and exit ramps of the M5 Motorway. Therefore, the response above has been superseded and it has been confirmed with the survey company that placing cameras on the ramps has been allowed for.	14-Aug-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
TfNSW	12-July-19	It is noted that Section 5.1.2 (page 15) of the attached report includes the following without further details: "Therefore, the OD surveys will be undertaken during the following times;"	The report has been amended to correct the text and summarise the OD survey periods, capturing both the general network peak and development peak periods.	22-July-19
TfNSW	12-July-19	It is also noted that the survey period 8pm-10pm does not cover the movements of workers leaving the site. A copy of spreadsheet that includes further details is attached for your information.	The night-time survey period has been extended to 8pm to 11pm, which captures the shift change over and workers leaving the site, in accordance with the spreadsheet attached to TfNSW's email dated 12 July 2019.	22-July-19

MEETING MINUTES - NO 001





PROJECT Moorebank Logistics Park – East Precinct MPE Stage 2

MEETING TYPE Traffic Management Plan Consultation Meeting with TfNSW

TIME & DATE 10am, Thurs 13 June 2019

LOCATION TfNSW offices, Zenith Tower, Chatswood

ISSUED 17 June 2019

PRE	SENT	ORGANISATION	INITIAL	EMAIL ADDRESS
YES	APOLOGIES			
\boxtimes		TfNSW	MO	mark.ozinga@transport.nsw.gov.au
\boxtimes		TfNSW	PS	para.sangar@transport.nsw.gov.au
\boxtimes		Arcadis	NV	nicole.vukic@arcadis.com
\boxtimes		Arcadis	KP	ketan.patel@arcadis.com
\boxtimes		Tactical	IA	iawad@tacticalgroup.com.au
\boxtimes		Tactical	FC	fchen@tacticalgroup.com.au

DISTRIBUTION AS ABOVE AND

Nathan Cairney Heather Tilley

ITEM	DESCRIPTION	ACTION	DATE
1.	GENERAL		
1.1.	Introductions	N/A	N/A
1.1.1.	IA noted the plans that had been submitted to TfNSW for review and comment and their current status, including close out of consultation with TfNSW on WTP and comments on BTODR. IA noted that RMS had also raised very similar comments with respect the BTODR.	N/A	N/A
1.1.2.	PS confirmed that the OEMP was still under review and that he'd emailed IA to request a copy of the ONVMP	IA TO PROVIDE COPY OF ONVMP TO PS PS to get back to IA on OEMP	N/A
1.1.3.	IA introduced NV to discuss details of comments on BTODR	N/A	N/A



ITEM	DESCRIPTION	ACTION	DATE
2.	TRAFFIC – BTODR		
2.1.	NV confirmed TfNSW request (comment) with respect the intent to capture 100% traffic movement in OD survey. MO stated that was the preferred approach but that it would be understandable if did not capture 100% but a little less. NV noted that the survey company would detail the proportion captured and document any adjustments required.	N/A	
	MO/PS stated that they would like to capture development peak periods, and different patterns of development peak periods in addition to network peaks and that TfNSW was interested in heavy vehicle peak periods including capturing:	IA to raise the request to cover development peak periods in an expanded OD survey with Qube and get back to TfNSW on the outcome.	Week end - 21 June 2019
	- Shift changes		
	- Heavy vehicle peaks		
	- General network peaks		
2.1.1.	These would confirm uncertainty about the assumptions in the initial assessments.		
	NV confirmed that the Consultant understood the intent of the comments and above recommendations and that the Consultant would look to capture these in an expanded OD survey.		
	IA stated that we would first need to discuss the above further actions with Qube first and seek their input / feedback / approval on any further work in this regard.		
2.1.1.1	MO and PS stated they were interested in understanding the directional split on the M5, which has high existing heavy vehicle volumes.	IA to raise with TfNSW request for expanding scope of OD survey to cover	Week end – 21 June 2019

MEETING MINUTES - NO 001





ITEM	DESCRIPTION	ACTION	DATE
	NV stated that the Consultant understood the intent of this request but noted that there were previous difficulties with survey companies placing cameras on the ramps and safety issues and restrictions by various motorway operators.	directional split with Qube and come back to TfNSW with feedback.	
	MO noted that Qube may need to sign a commercial / confidentiality agreement with Interlink before placing the cameras in order to get approval to place the cameras on the ramps.		
	MO stated and agreed with NV that we do not need to count vehicles on the M5 just on the ramps.		
	NV noted that the Consultant could look to include this in an expanded OD survey.		
	IA noted that Tactical will raise this request for additional OD survey work with Qube and will come back to TfNSW with feedback.		

ISSUED BY TACTICAL GROUP

IBRAHIM AWAD ENVIRONMENTAL MANAGER

From: <u>Ibrahim Awad</u>
To: <u>Laura Van putten</u>
Cc: <u>Nathan Cairney; Fei Chen</u>

Subject: FW: Tactical & RMS Consultation - B, Biannual Trip Report - Moorebank Intermodal - MPE Stage 1 (SSD-

6766) and Stage 2 (SSD_7628)

Date: Friday, 9 August 2019 10:20:06 AM

Attachments: BTODR - response to RMS comments - 25 Jul 19 tracked.docx

190724 Biannual Trip Origin Destination Report Framework Final Draft 006 clean FINAL (002),pdf

Hi Laura

I just called to follow up on the above. Can you please give me a call when you get a chance?

Thanks,

Ibrahim

Regards,

IBRAHIM AWAD

ENVIRONMENTAL MANAGER



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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>
W <u>www.tacticalgroup.com.au</u>



Before printing this document, please consider the environment.

From: Ibrahim Awad

Sent: Wednesday, 7 August 2019 6:37 PM

To: 'Laura Van putten' <Laura.VAN.PUTTEN@rms.nsw.gov.au>

Cc: Rachel Cumming <rachel.cumming@rms.nsw.gov.au>; Nathan Cairney <ncairney@tacticalgroup.com.au>; Fei Chen <fchen@tacticalgroup.com.au>

Subject: RE: Tactical & RMS Consultation - B, Biannual Trip Report - Moorebank Intermodal -

MPE Stage 1 (SSD-6766) and Stage 2 (SSD 7628)

Hi Laura

Please find attached the updated consultation response table and BTODR addressing your comments below.

Can you please confirm you are satisfied we have addressed your comments so that we can move to close out our consultation on this Report and submit to DPIE for approval?

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

Thanks,

Ibrahim

Regards, IBRAHIM AWAD ENVIRONMENTAL MANAGER

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

T +61 2 8907 0700 M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au

?	
Before printing this do	ocument please consider the environment

From: Laura Van putten < Laura. VAN. PUTTEN@rms.nsw.gov.au >

Sent: Monday, 22 July 2019 2:37 PM

To: Ibrahim Awad < iawad@tacticalgroup.com.au >

Cc: Rachel Cumming < rachel.cumming@rms.nsw.gov.au>

Subject: Tactical & RMS Consultation - B, Biannual Trip Report - Moorebank Intermodal - MPE

Stage 1 (SSD-6766) and Stage 2 (SSD_7628)

Hi Ibrahim

Thank you for providing the updated Biannual Trip Origin Destination Report (BTODR). Whilst we appreciate the updates and note that the changes address some of our concerns, however the following issues remain to be addressed:

1. The OD survey will now include the movements onto and off the M5, in each direction. While the new survey points on the 4 ramps are described as "OD station" in Fig 4-1, they are described this way on page 16:

'The sites located on Moorebank Avenue, north and south of the South Western Motorway will be used to determine the vehicles travelling to and from the site through interpolation and combined with survey equipment on the on and off ramps of the M5 South Western Motorway will provide an adequate over of the origin and destination of light and heavy vehicles from the facility.'

It is unclear if the term "survey equipment" which is used to explain the equipment located on the 4 ramps will be collecting exactly the same type of information as the other OD stations. Further detail is required to inform that the OD Stations will be collecting the same data (for example number plates) and not simply counting vehicles. this data needs to be able to identify actual trips moving onto and off the M5, not just derive estimates based on some pro-rata split of count volumes on the ramps.

2. RMS preference is to extend the OD survey to cover the orientation of trips at Moorebank Ave / Newbridge Rd and at M5 / Hume Hwy, to provide further information on HV movements onto and from these key arterials. However, we accept that this would add significantly to the OD survey expense & complexity, and would suggest as an alternative that these two locations could

be added to the list of intersection surveys (ie simple counts, not OD) shown on page 16. For example, if the OD survey showed a high level of left turn movement onto M5 from the new intermodal facility, we would like to know if those HVs stayed on M5 (where their impact is less) or exited at Casula onto the Hume Hwy (where their impact is greater).

Should you have any questions happy to discuss my contact details are below.

Kind regards,

Laura van Putten

A/Senior Land Use Planner
Stategic 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: Saturday, 29 June 2019 9:12 AM **To:** Laura Van putten; Pahee Rathan **Cc:** Nathan Cairney; Fei Chen

Subject: RE: RMS Consultation - OTAMP, CTAMP-B, Biannual Trip Report - Moorebank Intermodal -

MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628)

Hi Laura, Pahee

We have updated the BTODR to address very similar requests from both RMS (as per your email below) as well as TfNSW with respect to expanding the OD survey to cover traffic in the broader surrounding network, directional split, 'on and off' ramps for M5, and development traffic peaks.

These updates are marked in track changes in the OD Survey section (of the attached BTODR) and the changes have now been communicated back to TfNSW.

Could you please confirm that you are satisfied with these changes so that we can present the agreed framework to DPE?

Thanks and we look forward to meeting you next Thursday.

Regards, Ibrahim

Regards, IBRAHIM AWAD ENVIRONMENTAL MANAGER



From: <u>Ibrahim Awad</u>

To: <u>Patel, Ketan; Vukic, Nicole</u>

Cc: <u>Tilley, Heather; Nathan Cairney; Fei Chen</u>

Subject: FW: RMS Consultation - OTAMP, CTAMP-B, Biannual Trip Report - Moorebank Intermodal - MPE Stage 1 (SSD-

6766) and Stage 2 (SSD_7628)

Date: Thursday, June 13, 2019 8:40:43 AM

Attachments: <u>image001.gif</u>

image002.jpg image003.jpg image006.jpg image004.jpg

BTODR - response to RMS comments - 3 Jun 19.docx

Hi Ketan, Nicole

Please see further comments from RMS on the BTODR. I'll organise a time to discuss these before or after our meeting with TfNSW today and decide further actions.

Thanks,

Ibrahim

Regards, IBRAHIM AWAD

ENVIRONMENTAL MANAGER



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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au



Before printing this document, please consider the environment.

From: Pahee Rathan < <u>Pahee.RATHAN@rms.nsw.gov.au</u>>

Sent: Wednesday, 12 June 2019 5:06 PM

To: Ibrahim Awad < <u>iawad@tacticalgroup.com.au</u>>

Cc: Laura Van putten <Laura.VAN.PUTTEN@rms.nsw.gov.au>

Subject: FW: RMS Consultation - OTAMP, CTAMP-B, Biannual Trip Report - Moorebank

Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628)

Hi Ibrahim

Roads and Maritime has reviewed Tactical's response to the Roads and Maritime comments in regards to the Biannual Trip Report and has the following comments:

Roads and Maritime does not agree with the following statement, that the OD survey will "adequately capture the vehicle movements generated by the site for a recommended survey cordon, which includes the M5 South Western Motorway."

The "recommended survey cordon" is very limited, and does not include all of the defined HV access routes (Fig 2-2). Roads and Maritime has an interest in knowing (as a minimum) the **directional split of the HVs on M5 and Newbridge Rd**. This will assist with answering questions such as will the intermodal's HVs predominantly be <u>adding to</u> the peak demand flow, or travelling mainly in the contra-peak direction? Etc.

The OD survey should be designed so that it provides insights into how the intermodal's HVs use M5 and Newbridge Rd over a typical day. This also extends to the Hume Highway, which is the other key HV access route. This is expected to add to the quality and usefulness of the data.

Should you have any questions my contact details are below.

Please note that RMS will provide a response to the OTAMP and CTAMP comments provided by Tactical next week.

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

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]

Sent: Tuesday, 4 June 2019 2:48 PM

To: Laura Van putten

Cc: Nathan Cairney; Fei Chen

Subject: RE: RMS Consultation - OTAMP, CTAMP-B, Biannual Trip Report - Moorebank Intermodal -

MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628)

Hi Laura

Please find attached our response to your comments on the BTODR. Could you please confirm if you are satisfied that we have addressed your comments so that we can close out our consultation on this report?

I was also hoping to get the CATMP-B response to you yesterday but we are still working to address some of the comments and will have this to you soon..

Please also note that I will also shortly forward to you an updated version of the BTODR detailing changes to address comments from TfNSW for your information / reference.

Regards, Ibrahim

Regards, IBRAHIM AWAD

ENVIRONMENTAL MANAGER



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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>

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: Monday, 3 June 2019 3:19 PM

To: Ibrahim Awad < <u>iawad@tacticalgroup.com.au</u>>

Subject: RE: RMS Consultation - OTAMP, CTAMP-B, Biannual Trip Report - Moorebank

Intermodal - MPE Stage 1 (SSD-6766) and Stage 2 (SSD_7628)

Hi Ibrahim

Thank you for your email. Please note that I have sent your response to the relevant RMS sections to review and provide comments, once I have received these comments I will collate and provide to you.

Please note I am expecting to have a response by mid next week. Please let me know if there is any concerns with this timeframe.

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

From: Ibrahim Awad [mailto:iawad@tacticalgroup.com.au]

Sent: Monday, 3 June 2019 2:13 PM

To: Laura Van putten

Cc: Nathan Cairney; Fei Chen

Subject: RMS Consultation - OTAMP, CTAMP-B, Biannual Trip Report - Moorebank Intermodal - MPE

Stage 1 (SSD-6766) and Stage 2 (SSD_7628)

Hi Laura

We provided our response to RMS's comments on the OTAMP on the 26 May 19 – please see below. Could you please let me know if you have any further comments that you'd like to discuss over the phone or in person and/or otherwise provide us an indication that you are satisfied we have addressed your comments?

We proposed to close out our consultation with RMS on this plan and submit to DPE for approval on Thursday 6th June 2019.

I'll also be forwarding to you our response to your comments on the CTAMP-B and BTODR by this afternoon.

Thanks and regards,

Ibrahim

Regards, IBRAHIM AWAD

ENVIRONMENTAL MANAGER



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

T +61 2 8907 0700

M +61 426 832 993

E <u>iawad@tacticalgroup.com.au</u>
W <u>www.tacticalgroup.com.au</u>

Before printing this document, please consider the environment.
From: Ibrahim Awad
Sent: Sunday, 26 May 2019 12:04 PM
To: 'VAN PUTTEN Laura E' < <u>Laura.VAN.PUTTEN@rms.nsw.gov.au</u> >
Cc: RATHAN Pahee < Pahee.RATHAN@rms.nsw.gov.au >; CUMMING Rachel
<a href="mailto:; Fei ; Fei <a href="mai</td></tr><tr><td>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
LEVEL 15 124 WALKER STREET NORTH SYDNEY NSW 2060
T + C4 0 0007 0700

T +61 2 8907 0700 M +61 426 832 993

?

E <u>iawad@tacticalgroup.com.au</u>

W www.tacticalgroup.com.au

Before printing this document, please consider the environment.

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 < <u>Pahee.RATHAN@rms.nsw.gov.au</u>>; 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.

Operational Traffic and Access Management Plan (OTAMP)

- 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.

Moorebank Precinct East Biannual Trip Origin Destination Report

• 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

?

Before printing, please consider the environment

IMPORTANT NOTICE: This email and any attachment to it are intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. Roads and Maritime Services is not responsible for any unauthorised alterations to this email or attachment to it. Views expressed in this message are those of the individual sender, and are not necessarily the views of Roads and Maritime Services. If you receive this email in error, please immediately delete it from your system and notify the sender. You must not disclose, copy or use any part of this email if you are not the intended recipient.



Before printing, please consider the environment

IMPORTANT NOTICE: This email and any attachment to it are intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. Roads and Maritime Services is not responsible for any unauthorised alterations to this email or attachment to it. Views expressed in this message are those of the individual sender, and are not necessarily the views of Roads and Maritime Services. If you receive this email in error, please immediately delete it from your system and notify the sender. You must not disclose, copy or use any part of this email if you are not the intended recipient.



Before printing, please consider the environment

IMPORTANT NOTICE: This email and any attachment to it are intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. Roads and Maritime Services is not responsible for any unauthorised alterations to this email or attachment to it. Views expressed in this message are those of the individual sender, and are not necessarily the views of Roads and Maritime Services. If you receive this email in error, please immediately delete it from your system and notify the sender. You must not disclose, copy or use any part of this email if you are not the intended recipient.



Before printing, please consider the environment

IMPORTANT NOTICE: This email and any attachment to it are intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. Roads and Maritime Services is not responsible for any unauthorised alterations to this email or attachment to it. Views expressed in this message are those of the individual sender, and are not necessarily the views of Roads and Maritime Services. If you receive this email in error, please immediately delete it from your system and notify the sender. You must not disclose, copy or use any part of this email if you are not the intended recipient.

Biannual Trip Origin Destination Report (Revision 002 (Final Draft) dated 13 March 2019)

Status of comments from RMS

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
RMS	15-May-2019	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.	The OD survey locations were determined in consultation with a survey company to adequately capture the vehicle movements generated by the site for a recommended survey cordon, which includes the M5 South Western Motorway. The recommended cordon is considered sufficient for providing a representative OD pattern for the site. The sites located on Moorebank Avenue, north and south of the South Western Motorway will be used to determine the vehicles travelling to and from the site through interpolation. Given that the Hume Highway is designed to accommodate substantial heavy vehicle movements, it is considered too far for the proposed cordon and heavy vehicles generated by the site would be absorbed in the existing traffic volumes on this part of the network.	21-May-2019
RMS	15-May-2019	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	The OD surveys are intended to capture all vehicles (light and heavy) generated by the site. Additionally, assessing the vehicles on Cambridge Avenue and Anzac Road will enable the identification of heavy vehicles accessing the site using routes that are not designated for heavy vehicles. This section of the report has been amended to clarify this intent.	21-May-2019
RMS	15-May-2019	On page 13 it is stated that the Operational Data Collection will involve trucks filled with RFID readers.	Noted.	21-May-2019
		(a) Does this equipment also form the basis of the vehicle identification for the OD surveys?	They won't be sufficient to give the full spectrum of vehicles and will only cover container trucks. Not rigids, semis and LVs and only covering part of the conditions.	21-May-2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
		 (b) If not, what method will be used to uniquely identify the HVs for the OD survey? Manual observation or 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? 	This will be determined in commissioning the preferred survey company. The predominant method is using CCTV cameras with number plate recognition. The level of accuracy will be reported by the survey company for each survey, dependent on the survey conditions. This section of the report has been updated to specify that this is carried out and documented by the survey company commissioned.	21-May-2019
RMS	15-May-2019	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.	The OD survey data will be provided by the survey company. The report will be updated to provide a template for presenting the OD data.	21-May-2019
RMS	22 July 2019	The OD survey will now include the movements onto and off the M5, in each direction. While the new survey points on the 4 ramps are described as "OD station" in Fig 4-1, they are described this way on page 16: 'The sites located on Moorebank Avenue, north and south of the South Western Motorway will be used to determine the vehicles travelling to and from the site through interpolation and combined with survey equipment on the on and off ramps of the M5 South Western Motorway will provide an adequate over of the origin and destination of light and heavy vehicles from the facility.' It is unclear if the term "survey equipment" which is used to explain the equipment located on the 4 ramps will be collecting exactly the same type of information as the other OD stations. Further detail is required to inform that	The modified OD survey scope includes data collection on the ramps that is consistent with the remaining stations. The text referred to in the comment has been deleted from the report, since there is no longer requirement to interpolate data.	25 July 2019

Stakeholder	Initial Comment Date	Comment	Arcadis Response	Initial Response Date
		the OD Stations will be collecting the same data (for example number plates) and not simply counting vehicles. this data needs to be able to identify actual trips moving onto and off the M5, not just derive estimates based on some pro-rata split of count volumes on the ramps.		
RMS		RMS preference is to extend the OD survey to cover the orientation of trips at Moorebank Ave / Newbridge Rd and at M5 / Hume Hwy, to provide further information on HV movements onto and from these key arterials. However, we accept that this would add significantly to the OD survey expense & complexity, and would suggest as an alternative that these two locations could be added to the list of intersection surveys (ie simple counts, not OD) shown on page 16. For example, if the OD survey showed a high level of left turn movement onto M5 from the new intermodal facility, we would like to know if those HVs stayed on M5 (where their impact is less) or exited at Casula onto the Hume Hwy (where their impact is greater).	The two intersections of Moorebank Avenue/ Newbridge Road and at M5 / Hume Highway have been added to the scope for intersection surveys.	25 July 2019