

asongroup



Biannual Trip Origin Destination Report

November 2020 - April 2021

Moorebank Precinct East

8/06/2021

P1065r03v1

Document Control

Project No	P1065r01
Project	Moorebank Precinct East
Client	Qube Property Management Services Pty Limited
File Reference	1065r03_Biannual Trip Origin Destination Report, May 2021

Revision History

Revision No.	Date	Details	Author	Approved by
-	04/06/2021	Draft	[REDACTED]	[REDACTED]
Issue 1	08/06/2021	Issue 1	[REDACTED]	[REDACTED]

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	Introduction	1
1.1	Introduction	1
1.2	Purpose	1
1.3	Scope	2
1.4	Period of Reporting	2
2	Shipping Container Transport	4
3	Truck Gate Opening Periods	5
3.1	Period of Opening	5
3.2	Exceptions to Full Time Opening	5
3.3	Actual Hours of Opening	5
4	Traffic Volumes	6
4.1	MPE Main Access	6
4.2	MPE Individual Warehousing Facilities	6
5	Origin-Destination Results	9
6	Employee Numbers	15
7	Summary	16

Contents Continued

Figures

Figure 1: Origin-Destination Gates	10
Figure 2: Visual of Average OD Movements - All Vehicles	11
Figure 3: Visual of Average OD Movements - Light Vehicles	12
Figure 4: Visual of Average OD Movements - Heavy Vehicles	13
Figure 5: Visual of Average OD Movements – Articulated Heavy Vehicles	14

Tables

Table 1 Breakdown of Operational Status Within MPE	2
Table 2 Shipping Container Transport	4
Table 3 Breakdown of Operational Status Within MPE	5
Table 4 Truck Gate Opening Period Exceptions	5
Table 5 Average Daily Traffic Volumes	6
Table 6 Warehouse 1 – Average Daily Traffic Volumes	6
Table 7 Warehouse 3A – Average Daily Traffic Volumes	7
Table 8 Warehouse 3B – Average Daily Traffic Volumes	7
Table 9 Warehouse 4A – Average Daily Traffic Volumes	7
Table 10 Warehouse 4B – Average Daily Traffic Volumes	8
Table 11 Warehouse 3A – Average Daily Traffic Volumes	8
Table 12 OD Survey Gates	9
Table 13 Average OD Movements – All Vehicles	11
Table 14 Average OD Movements – Light Vehicles	12
Table 15 Average OD Movements – Heavy Vehicles	13
Table 16 Average OD Movements – Articulated Heavy Vehicles	14
Table 17 OD Survey Gates	15

APPENDICES

Appendix A. BTODR Framework Report

Appendix B. October 2020 BTODR OD Matrix Table Comparison

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

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 Oct 2020	Biannual Trip Origin Destination Report, Moorebank Precinct East, Ref:1065r01v1 (Ason Group, February 2021)
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 during this time period.
- 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 road network.
- Comment on the employee numbers at MPE.

With respect to the OD data, this report has assumed the selected cordons (as outlined within **Figure 1**) 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 May 2020 – 31 Oct 2020	1 Nov 2020 – 30 Apr 2021
IMEX	Yes – Partially	Yes - Partially
WH 1	Yes	Yes
WH 3A	Yes	Yes
WH 3B	No	Yes
WH 4A	No	Yes
WH 4B	Yes	Yes
WH 5	No	Yes
WH 6	No	No
WH 7	No	No
WH 8	No	No

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

Furthermore, some key functions of the Site were not fully operational throughout the reporting period; therefore, these timings do not directly align with the requirements outlined within BTODR Framework report.

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

- Shipping Container Transport: 1 November 2020 – 30 April 2021
- Truck Gate opening period: 1 November 2020 – 30 April 2021
- Traffic Volumes: 19 April 2021 – 26 April 2021
- Origin / Destination Numbers: 19 April 2021 – 26 April 2021
- Employee Numbers: 1 November 2020 – 30 April 2021

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 Qube Logistics, Knight Frank and the operating tenancies 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 1	May-2020	1,377	1,377
	Jun-2020	196	1,573
	Jul-2020	4	1,577
	Aug-2020	0	1,577
	Sep-2020	0	1,577
	Oct-2020	0	1,577
Period 2	Nov-2020	2,768	2,768
	Dec-2020	1,916	4,684
	Jan-2021	1,636	6,320
	Feb-2021	2,230	8,550
	Mar-2021	1,662	10,212
	April-2021	708	10,920

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 1	1 May 2020 – 31 October 2020
Period 2	1 November 2020 – 30 April 2021

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 1	Late July - October 2020	No containers left from IMEX Terminal
Period 2	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: 7:00am – 3:00pm
- Saturday & Sunday: Closed

These times remain unchanged 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 Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 1	26-Aug-2020 - 05 Sep 2020	629	341	607	355
Period 2	19 Apr 2021 - 26 Apr 2021	518	193	512	197

4.2 MPE Individual Warehousing Facilities

Warehouses within MPE will not be gated (in the same manner as IMEX), therefore data on individual warehouses has been collected separately. This data has been collected to record the number of vehicles entering and exiting each warehouse; these results are presented below.

4.2.1 Warehouse 1: Target Warehouse

Internal access to and from Warehouse 1 (Target Warehouse) is outlined below within Table 6.

TABLE 6 WAREHOUSE 1 – AVERAGE DAILY TRAFFIC VOLUMES

Reporting Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 1	8 – 14 Nov 2020	115	73	111	73
Period 2	19 -26 April 2021	27	10	28	10

4.2.2 Warehouse 3A: Caesarstone Warehouse

Internal access to and from Warehouse 3A (Caesarstone Warehouse) is outlined below within Table 7

TABLE 7 WAREHOUSE 3A – AVERAGE DAILY TRAFFIC VOLUMES

Reporting Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 1	8 – 14 Nov 2020	35	44	32	45
Period 2	19 -26 April 2021	39	46	38	47

4.2.3 Warehouse 3B

Internal access to and from Warehouse 3B is outlined below within Table 8.

TABLE 8 WAREHOUSE 3B – AVERAGE DAILY TRAFFIC VOLUMES

Reporting Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 1	8 – 14 Nov 2020	-	-	-	-
Period 2	19 -26 April 2021	41	39	39	42

4.2.4 Warehouse 4A

Internal access to and from Warehouse 4A is outlined below within Table 9.

TABLE 9 WAREHOUSE 4A – AVERAGE DAILY TRAFFIC VOLUMES

Reporting Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 1	8 – 14 Nov 2020	-	-	-	-
Period 2	19 -26 April 2021	18	18	18	17

4.2.5 Warehouse 4B: ATS Timber

Internal access to and from Warehouse 4B (ATS Timber) is outlined below within **Table 10**.

TABLE 10 WAREHOUSE 4B – AVERAGE DAILY TRAFFIC VOLUMES

Reporting Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 1	8 – 14 Nov 2020	33	41	34	41
Period 2	19 -26 April 2021	37	46	35	44

4.2.6 Warehouse 5

Internal access to and from Warehouse 5 is outlined below within **Table 11**.

TABLE 11 WAREHOUSE 3A – AVERAGE DAILY TRAFFIC VOLUMES

Reporting Period	Reporting Dates	Vehicles In		Vehicles Out	
		Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 1	8 – 14 Nov 2020	-	-	-	-
Period 2	19 -26 April 2021	11	53	11	51

5 Origin-Destination Results

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 12 OD SURVEY GATES

Gate Number	Gate Location
OD1	Moorebank Avenue, about 350metres north of the M5 South Western Motorway
OD2	Westbound off-ramp of M5 Interchange
OD3	Eastbound on-ramp of M5 Interchange
OD4	Westbound on-ramp of M5 Interchange
OD5	Eastbound off-ramp of M5 Interchange
OD6	Moorebank Avenue, about 300metres 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

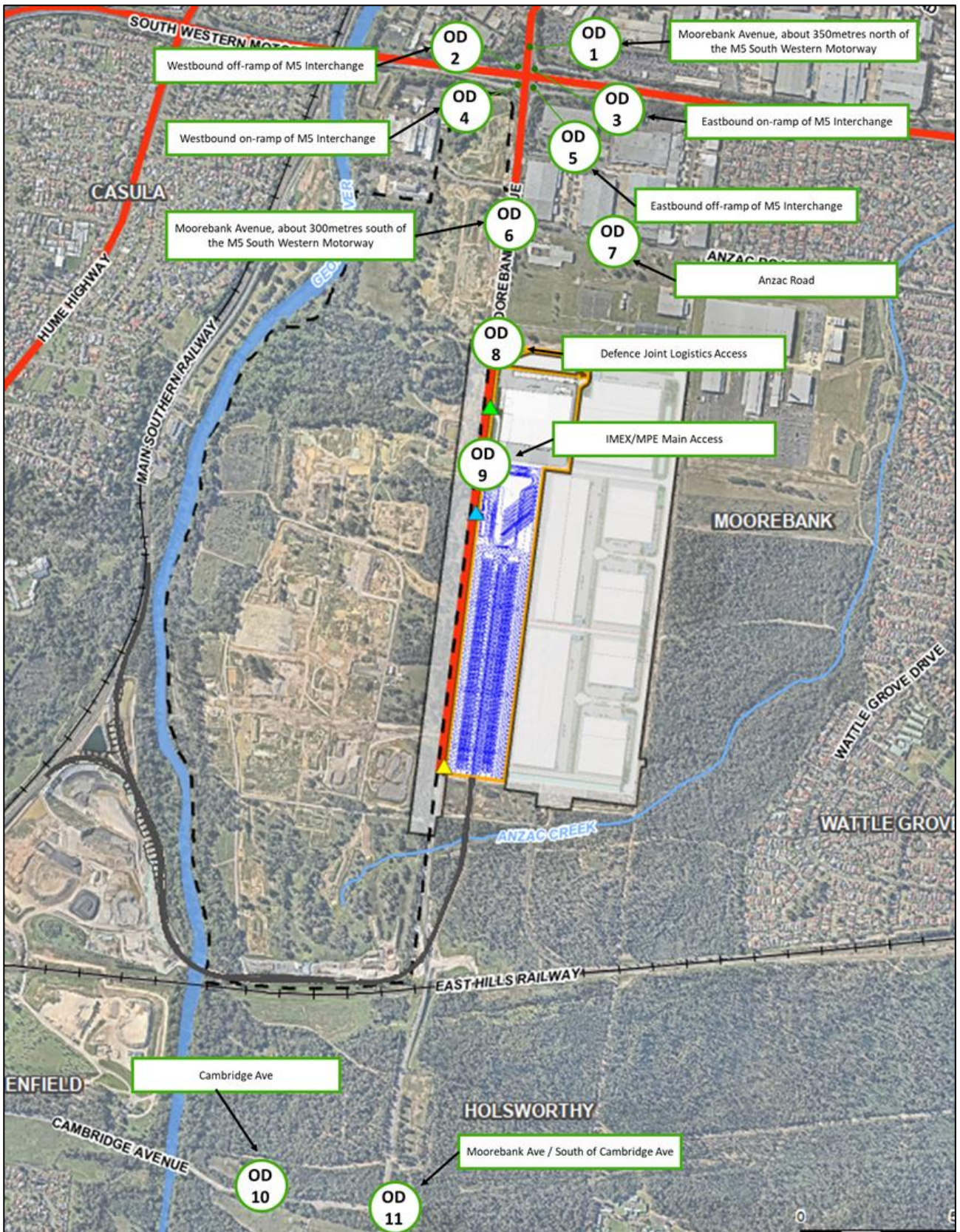


Figure 1: Origin-Destination Gates

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 13 AVERAGE OD MOVEMENTS – ALL VEHICLES

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	494	10,716	0	3,090	1,125	40	98	1,544	43	17,149
2	13,539		0	322	0	4,383	1,655	115	241	1,981	104	22,341
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	1,759	0	1,759	0		2,833	907	49	108	1,390	50	8,856
6	3,453	0	2,835	3,540	0		3,963	290	594	5,096	278	20,049
7	1,062	0	825	1,214	0	3,070		0	94	2,323	0	8,589
8	24	0	94	120	0	238	50		6	129	0	661
9	148	0	238	289	0	619	0	0		64	0	1,357
10	961	0	2,693	1,615	0	5,253	2,230	128	3		524	13,407
11	40	0	145	162	0	347	32	0	0	539		1,266
Total	20,987	0	9,084	17,977	0	19,833	9,962	622	1,145	13,067	999	93,675

Below is a visual representation of the OD Movements within Table 13

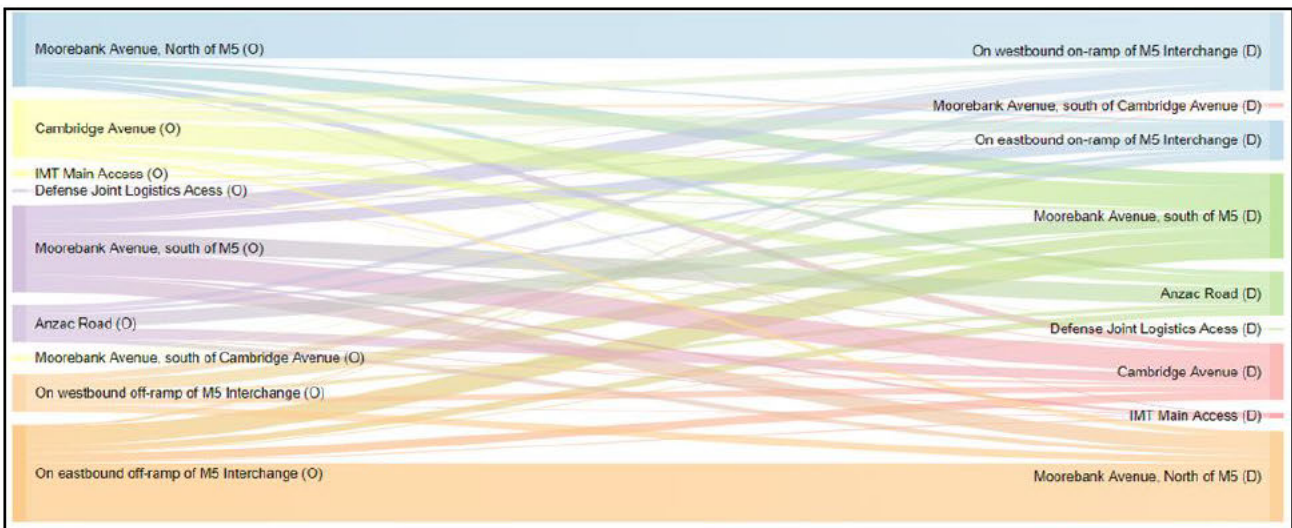


Figure 2: Visual of Average OD Movements - All Vehicles

TABLE 14 AVERAGE OD MOVEMENTS – LIGHT VEHICLES

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	368	9,349	0	2,868	1,076	39	79	1,486	41	15,307
2	12,205		0	292	0	4,011	1,565	113	185	1,888	99	20,357
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	1,612	0	1,612	0		2,548	869	48	87	1,268	47	8,092
6	3,212	0	2,552	3,191	0		3,693	269	419	4,745	252	18,332
7	970	0	766	1,079	0	2,815		0	94	2,273	0	7,997
8	24	0	91	105	0	220	50		6	115	0	612
9	89	0	183	188	0	445	0	0		58	0	963
10	893	0	2,547	1,490	0	4,929	2,184	118	2		522	12,685
11	40	0	141	141	0	322	32	0	0	535		1,211
Total	19,045	0	8,261	15,835	0	18,159	9,469	587	873	12,367	961	85,557

Below is a visual representation of the OD Movements within Table 14.

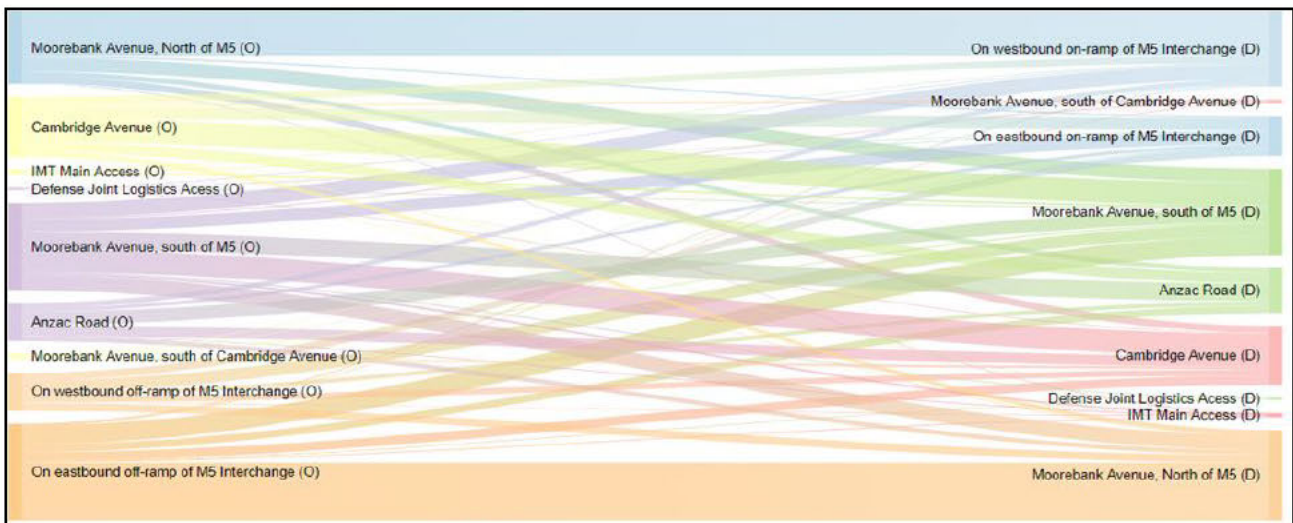


Figure 3: Visual of Average OD Movements - Light Vehicles

TABLE 15 AVERAGE OD MOVEMENTS – HEAVY VEHICLES

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	84	878	0	191	46	0	16	53	1	1,269
2	894		0	22	0	265	73	1	30	73	4	1,363
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	103	0	103	0		150	31	0	10	40	1	438
6	191	0	162	249	0		217	16	109	223	23	1,191
7	78	0	43	101	0	204		0	0	49	0	473
8	0	0	2	11	0	13	0		0	11	0	39
9	38	0	31	60	0	106	0	0		6	0	241
10	50	0	79	94	0	216	45	9	0		2	495
11	0	0	4	19	0	23	0	0	0	4		50
Total	1,355	0	508	1,435	0	1,167	412	27	164	459	32	5,558

Below is a visual representation of the OD Movements within Table 15.

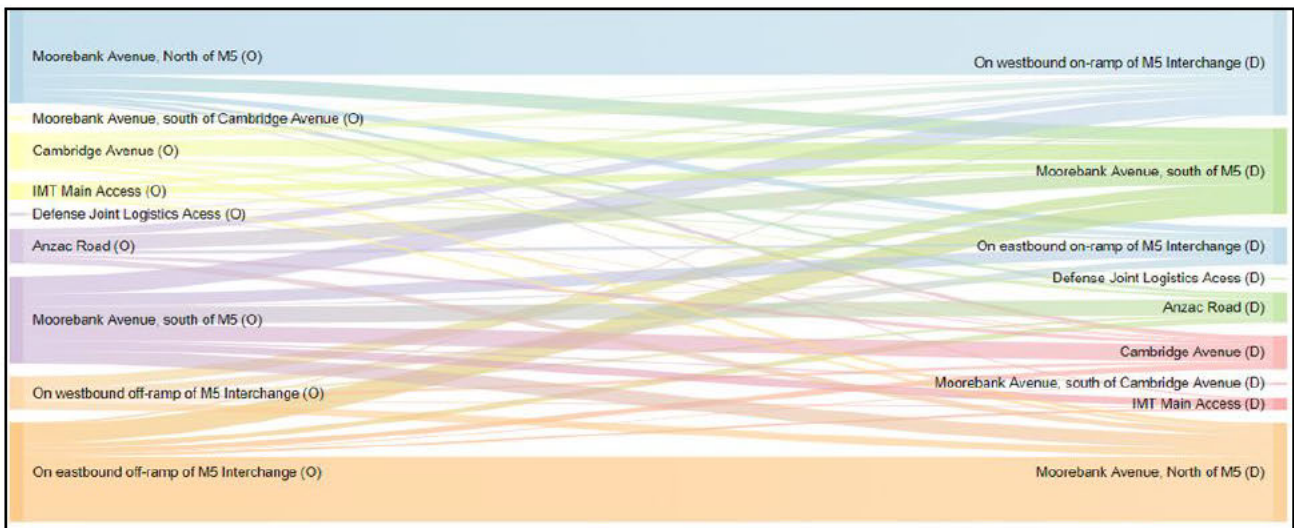


Figure 4: Visual of Average OD Movements - Heavy Vehicles

TABLE 16 AVERAGE OD MOVEMENTS – ARTICULATED HEAVY VEHICLES

From Station	To Station											Total
	1	2	3	4	5	6	7	8	9	10	11	
1		0	42	488	0	31	3	0	3	6	0	573
2	440		0	8	0	107	17	1	26	21	1	621
3	0	0		0	0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0	0
5	44	0	44	0		136	8	0	11	83	1	326
6	49	0	120	100	0		53	5	67	128	4	525
7	15	0	17	34	0	51		0	0	2	0	119
8	0	0	1	3	0	4	0		0	2	0	10
9	21	0	24	41	0	69	0	0		0	0	154
10	18	0	67	31	0	108	1	2	0		0	227
11	0	0	0	2	0	2	0	0	0	0		4
Total	587	0	315	707	0	507	82	8	107	241	6	2,560

Below is a visual representation of the OD Movements within Table 16.

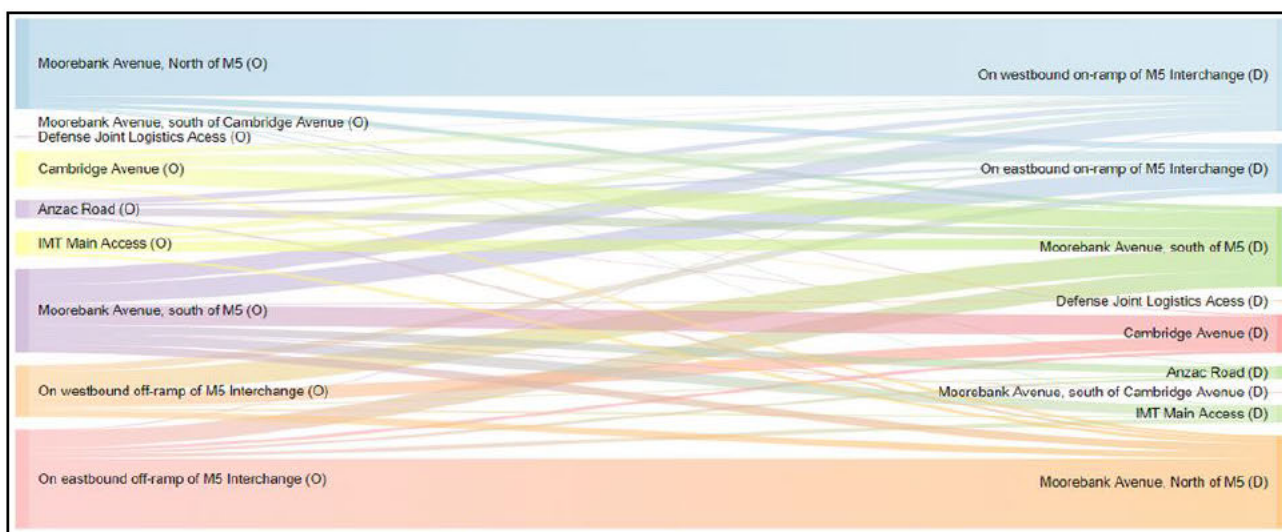


Figure 5: Visual of Average OD Movements – Articulated Heavy Vehicles

6 Employee Numbers

To corroborate data provided within the Workplace Travel Plan and minimise the need for additional reporting, Table 17 presents relevant information on employee numbers for each of the sub-area's within MPE.

TABLE 17 OD SURVEY GATES

Reporting Periods	Month	IMEX	Rail Link	Tenanted Area	
Period 1	01-May-2020 - 31-Oct-2020	5	33	WH 1	129
				WH 3A	26
				WH 3B	-
				WH 4A	-
				WH 4B	26
				WH 5	-
Period 2	01-Nov 2020 - 30 Apr 2020	6	40	WH 1	2
				WH 3A	30
				WH 3B	14
				WH 4A	18
				WH 4B	24
				WH 5	12

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 November 2020 and 30 April 2021.

Appendix A. BTODR Framework Report

MOOREBANK PRECINCT EAST - BIANNUAL TRIP ORIGIN DESTINATION REPORT

Framework for Data Collection and Reporting

27 AUGUST 2019



CONTACT



QUBE

MOOREBANK PRECINCT EAST - BIANNUAL TRIP ORIGIN DESTINATION REPORT

Framework for Data Collection and Reporting

Author [REDACTED] _____

Checker [REDACTED] _____

Approver [REDACTED] _____

Report No PREC-ARC-TR-RPT-0001

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	[REDACTED]	[REDACTED]
002	13/03/19	Revised and issued for client review	[REDACTED]	[REDACTED]
003	5/06/19	Revised to address agency comment	[REDACTED]	[REDACTED]
004	14/06/19	Revised to address further agency comment	[REDACTED]	[REDACTED]
005	28/06/19	Revised to address further agency comments	[REDACTED]	[REDACTED]
006	29/07/19	Revised to address further agency comments	[REDACTED]	[REDACTED]
007	15/08/19	Consultation table updated to close out agency comments	[REDACTED]	[REDACTED]

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

CONTENTS

1 INTRODUCTION	1
1.1 Background.....	1
1.1 Scope and Purpose.....	1
1.2 Consultation.....	3
2 PROJECT DESCRIPTION	6
2.1 Site Location.....	6
2.2 Site Operations.....	6
2.3 Heavy Vehicle Access Routes.....	6
3 REPORTING FRAMEWORK	9
3.1 Frequency of Reporting.....	9
3.2 Report Structure.....	9
3.3 Process.....	11
4 ROLES AND RESPONSIBILITIES	12
5 DATA COLLECTION FRAMEWORK	14
5.1 Data Collection Scope and Methodology.....	14
5.2 Using the Data in the Report.....	18
APPENDIX A REPORTING TABLE TEMPLATES	1
APPENDIX B EVIDENCE OF CONSULTATION	1

LIST OF TABLES

Table 1-1: CoCs of SSD 7628 (MPE Stage 2).....	1
Table 1-2: CoCs of SSD 6766 (MPE Stage 1).....	2
Table 1-3: Consultation Summary.....	3
Table 3-1: Report Outline and Structure.....	9
Table 4-1: Key roles and responsibilities.....	12

LIST OF FIGURES

Figure 2-1: Site location and local context.....	7
Figure 2-2: Heavy vehicle access routes to MPE site.....	8
Figure 3-1: Biannual trip origin destination reporting process.....	11
Figure 4-1: Key roles for MLP East Precinct.....	12
Figure 5-1 Survey locations.....	17

ACRONYMS AND DEFINITIONS

Acronym	Meaning
CoC	Conditions of Consent
DJLU	Defence Joint Logistics Unit
DP&E	Department of Planning and Environment
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
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 Conditions		
B28	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:	
	a. the number of actual and standard twenty-foot equivalent shipping containers despatched and received during the period;	Section 3 Section 5
	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 numbers will be monitored.
	c. records of vehicle numbers accessing the site; 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
	<p>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.</p> <p>The cordon count at (d) above will:</p> <ul style="list-style-type: none"> • apply to all classes of vehicles; and • cover the intermodal terminal, the warehousing facility and any other uses such as the freight village. 	Section 3.1
Secondary Conditions		
B89	<p>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.</p>	Section 2.3

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

CoC	Requirement	Document Reference
Secondary Conditions		
	<p>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:</p>	Section 3.1
G11	a) The number of twenty foot equivalent units dispatched and received during the period	Section 3 Section 5
	b) 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	<p>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.</p>	Section 2.3

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
Transport for NSW (TfNSW)	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
	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
Roads and Maritime Service (RMS)	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
	26/4/19	RMS representative	Email to follow up on progress of review	Open
	2/5/19	RMS representative	Email to follow up on progress of review	Open
	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

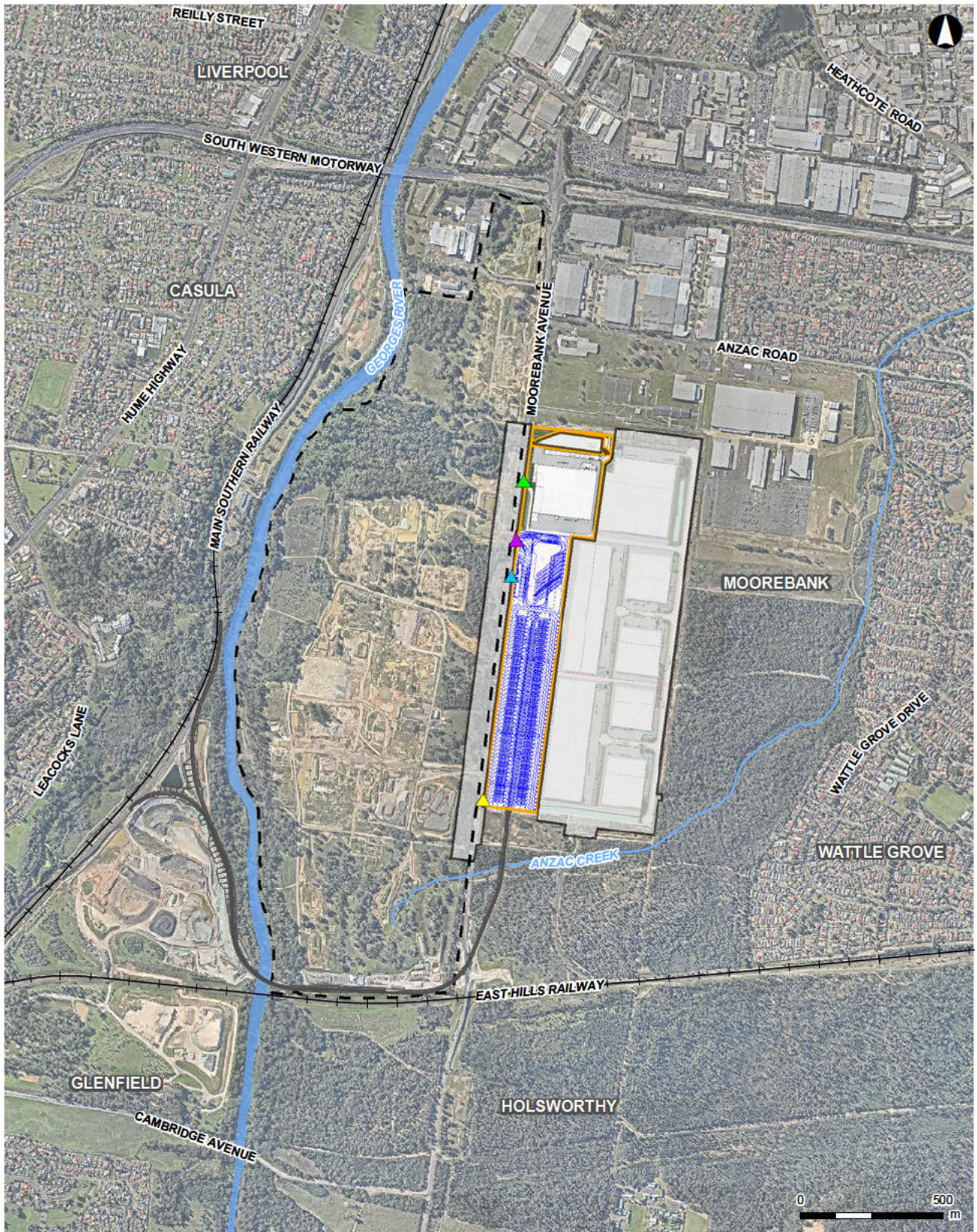
The operational activities associated with the MLP East Precinct site, which are likely to result in vehicle movements into and out of the site are detailed as follows:

- Import Export (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



LEGEND

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

ARCADIS AUSTRALIA PACIFIC PTY LTD
 ABN 76 104 485 289
 Level 16, 580 George St | Sydney NSW 2000
 P +61 (0) 2 8907 5000 | F +61 (0) 2 8907 9001
 Coordinate System GDA 1994 MGA Zone 56
 Date issued June 26, 2019
 Aerial Imagery supplied by Neamap (Mar, 2019)

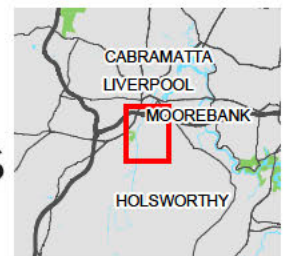
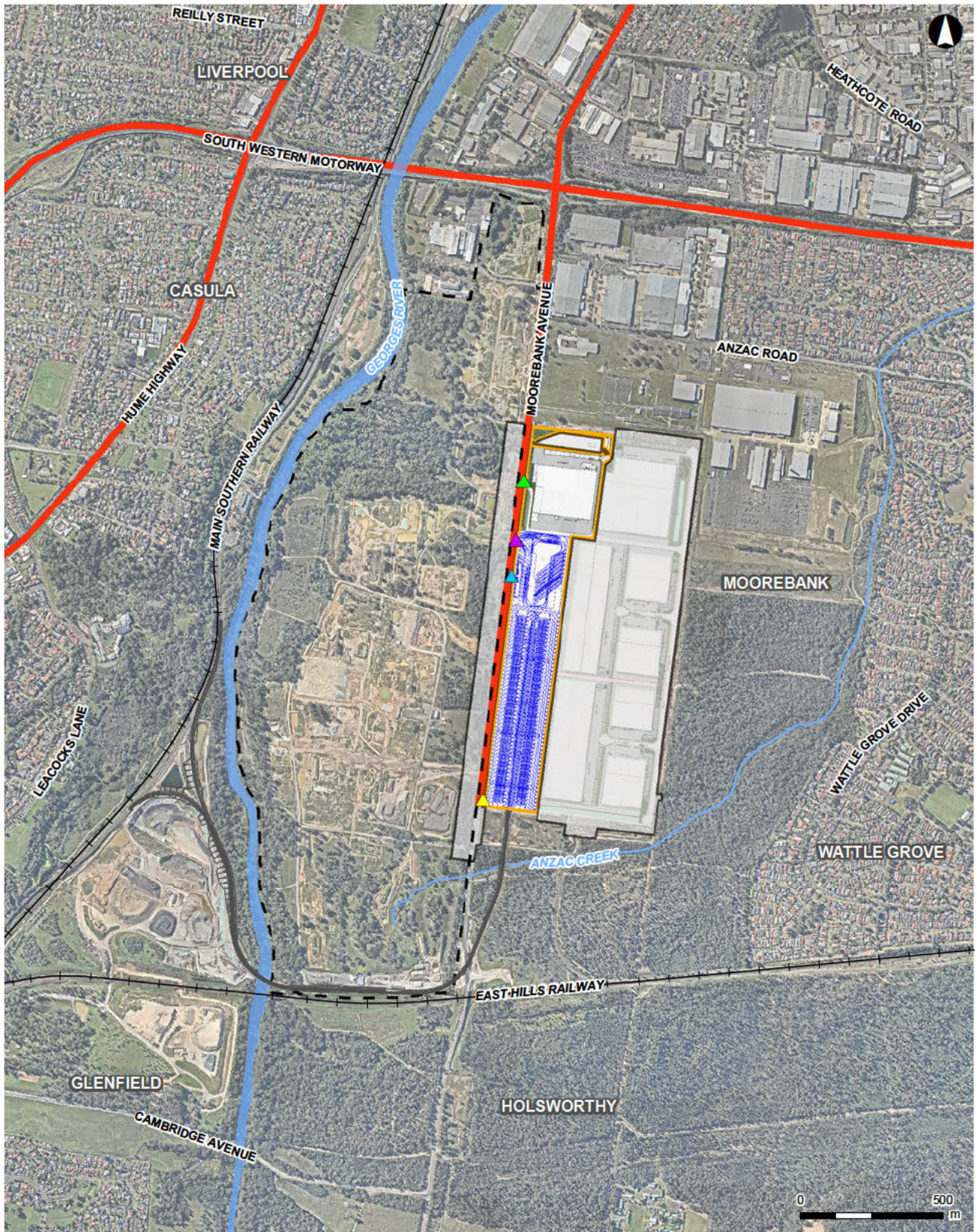


Figure 2-1: Site Location and Local Context

Biannual Trip Origin Destination Report Framework



LEGEND

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

ARCADIS AUSTRALIA PACIFIC PTY LTD
 ABN 76 104 485 289
 Level 16, 580 George St | Sydney NSW 2000
 P +61 (0) 2 8907 5000 | F +61 (0) 2 8907 9001
 Coordinate System GDA 1994 MGA Zone 56
 Date issued June 26, 2019
 Aerial Imagery supplied by Neamap (Mar, 2019)

1:20,000 at A4



Figure 2-2: Heavy Vehicle Access Routes to MPE site

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	<p>This section will include the following subsections:</p> <ul style="list-style-type: none">• Introduction• Purpose• Scope• Period of Reporting.
Shipping container transport	<p>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.</p> <p>This section will include the following subsections:</p> <ul style="list-style-type: none">• Shipping containers received• Shipping containers dispatched. <p>This data will be presented using a combination of tables (refer to template in Appendix A) and graphs.</p>
Truck gate opening periods	<p>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).</p> <p>This section will include the following subsections:</p> <ul style="list-style-type: none">• Period of opening• Exceptions to full time opening• Actual hours of opening. <p>This data will be presented in a table (refer to template in Appendix A) with commentary of the results under each subsection.</p>

Section	Description
Traffic volumes	<p>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.</p> <p>This section will include the following subsections:</p> <ul style="list-style-type: none"> • Total vehicles accessing the site for reporting period. <p>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.</p>
Origin-destination results	<p>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.</p> <p>This section will include the following subsections:</p> <ul style="list-style-type: none"> • Approach distribution (origin) • Departure distribution (destination). <p>The data will be presented on plans indicating approach/ departure routes with the proportion of the total vehicles arriving/ leaving the MPE site.</p>
Employee numbers	<p>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 <i>Biannual Trip Origin Destination Report</i></p>
Summary	<p>Provides an overview of the findings reported above</p>

3.3 Process

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

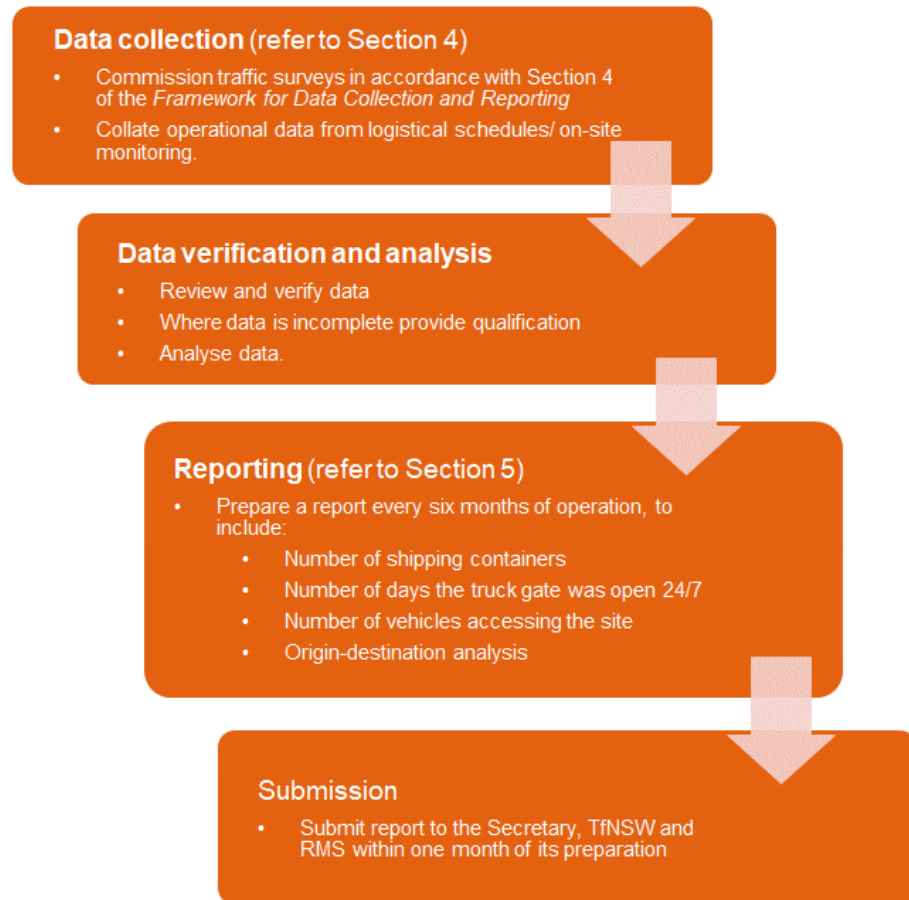


Figure 3-1: Biannual trip origin destination reporting process

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.

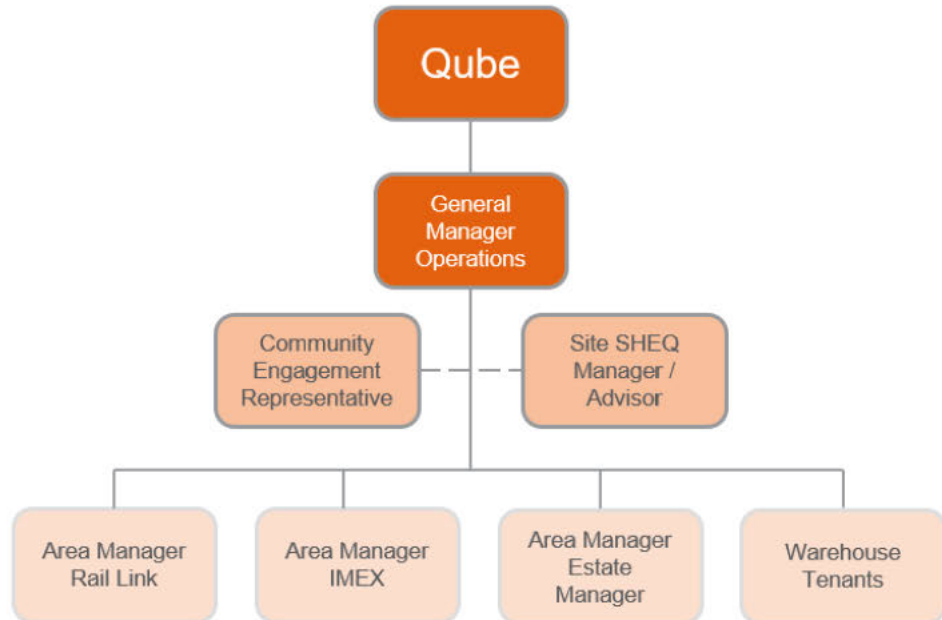


Figure 4-1: Key roles for MLP East Precinct

Table 4-1: Key roles and responsibilities

Role	Responsibility
General Manager Operations	<ul style="list-style-type: none"> Accountable for the operational activities and performance of the MLP East Precinct Provide sufficient resources to implement, develop and maintain the <i>Biannual Trip Origin Destination Report</i> and framework throughout the operating life of the MLP East Precinct 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 <i>Biannual Trip Origin Destination Report</i> Based on the outcome of the review and validation of the data collected to support the development of the <i>Biannual Trip Origin Destination Report</i>, endorse the data as fit for purpose.
Area Managers: <ul style="list-style-type: none"> IMEX Rail Link Estate Manager 	<ul style="list-style-type: none"> Responsible for the implementation of the <i>Biannual Trip Origin Destination Report</i> and framework within the areas of responsibility Provide operational data to support the <i>Biannual Trip Origin Destination Report</i>, including logistical schedules and on-site monitoring data

Role	Responsibility
	<ul style="list-style-type: none"> • Communicate the requirements of the <i>Biannual Trip Origin Destination Report</i> 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 <i>Biannual Trip Origin Destination Report</i> • 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 <i>Biannual Trip Origin Destination Report</i> to the General Manager Operations.
<p>Site Safety, Health, Environment and Quality Manager / Advisor (Site HSEQ Manager / Advisor)</p>	<ul style="list-style-type: none"> • Act as the primary contact point for TfNSW and RMS in relation to the <i>Biannual Trip Origin Destination Report</i> • Provide advice on matters specified in the CoC relating to the IMEX, Rail Link and Estate operations • Review and implement <i>Biannual Trip Origin Destination Report</i> and framework and monitoring programs required under the CoC • Monitor operations against the <i>Biannual Trip Origin Destination Report</i> and framework to evaluate compliance with the CoC • Commission surveys and collate data required to carry out analysis and produce the <i>Biannual Trip Origin Destination Report</i> • Commission (if required), coordinate and manage resources to carry out the data collection, analysis and preparation of the <i>Biannual Trip Origin Destination Report</i> • Maintain the register of data collection and reports issued.
<p>Community Engagement Representative</p>	<ul style="list-style-type: none"> • Act as the 'control tower' for all public communications and be the central contact to keep nearby residential receivers informed of monitoring/ surveys • Communicate community concerns to the Qube Environmental Representative in relation to vehicle movements within the surrounding road network.
<p>Individual Tenants</p>	<ul style="list-style-type: none"> • Support the compliance with the CoC and provide data and information to Qube to inform the development of the <i>Biannual Trip Origin Destination Report</i> 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 on-site 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:

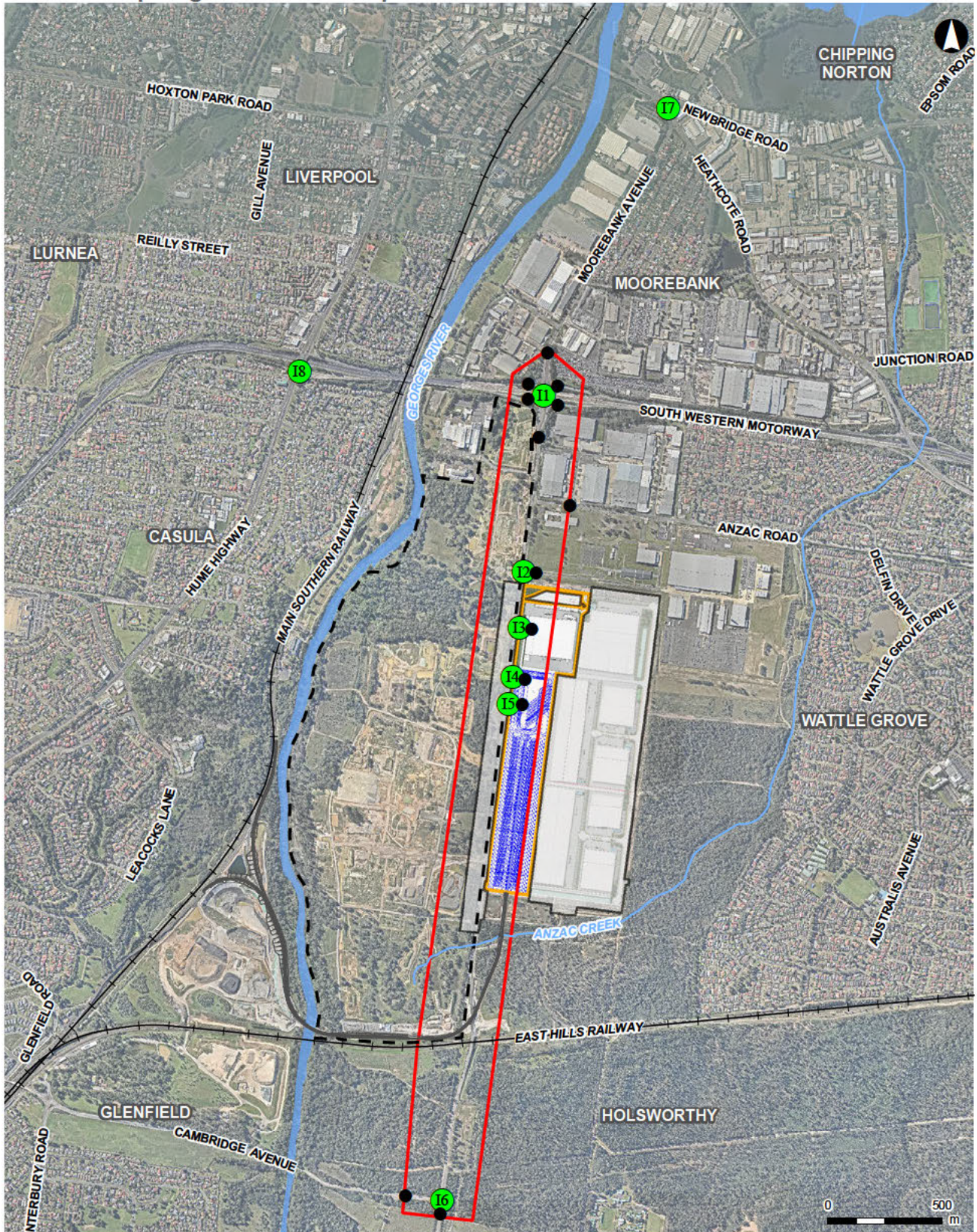
- OD surveys at the following stations:
 - Moorebank Avenue, about 350 metres north of the M5 South Western Motorway
 - Moorebank Avenue, about 300 metres south of the M5 South Western Motorway
 - Moorebank Avenue, south of Cambridge Avenue
 - M5 South Western Motorway on and off ramps to and from Moorebank 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.

Biannual Trip Origin Destination Report Framework



LEGEND

- | | | | |
|---|-------------------------------------|---|------------------------------|
|  | MLP East Precinct construction area |  | Intersection ID and location |
|  | MLP East Precinct operational area |  | OD station |
|  | MPW site |  | Existing railway |
|  | Cordon area |  | Watercourse |
| | |  | Operational rail link |

ARCADIS AUSTRALIA PACIFIC PTY LTD
 ABN 76 104 485 289
 Level 16, 580 George St | Sydney NSW 2000
 P +61 (0) 2 8907 5000 | F +61 (0) 2 8907 9001
 Coordinate System GDA 1994 MGA Zone 56
 Date issued July 29, 2019
 Aerial Imagery supplied by Neamap (Mar, 2019)

1:25,000 at A4



Figure 5-1: Survey Locations

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
Period 1 2019	January		
	February		
	March		
	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

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

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

Traffic volumes accessing site by week

Reporting period	Week	Vehicles in		Vehicles out	
		Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles
Period 1 2019	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	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				

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
Period 1 2019	January			
	February			
	March			
	April			
	May			
	June			

Appendix B. October 2020 BTODR OD Matrix Table Comparison

All Vehicle – Period 1 (1 May 2020 – 31 Oct 2020)

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1		0	388	10,510	0	2,428	965	37	128	1,017	29
2	13,422		0	378	0	4,364	1,789	138	353	1,656	98
3	0	0		0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0
5	1,744	0	1,744	0		2,840	995	56	158	1,141	44
6	2,978	0	2,819	3,640	0		3,996	328	802	3,978	244
7	1,259	0	1,070	1,563	0	3,881		0	40	1,115	0
8	33	0	114	168	0	315	3		6	128	1
9	152	0	305	390	0	825	0	0		111	0
10	874	0	2,570	1,640	0	5,076	1,759	127	5		455
11	53	0	221	252	0	525	20	1	0	452	
Total	20,515	0	9,230	18,541	0	20,254	9,528	687	1,491	9,599	871

All Vehicle: Difference between Period 1 & Period 2

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1	0	0	107	205	0	661	160	3	-30	527	14
2	118	0	0	-56	0	19	-134	-22	-111	325	6
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	15	0	15	0	0	-7	-88	-7	-50	249	6
6	475	0	15	-100	0	0	-34	-38	-207	1,118	34
7	-197	0	-245	-349	0	-811	0	0	54	1,209	0
8	-9	0	-20	-48	0	-77	47	0	0	1	-1
9	-5	0	-66	-102	0	-206	0	0	0	-47	0
10	87	0	123	-25	0	177	471	1	-2	0	70
11	-12	0	-75	-90	0	-178	12	-1	0	87	0
Total	472	0	-146	-565	0	-421	434	-64	-346	3,468	128

Light Vehicle– Period 1 (1 May 2020 – 31 Oct 2020)

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1		0	278	9,220	0	2,193	947	36	81	952	25
2	12,125		0	345	0	3,967	1,764	136	233	1,584	92
3	0	0		0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0
5	1,605	0	1,605	0		2,486	982	54	104	1,061	40
6	2,759	0	2,469	3,220	0		3,890	297	494	3,704	215
7	1,198	0	1,049	1,476	0	3,723		0	40	1,083	0
8	33	0	109	147	0	289	1		6	116	0
9	92	0	205	235	0	523	0	0		66	0
10	850	0	2,548	1,606	0	5,004	1,571	117	4		450
11	36	0	138	148	0	322	20	1	0	444	
Total	18,699	0	8,402	16,397	0	18,506	9,176	641	962	9,011	822

Light Vehicle: Difference between Period 1 & Period 2

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1	0	0	90	129	0	676	129	4	-1	533	16
2	80	0	0	-53	0	45	-199	-23	-47	303	7
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	7	0	7	0	0	62	-113	-6	-17	207	7
6	453	0	84	-29	0	0	-197	-28	-75	1,041	37
7	-228	0	-284	-397	0	-908	0	0	54	1,189	0
8	-9	0	-18	-42	0	-69	49	0	0	0	0
9	-3	0	-22	-47	0	-78	0	0	0	-8	0
10	43	0	-1	-116	0	-75	613	1	-2	0	72
11	4	0	3	-7	0	0	12	-1	0	91	0
Total	346	0	-141	-563	0	-347	292	-53	-89	3,357	139

Heavy Vehicle– Period 1 (1 May 2020 – 31 Oct 2020)

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1		0	77	858	0	209	18	1	41	64	4
2	940		0	27	0	244	25	1	59	67	6
3	0	0		0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0
5	107	0	107	0		221	13	1	38	73	4
6	197	0	227	293	0		106	26	201	261	29
7	59	0	20	81	0	151		0	0	30	0
8	0	0	4	17	0	21	1		0	11	1
9	47	0	53	89	0	182	0	0		44	0
10	23	0	20	30	0	66	158	9	0		5
11	15	0	71	86	0	172	0	0	0	9	
Total	1,388	0	578	1,482	0	1,265	320	39	339	559	49

Heavy Vehicle: Difference between Period 1 & Period 2

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1	0	0	7	20	0	-18	28	-1	-25	-11	-2
2	-46	0	0	-6	0	21	48	0	-29	5	-2
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	-3	0	-3	0	0	-71	18	-1	-28	-33	-3
6	-6	0	-65	-43	0	0	112	-9	-92	-37	-6
7	19	0	22	20	0	53	0	0	0	18	0
8	0	0	-2	-6	0	-8	-1	0	0	0	-1
9	-9	0	-22	-30	0	-76	0	0	0	-38	0
10	27	0	60	64	0	150	-113	-1	0	0	-3
11	-15	0	-67	-67	0	-149	0	0	0	-5	0
Total	-34	0	-69	-47	0	-98	92	-12	-175	-100	-16

Articulated Heavy Vehicle – Period 1 (1 May 2020 – 31 Oct 2020)

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1		0	33	432	0	27	0	0	6	1	0
2	357		0	5	0	154	0	1	61	4	0
3	0	0		0	0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0	0
5	32	0	32	0		134	0	0	17	7	0
6	21	0	124	128	0		1	6	107	14	0
7	3	0	1	6	0	7		0	0	1	0
8	0	0	1	4	0	5	1		0	1	0
9	13	0	47	66	0	121	0	0		1	0
10	1	0	2	3	0	6	30	0	0		0
11	1	0	11	19	0	31	0	0	0	0	
Total	428	0	251	662	0	483	32	7	190	29	1

Articulated Heavy Vehicle: Difference between Period 1 & Period 2

From Station	To Station										
	1	2	3	4	5	6	7	8	9	10	11
1	0	0	10	56	0	4	3	0	-3	5	0
2	83	0	0	3	0	-47	17	0	-35	17	1
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	11	0	11	0	0	2	7	0	-5	75	1
6	28	0	-4	-28	0	0	51	-1	-40	114	3
7	12	0	16	29	0	45	0	0	0	1	0
8	0	0	0	-1	0	-1	-1	0	0	1	0
9	7	0	-23	-25	0	-52	0	0	0	-1	0
10	17	0	65	28	0	102	-29	1	0	0	0
11	-1	0	-11	-17	0	-29	0	0	0	0	0
Total	159	0	64	45	0	24	50	1	-83	212	6