



OBJECTION **Moorebank Avenue Realignment SSI 10053**

April 2021

ATTN: Jonathan Blackmore,
Senior Planning Officer – Transport Assessments Team

Please accept this formal and preliminary objection to SSI 10053, on behalf of Residents Against Intermodal Development Moorebank Incorporated (RAIDM Inc.) and the broader community it is borne of and collectively represents.

RAIDM Inc. reserves the right to submit a further, more detailed objection submission at a later date. This preliminary objection will speak to general themes without extensive citations and annexes so as to meet the submission date of 13 April 2021. The brevity of this submission and the reservation of the right to make further detailed submission is directly related to three other composite parts of the precinct and two interrelating legal and or departmental processes.

Firstly, there is Moorebank Precinct West (MPW) Stage 3 SSD 10431 which was recently referred to the IPCN resulting in a site visit this past Friday 09 April 2021 and a Public Meeting / Hearing this coming Monday 19 April 2021. Secondly there is public interest Class 1 Merits Appeal in the NSW Land and Environment Court, case no. 2020/00004407. The appeal has been in train for approx. 14 months and seeks revocation of MPW Stage 2 SSD 7099 (and MPW Concept Mod 1) on the grounds of Traffic and Air Quality.

Based on the developer's introduction of a modification, the appeal is now conflated to concurrently seek revocation of MPW Stage 2 SSD 7099 Mod 1 (and MPW Concept Mod 2). The primary contentions of Traffic and Air Quality are compounded and contentions pertaining to Noise and Visual Impacts are added.

The Amended Statement of Facts and Contentions (SoFaC) 31 March 2021 cannot be supplied at this time as they are yet to go before the NSW LEC. Nevertheless, the original Statement of Facts and Contentions 07 July 2020 are supplied for your benefit and reference. The facts and contentions for Traffic and Air Quality remained largely unchanged in the Amended SoFaC, thus the earlier version continues to a reliable representation of key issues.



Individual Expert Reports underpinning the relevant facts and contentions cannot be supplied wholesale as they refer to government material and documentation that is covered by a confidentiality undertaking. It is likely the case that you personally and or the department generally will be in possession of the same TfNSW material and documentation.

However, to acquit our responsibility the aforementioned individual reports are not provided at this time. These reports will be quoted in parts, either in this submission or perhaps a later detailed submission and they generally give providence to any and all authoritative positions taken, and statements made.

At the outset RAIDM Inc. can and does declaratively state that the Development Application and EIS in this form must be refused – with prejudice. Similar and identical flaws that have plagued every traffic impact assessment since 2010 have again infected this EIS undertaken by EMM Consulting. That being the wrong software and modelling methodology necessary to test *network capacity*. More critical than models and software alone is issue of *source inputs*.

EMM cites (Ason Group 2020) for future and full build traffic generation without properly referencing it or providing the report. Leaving no capacity to test summary assertions and tables in the EIS or Traffic Modelling Appendix. Nor is there capacity to verify the accuracy or methodology of the source material. This is of grave concern given the numerous disqualifying errors found in Ason Group's 2020 Traffic Assessment for SSD 7099 Mod 1 (Woolworths Development). This report by the same consultant was dissected and discredited within expert peer review conducted for the legal appeal.

EMM further cites (Arcadis 2016) for future and full build traffic generation but references it as (MPE + MPW) proposal construction traffic only. Applying the benefit of the doubt and assuming this is a clerical error does not provide remedy. Arcadis' 2016 OTTIA is also dissected and discredited in expert peer review conducted for legal appeal. Separately and together the multivariate errors found in the previous work product sit at the core of the current Class 1 Merits Appeal, which seeks revocation. The above cited reports and baseline traffic generation assumptions and modelling therein, are considered to infect this EIS. In fact, it appears the same or similar multivariate errors has been made again. Compounding the underrepresentation of traffic network impacts and concomitant impacts like air and noise pollution. **Consequently SEARs 2.2 has not been met and the department must refuse.**

Statement of Facts and Contentions

COURT DETAILS

Court	Land and Environment Court of New South Wales
Class	Class 1
Case number	2020/00004407

TITLE OF PROCEEDINGS

Applicant	Residents Against Intermodal Development Moorebank Incorporated
First respondent	Independent Planning Commission of NSW
Second respondent	Qube Holdings Limited

FILING DETAILS

Filed for	Residents Against Intermodal Development Moorebank Incorporated
Legal representative	Bruce Woolf, Woolf Associates
Contact name and telephone	Bruce Woolf. Telephone 9221 8522

PART A– FACTS

Terminology

1. The development comprises an intermodal terminal at Moorebank. For reasons that are obscure, various applicants have made separate State significant and concept development applications for the east and west sides of Moorebank Avenue, although the ultimate intention of the applicants (who are now joint venturers) is to operate the sites as a single entity and change the route of Moorebank Avenue so that it does not intersect the sites but is located to the east of them. Recent approval documents have adopted the terminology of MPW for the terminal on the western side of Moorebank Avenue and MPE for the terminal on its eastern side. That terminology will be adopted below.

Subject land

2. This appeal relates to one aspect of this overall development, now known as the Moorebank Intermodal. The particular development under appeal is a consent granted by the Independent Planning Commission (IPC) in November 2019 for MPW stage 2. It comprises various land titles but also includes the Georges River and various roads under the ownership of the Commonwealth, the State (via TfNSW) and Liverpool City Council. The subject land also includes land for a rail corridor. The northern portion of the land (excluding Moorebank Avenue north) is Lot 100 DP 1049508. The development consent does not correctly describe the site as it omits reference to the Georges River, Bapaume Road, the rail corridor and several land titles.

Development

3. In the course of assessment, the applicant amended the proposal to expand hours of operation of the warehouse, and to provide consistency with the modification to the concept approval for MPW, which was approved in October 2019 and which was assessed in parallel with the subject application. The project for which consent was granted was described in the consent as follows:

“Moorebank Precinct West Stage 2 (MPW Stage 2), comprising:

- Construction and 24/7 operation of an intermodal terminal (IMT) facility to support a container freight throughput volume of 500,000 twenty-foot equivalent units (TEUs) per annum, including:
 - a rail terminal with nine rail siding and associated locomotive shifter
 - a rail link connection from the sidings to the rail link constructed under MPE Stage 1 (SSD 6766) to the Southern Sydney Freight Line (SSFL)
 - rail and truck container loading and unloading and container storage areas
 - truck waiting area and emergency truck storage area
 - container wash-down facilities and degassing area
 - mobile locomotive refuelling station
 - engineer’s workshop, administration facility and associated car parking.

Operation of the IMT facility includes operation of the rail link to the SSFL and container freight movements by truck to and from the Moorebank Precinct East (MPE) site.

- Construction and 24/7 operation of a warehousing estate on the northern part of the site servicing the IMT facility and including:

- six warehouses with a total gross floor area (GFA) of 215,000 m² and, for each warehouse, associated offices, staff amenities, hardstands and truck and light vehicle parking
- 800 m² freight village (operating from 7am to 6pm, 7 days/ week) including staff/ visitor amenities
- internal roads, noise wall, landscaping, lighting and signage.
- Intersection upgrades on Moorebank Avenue at:
 - Anzac Road providing site access
 - Bapaurne Road for left turn only out of the site.
- Construction and operation of on-site detention basins, bioretention/ biofiltration systems and trunk stormwater drainage for the entire site.
- Construction works and temporary ancillary facilities, including:
 - vegetation clearing, top soil stripping and stockpiling and site earthworks and temporary on site detention
 - importation of up to 1,600,000 m² of uncompacted fill, temporary stockpiling and placement over the entire site to raise existing ground levels by up to 3 m
 - materials screening, crushing and washing facilities
 - importation and placement of engineering fill and rail line ballast
 - installation and use of a concrete batching plant
 - utilities installation/ connection"

Approvals

4. The intermodal site is now governed by these approvals (omitting modifications).

MP 10_0193	MPE Concept Plan (a transitional Part 3A concept approval)
SSD 5066	MPW Concept DA and early works (Stage 1) consent
SSD 6766	MPE Stage 1 consent
SSD 7628	MPE Stage 2 consent
SSD 7709	MPW Stage 2 consent (subject to this appeal)

5. Section 4.24(2) provides:

“While any consent granted on the determination of a concept development application for a site remains in force, any further development application in respect of the site cannot be inconsistent with the consent for the concept proposals for the development of the site.”

6. The MPW Concept DA consent SSD 5066 (as modified) relevantly provides:

“

SCHEDULE 2 TERMS OF APPROVAL

Determination of Future Applications

2. In accordance with section 4.22 of the EP&A Act, all future development under the Concept Proposal (for the avoidance of doubt, excluding the Early Works) shall be the subject of future development application(s).
3. The determination of the future development application(s) are to be generally consistent with the terms of this development consent as described in Schedule 1, and subject to the conditions in Schedule 4.

Limits of Approval

6. Projects carried out under this staged development consent are to be assessed with the objective of not exceeding the capacity of the transport network, including the local, regional and State road network.
7. Concept approval is granted for a container throughput of up to 500,000 TEU p.a. (excluding IMEX freight) if the combined movement of container freight on the Subject Site does not exceed 1.05 million TEU p.a. The consent authority must also be satisfied that the Traffic Impact Assessment demonstrates that the container throughput would not exceed the capacity of the transport network with or without mitigation measures/upgrades.
8. For the IMEX freight, concept approval is granted for a container throughput:
 - a) initially, 250,000 TEU p.a. if the consent authority is satisfied that the Traffic Impact Assessment demonstrates the proposal would not exceed the capacity of the transport network with or without mitigation measures/upgrades;
 - b) after the facility has been in operation, an increase of up to an additional 300,000 TEU p.a. if the consent authority is satisfied that monitoring and modelling of the operation of the intermodal terminal facility demonstrates that traffic movements resulting from the proposed increase in TEU will achieve the objective of not exceeding the capacity of the transport network. The combined movement of container freight on the Subject Site must not exceed 1.05 million TEU p.a.
- ...
12. Prior to submitting any Development Application for the intermodal terminal facility, the Applicant shall convene a meeting with regard to proposed traffic assumptions and mitigation measures. The Applicant must:
 - a) Invite SIMTA, TfNSW, RMS, Liverpool City Council and Campbelltown City Council. Each Council may also invite a maximum of two community representatives to attend.
 - b) At the meeting, present the scope and assumptions of the mesoscopic/microsimulation traffic modelling, the draft Traffic Impact Assessment and any proposed mitigation measures including timing on the delivery of any proposed measures;
 - c) Publish the meeting minutes and a schedule of action items arising from the meeting, including responsibilities and timeframes on its website;
 - d) Prepare a written report responding to the action items and consult with RMS on the action items and final mitigation measures; and

- e) Provide details of the undertaking and outcomes of this condition in the EIS.

SCHEDULE 4

CONDITIONS TO BE MET IN FUTURE DEVELOPMENT APPLICATIONS

Locomotives

- E3. Development Applications for the intermodal terminal facility shall detail how the expected port shuttle locomotives incorporate available best practice technologies.

Traffic

- E11. All future Development Applications shall include a Traffic Impact Assessment based on background growth models developed by RMS for the Liverpool/Moorebank area (if applicable).
- E11A. All future Development Applications must assess traffic impacts associated with fill importation and identify management measures.

Staging

- E27. Any future Development Applications that propose staging of construction must provide details of staging which:
- a) describes how the development will relate to other future development stages including those on the MPE site;
 - ...
 - c) includes an indicative construction program for both MPW and MPE;
 - d) documents how compliance with the requirements of conditions in this Schedule (Schedule 4) will be achieved; and
 - ...

Cumulative Impacts

- E28. All future Development Applications must provide the timing for construction and operation on both the MPW and MPE sites and provide cumulative assessments for construction and operation on the MPW and MPE sites including, but not limited to:
- a) traffic and access impacts;
 - b) noise and vibration impacts;
 - c) air quality impacts;
 - ...

Interaction between MPW and MPE sites

- E29. Any future Development Application that proposes the use of infrastructure on the MPE site or integration of operations across the MPW and MPE sites must:
- a) demonstrate that there will be no overall increase in cumulative construction and operational environmental impacts;
 - b) describe the relationship between similar facilities on each site such as the intermodal terminal facilities and freight villages;
 - c) provide a mechanism to record the TEUs supplied and received at each of the MPW and MPE intermodal terminal facilities to demonstrate compliance

- with condition 7 and 8 of this consent and conditions 1.6 and 1.7 of the MPE Concept Plan (PM 10 0193) approval;
- d) provide an overall Precinct (MPW + MPE) layout and design drawings, including for:
 - (i) access to the Precinct,
 - (ii) internal access and connections for pedestrians and vehicles including for the transfer of containers between intermodal terminal facilities and warehouses,
 - (iii) public access including vehicle access between Anzac Road and Cambridge Avenue, public transport and pedestrian/cyclist connections,
 - (iv) stormwater infrastructure including stormwater treatment and detention, and
 - (v) landscaping and directional signage; and
 - e) outline management and maintenance arrangements for the use of infrastructure on the other site.”

7. Conditions 1.6 and 1.7 of the MPE Concept Plan 10 0193 approval (as modified) provide:

- 1.6 Projects carried out under this this [sic] Concept Plan must be operated with the objective of not exceeding the capacity of the transport network, including the local, regional and State road network. The container freight road volume must not exceed 250,000 TEUs p.a, subject to the exception identified in 1.7, which may only be considered after the facility has been in operation.
- 1.7 The movement of container freight by road may exceed the 250,000 TEU pa. limit by up to a further 250,000 TEU p.a, if the consent authority of a subsequent Development Application is satisfied that traffic monitoring and modelling of the operation of the facility demonstrate that traffic movements resulting from the proposed increase in TEU will achieve the objective of not exceeding the capacity of the transport network.

History of approvals and traffic assessments

8. We set out below the approvals history of the project, specifically referable to traffic assessment. The approvals are referenced throughout the documents for this application.

October 2010 - MPE, Part 3A concept plan (MP10_0193)	Application for authorisation for preparation of a concept plan for the proposed Sydney Intermodal Terminal at Moorebank Avenue, Moorebank.
November 2010 – MPE concept plan (MP10_0193)	The Minister for Planning authorises the preparation of the concept plan and declares a Major Project under Part 3A of the EPAA 1979.
December 2011 – MPW SSD-5066 Concept Plan	The Commonwealth submitted an Application for concept plan approval and Stage 1 early works. Parsons Brinkerhoff (PB) recommended three levels of traffic modelling.
2012 – MPE EIS for Concept Plan (MP10 0193)	In support of the Concept Plan and within the EIS, Hyder Consulting (now Arcadis) prepares a strategic transport model using TransCAD with its source data from the Sydney Travel Model (STM). Microsimulation modelling completed using Paramics. Halcrow (now Jacobs) performed an audit for Hyder, identifying errors in throughput

	figures and missing background traffic in the model.
March-May 2012 and September-October 2012 – MPE Concept Plan	The Concept Plan was exhibited and re-exhibited during these periods to address issues raised by agencies and the public.
August 2013 – MPE Concept Plan	The Transitional Part 3A Concept Application Environmental Assessment was submitted.
March 2014 – MPE Concept Plan	An independent review of the Traffic and Transport assessment for the Concept Plan, including the modelling was completed by Arup.
June 2014 – MPE Concept Plan	The Minister for Planning refers the Concept Plan to the Planning Assessment Commission (PAC).
September 2014 – MPE MP10_0193 Concept Plan	Concept Plan for 1,000,000 TEUs was conditionally approved by PAC with terminal capacity instead capped at 250,000 TEUs per annum, and warehousing and distribution facilities at 300,000m ² GFA. The 250,000 TEUs cap to be lifted to 500,000 TEUs per annum if conditions 1.6 and 1.7 were addressed via further traffic modelling and monitoring of operational impacts on the network.
October to December 2014 – MPW Concept Plan and early works (Stage 1) SSD 5066	An EIS was exhibited for this application. PB produced the EIS for MIC (Moorebank Intermodal Company). PB undertook the traffic assessment using STM and SIDRA but failed to include mesoscopic/microsimulation modelling. MPE traffic was considered in a cumulative assessment.
December 2014 – MPE Stage 1 SSD 6766	Application for DGRs.
May 2015 – MPE Concept Plan Modification 1 to MP10_0193	Application to modify the Concept Plan.
May to June 2015 – MPW Concept Plan and early works (Stage 1) EIS SSD 5066	Re-exhibition of amended EIS.
May to June 2015 – MPE Stage 1 SSD 6766	Application lodged for Stage 1 of MPE, including an EIS with a traffic and transport assessment.
October 2015 - MPW Concept Plan, SSD 5066	Aurecon submitted independent Traffic and Transport review on behalf of DPE and advised that PB's Traffic Assessment omitted the key modelling PB identified in 2011. Aurecon recommends modelling be conducted urgently and transparently.
October 2015 – MPW Concept Plan and early works (Stage 1) EIS SSD 5066	Liverpool Moorebank Arterial Road Investigations MITRA Base Model Calibration and Validation Report by Jacobs.
November 2015 – MPE Concept Plan	Assessment report completed by DPE. Includes a

Modification 1 to MP10 0193	revised statement of commitments.
November 2015 - MPW Concept Plan and early works (Stage 1) EIS, SSD_5066)	Moorebank Intermodal Terminal AIMSUN Existing Conditions Model reviewed by GTA Consultants
December 2015 – MPW Concept Plan and early works (Stage 1) EIS, SSD_5066)	The Minister for Planning refers the SSD to PAC.
January 2016 - MPE Stage 1 SSD 6766	The Minister for Planning refers the SSD to PAC.
March 2016 – MPW Concept Plan and early works (Stage 1) EIS, SSD 5066	RMS advises PAC that base AIMSUN modelling (LMARI, MITRA) has been supplied to the project applicant SIMTA (Sydney Intermodal Terminal Alliance) and MIC.
June 2016 - MPW Concept Plan and Stage 1 Early Works SSD 5066	Conditional consent granted by PAC for Concept Proposal and Stage 1 Early Works (SSD 5066).
June 2016 - MPW Modification 1, SSD 5066	Construction period impact assessment submitted with the modification application.
July – August 2016 – MPW Modification 1, SSD 5066	Exhibition of modification application and specific assessment appendices.
September 2016 – MPW Stage 2 SSD 7709	16 September 2016 meeting by proponents with RMS and Councils to disclose modelling methodology and outcomes using RMS model. See Condition 12, MPW Concept DA SSD 5066.
October - November 2016 - MPW Stage 2, SSD 7709	Exhibition of EIS including traffic and transport assessment prepared with the application, but not including the RMS model or mesoscopic/microsimulation modelling, or modelling of cumulative impacts.
December 2016 – MPE Concept Plan 10 0193 Modification	PAC determines Mod 1 by changing Schedule 2, condition 1.8 and adding note “Assessments at the DA stage will determine the nature and timing of road infrastructure upgrades...”
December 2016 -MPE Stage 2, SSD 7628	EIS prepared for the application including a traffic and transport assessment.
December 2016 – MPE Concept Plan 10 0193 Modification 1 and Stage 1 Development, SSD 6766	PAC approved Modification 1 to the Concept Plan and Stage 1 approval for 250,000 TEUs per annum, 24 hour Terminal, no warehousing.
December 2016 – MPE Concept Plan Modification 2 10_0193	Application lodged to modify the MPE concept plan by increasing the site area to 95 ha, including upgrade Moorebank Avenue.
December 2016 – MPE Stage 2 Development SSD 7628	Stage 2 application lodged concurrently with the Concept Plan Modification 2 application. EIS

	prepared for the application including a traffic and transport assessment.
November 2017 – MPE Concept Plan 10_0193, Modification 2	Application referred to PAC by DPE.
November 2017 – MPE Concept Plan 10_0193, Modification 3	Application for an additional 1.56ha referred to PAC by DPE.
January 2018 – MPE Concept Plan 10_0193 Modification 2, Stage 2 Development SSD 7628, Concept Plan Modification 3	PAC granted consents for Concept Plan Modification 2, SSD 7628 and Concept Plan Modification 3.
March 2018 - MPE SSD 6766 for Stage 1	LEC grants conditional consent. Strengthened conditions for biodiversity and noise across both MPE and MPW and a noise wall on MPW.
March 2019 - MPW Stage 2-SSD 7709	VPA Executed. Construction traffic impact assessment completed only.
May 2019 MPW Stage 2, SSD_7709 and MPW Modification 1, SSD_5066	Referred to IPC as consent authority.
June 2019 MPW Stage 2, SSD_7709 and MPW Modification 1, SSD_5066	Public meeting by IPC for MPW Stage 2 and concurrent Concept Mod 1
October 2019 – MPW Concept Plan and Stage 1 SSD 5066 Mod 1	IPC modifies Concept Plan and Stage 1 works.
November 2019 – MPW Stage 2 SSD 7709	IPC grants consent to current application.
December 2019 – MPW Stage 2 SSD_7709	Merits appeal rights notification.
January 2020 – MPW Stage 2 SSD_7709	Class 1 appeal lodged with LEC by RAID Moorebank Inc,

Voluntary planning agreement

9. On 21 March 2019, the RMS (now TfNSW) and the proponent of the development of MPW and MPE entered into a voluntary planning agreement relating to the concept plan and other approvals for MPE and MPW and the applications to modify the MPW concept plan and for development consent for MPW Stage 2 (the current application) (the VPA).
10. The developer offered to enter into the VPA to provide contributions for State public infrastructure needs arising from the current application and to address the regional road infrastructure needs arising from the Moorebank Intermodal Precinct west development as a whole (the whole development).
11. The VPA defined the whole development to comprise the development and use of the Moorebank Intermodal Precinct West land or an intermodal facility including a rail link warehousing and distribution facilities consistent with the MPW Concept Plan and Stage 1 approval.

12. The VPA required the payment of \$48 million in cash and the construction of works in kind by re-aligning Moorebank Avenue and upgrading Moorebank Avenue South. The latter works were required by condition B13 of the MPE – Stage 2 approval.
13. Clause 4.5 of the VPA provided:

“4.5 Acknowledgement

The Developer acknowledges and agrees that RMS:

- (a) has no obligation to use or expend a Development Contribution for a particular purpose;
- (b) has no obligation to repay or provide any compensation or payment for a Development Contribution, except as provided for in this deed; or
- (c) has not made any representation or warranty that, if any part of a Development Contribution is transferred or provided to another Authority, the Development Contribution will or must be used for any particular purpose by it or any other Authority.”

Relevant planning instruments

14. The planning instruments that apply to this application are referred to in Chapter 5.3 and 5.4 (pp 109-125) of the EIS. With the following exception, which is omitted from the EIS, the referenced instruments are of no relevance to the contentions on appeal.
15. Part of the land comprises Lot 100 DP1049508. It has a frontage to Lot 2 DP1063765 in the ownership of TfNSW comprising part of the M5 Motorway. It is a classified road.
16. Clause 101(2)(b)(ii) of SEPP (Infrastructure) 2007 provides that the consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of the nature, volume or frequency of vehicles using the classified road to gain access to the land.

Trip generation

17. On 1 September 2016, Parsons Brinckerhoff documented the estimated traffic generation from both MPE and MPW for the ultimate development (referred to in the documents as the total build out). It assumed a TEU throughout of 1,500,000 pa with warehouse facilities of 850,000m² GFA. It estimated that the average daily traffic movements were:

Light vehicles	11,128
Heavy vehicles	4,978

18. In October 2016, the EIS for this project assumed a TEU throughout of 500,000 pa and warehouse GFA of 215,000m² (pg 197). It estimated that the average daily traffic movements generated by MPW were:

Light vehicles	2,670
Heavy vehicles	1,458

19. On 19 February 2020, TfNSW advised the applicant that the daily trip generation from the intermodal development was “over”

Light vehicles	10,000
Heavy vehicles	6,600

When questioned about the discrepancy with the developer's trip generation volumes, TfNSW replied that its data "were independently derived by TfNSW".

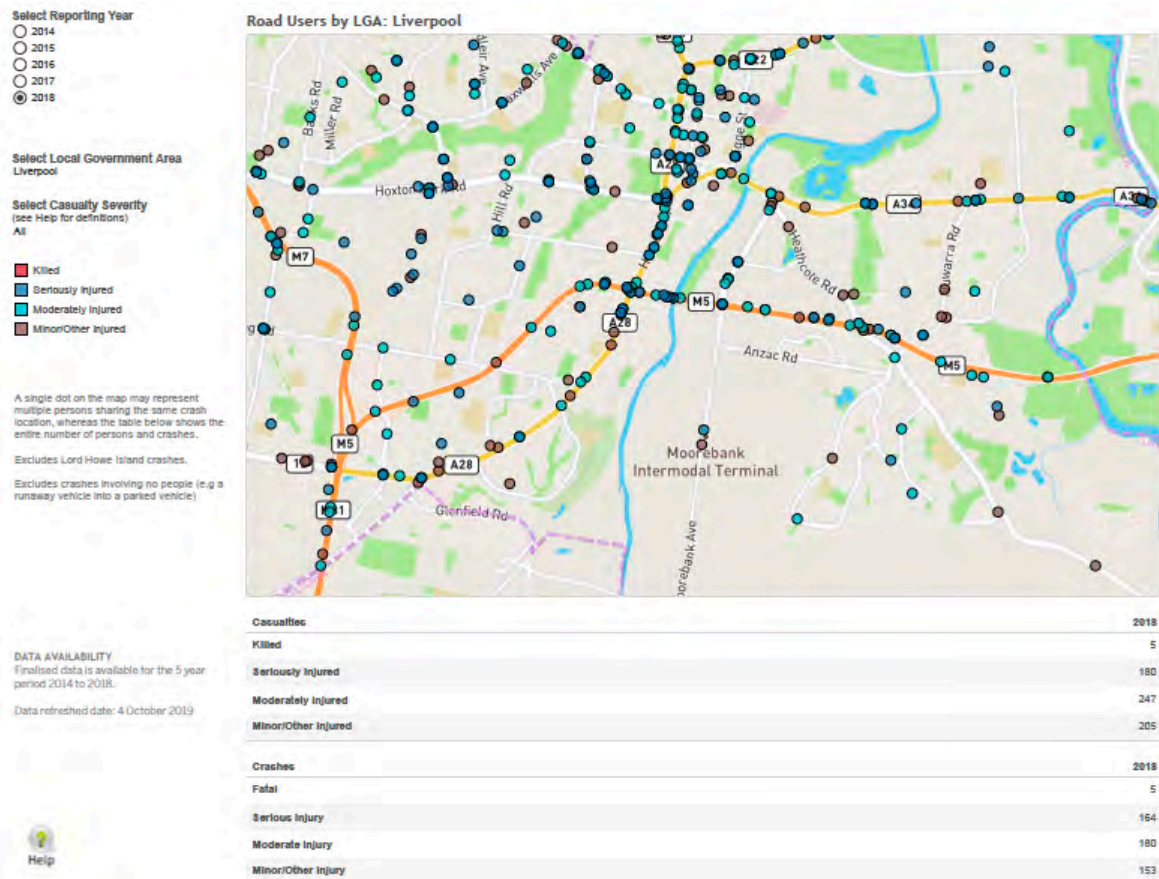
Recent crash figures

20. AAMI the motor vehicle insurer has identified (based on its claims data) the Hume Highway at Liverpool as the worst accident hotspot in Sydney in 2014, 2015, 2016, 2018 and 2019. It was the second worst in 2017.
21. In 2019, the NRMA carried out a Rate your Road survey of 23,000 drivers. The M5 at Moorebank was rated the most congested and least safe road in New South Wales.
22. On truck routes at Moorebank, the following crashes were recorded by snarl.com.au (based on police reports) between 24 February and 28 May 2020

Date and Time	Accident Location and Traffic flow affected	Accident Details
24 February 2020 4.28pm	M5 Motorway approaching Moorebank Avenue – eastbound affected	Crash – multiple vehicles
29 February 2020 7.05am	Heathcote Road at Moorebank Avenue – southbound affected	Crash - car
1 March 2020 11.39am	M5 Motorway approaching Moorebank Avenue – eastbound affected	Crash – truck, car
5 March 2020 10.34am	M5 Motorway on-ramp at Moorebank Avenue – eastbound affected	Crash (no details provided)
6 March 2020 11.25am	Newbridge Road approaching Heathcote Road – westbound affected	Crash - truck
8 March 2020 12.51pm	Newbridge Road approaching Epsom Road – eastbound affected	Crash - car
10 March 2020 3.43pm	Newbridge Road near Nuwarra Road – westbound affected	Crash – 2 cars
16 March 2020 9.08am	M5 Motorway approaching Moorebank Avenue – eastbound affected	Crash – 2 cars
16 March	Newbridge Road at Epsom Road – eastbound affected	Crash – 2

2020 7.04pm		cars
17 March 2020 2.35pm	Moorebank Avenue at Helles Avenue – all directions affected	Crash (no details)
30 March 2020 5.50pm	M5 Motorway just past Hume Highway – eastbound affected	Crash – multiple vehicles
5 April 2020 4.57pm	Heathcote Road near Moorebank Avenue – southbound affected	Crash – car, motorcycle
19 April 2020 6.10am	M5 Motorway at Moorebank Avenue off-ramp – eastbound affected	Crash (no details)
25 April 2020 3.17pm	Moorebank Avenue at M5 Motorway – southbound and northbound affected	Crash – 2 cars
30 April 2020 6.29pm	M5 Motorway at Moorebank Avenue – eastbound affected	Crash – multiple vehicles
30 April 2020 6.55pm	Newbridge Road approaching Nuwarra Road – eastbound affected	Crash – 2 cars
15 May 2020 9.13am	Heathcote Road new Seton Road – both directions affected	Crash – 2 cars
20 May 2020 8.13am	Newbridge Road just past Heathcote Road – westbound affected	Crash – 3 vehicles
20 May 2020 2.19pm	Newbridge Road at Governor Macquarie Drive – westbound affected	Crash – 2 cars
28 May 2020 2.41pm	M5 Motorway approaching Moorebank Avenue – eastbound affected	Crash – 2 cars

23. The most recent data available publicly on TfNSW website concerning traffic accidents in the Liverpool LGA is set out below. A subset of the LGA around the Intermodal Terminal is shown on the map.



PART B – CONTENTIONS

1. The proposal exceeds the capacity of the traffic network with or without mitigation measures or upgrades.
 - a. Conditions 2.6, 2.7 and 2.8 of the concept approval require the consent authority for this DA to be satisfied that the movement of container freight will not exceed the capacity of the transport network.
 - b. The EIS traffic assessment (EIS) used the modelling tool SIDRA to assess intersection and apparently network performance. It predicted that current (2019 pre-Covid) conditions showed a level of service (LOS) of E or F in either or both AM and PM peaks for intersections (Table 7-10):
 - 1-3 M5 Motorway / Hume Highway.
 - 1-4 Moorebank Avenue / Newbridge Road
 - 1-5 Moorebank Avenue / Heathcote Road
 - 1-6 M5 Motorway / Heathcote Road
 - c. The EIS predicted that in 2029, each intersection would operate at LOS F in both AM and PM peaks. It also predicted that another intersection:
 - 1-2 M5 Motorway / Moorebank Avenue
 would operate at LOS F in both peaks.
 - d. LOS E and F are indicative of intersections and roads that have more traffic demand than the infrastructure capacity can supply resulting in growing delays and congestion. In these situations small increases in flow can cause disproportionately greater increases in delay.
 - e. Intersection 1-2 currently operates at an unsafe condition, because of the “M5 weave”, a process whereby vehicles travelling west on the M5 change lanes to the south at high speed to enter the Hume Highway while vehicles entering the M5 to travel west from the Moorebank Avenue on-ramp must cross their path to avoid the southern lanes if they desire to proceed west along the M5. TfNSW has published an options report in December 2019 to upgrade the intersection to avoid weave. This proposal has not proceeded to the issue of SEARs, if adopted has no timetable for completion, is unfunded and may not in any event solve the safety issue. Its significance is that, according to the modal split in the EIS, most trucks from the development will enter the M5 at this intersection.
 - f. None of the local intersection works or traffic management proposals in the EIS the Response to Submissions (R to S) or in the development consent will improve the operation of any of these intersections.
 - g. With or without new traffic from the development and adjoining developments, the existing capacity of the road network will be exceeded. It can only get worse if additional traffic (particularly trucks) is added to the network.

- h. Consent to the development cannot therefore be granted because it is inconsistent with the concept approval. TfNSW agrees that the EIS does not adequately address condition 2.6 and 2.8 of the concept approval.

2. Failure to disclose model and modelling results.

- a. An object of the *Environmental Planning and Assessment Act 1979* (NSW) (the Act) is to provide increased opportunity for community participation in environmental planning and assessment.
- b. Regulations making information about development proposals publicly available is a purpose of the SSD provisions relating to environmental assessment, including the EIS preparation requirements in Schedule 2 of the EPA Regulation.
- c. The Secretary imposed environmental assessment requirements (SEARs) for the project. Requirement 4 required the EIS to assess both intersections and road network impacts of the proposal.
- d. Specifically it required the EIS “to assess the background growth models developed by the RMS for the Liverpool / Moorebank area” and “to undertake detailed modelling analysis to assess network operations in consultation with the RMS and to identify intersection upgrade requirements. The modelling package is to be determined by RMS” (SEAR 4(d)).
- e. It also required the EIS to assess operational traffic and transport impacts to “the local and regional road network” including changes to local road connectivity and impacts on local traffic arrangements, road capacity / safety and to assess the cumulative impacts associated with other planned and approved developments in the Moorebank precinct and traffic capacity of the road network and its ability to cater for predicted future growth and details of mitigation measures for the identified impacts” (SEARS 4(l)).
- f. In breach of these requirements, and best practice (contention 6), the EIS failed to assess network impacts using the RMS model (contention 3) and failed to assess cumulative impacts (contention 4). TfNSW agrees that SEARS 4(a), (b), (c), (d), (e), (g), (i), (k), (l), (m), (n) and (o) have not been adequately addressed.
- g. Condition 2.12 of the concept approval required the applicant, before submitting this DA, to convene a meeting to present the scope and assumptions of the “mesoscopic / microsimulation traffic modelling, the draft traffic impact assessment and any proposed mitigation measures including timing on the delivery of any proposed measures” and to publish the meeting minutes and a schedule of action items arising from the meeting on its website and to prepare a written report responding to the action items and consult with RMS on those items and final mitigation measures and “provide details of the undertaking and outcomes of this condition in the EIS”.
- h. The meeting was held on 12 September 2016 and the minutes are in appendix M to the EIS. The minutes are silent about modelling methodology or outcomes, despite presentation of both.
- i. TfNSW is of the opinion condition 2.12 has not been adequately addressed.
- j. The purpose of condition 2.12 of the concept approval has therefore been frustrated, because the public minutes do not record the business of the meeting relating to the model and hence an important community consultation purpose has also been frustrated. The key impact of this proposal has always been the traffic network: that

is evident from the objections and the various assessment reports and decision-making documents on this proposal. The most important aspect of assessment was the cumulative impact on regional traffic, in particular, the notoriously congested arteries of the Liverpool region. The ability of the community to understand and participate in the assessment of this proposal has been denied by the suppression of information concerning the RMS required modelling of the project. The failure to disclose the model and its outcomes is reason alone to refuse development consent.

3. Contrary to its claim, the EIS did not use the RMS model or, if it did, it did not disclose the results of its use.
 - a. The EIS claimed that it used the AIMSUN based traffic model, supplemented with SIDRA modelling (p. 172.2). However, elsewhere it said that it “sourced” traffic growth and modelling data from the AIMSUN model (p. 172.1) and that the EIS assessment was not of precinct-wide scope but focused only on the development proposal (p. 172.9).
 - b. In fact, it used SIDRA to model traffic. SIDRA modelling has limitations in over-saturated network or corridor conditions as its algorithms are not suited to situations where traffic demand significantly exceeds traffic capacity. It is not clear why the assessment was undertaken using SIDRA even though a calibrated and validated AIMSUN microsimulation model was available.
 - c. The EIS claimed that the RMS model defined a “wider traffic study area” shown in blue on figure 7-1 (p. 174) but a subset of that area, described as “the core traffic study area” had been selected for assessment (shown in red on figure 7-1). The so called core area comprised eight intersections, five of which are referred to in contention 1 above. The wider area, derived from the RMS model, comprised many more intersections (up to 21): see footnote 15, EIS, p. 177.
 - d. In the premises, the EIS did not assess traffic impacts in accordance with the RMS model or any agreement to that effect with the RMS. Rather, it selected a smaller area based upon different and inappropriate modelling, with the effect of minimising the impacts of the development on regional traffic.
 - e. As TfNSW noted, this was a breach of SEARs 4 and of the concept approval (see Contentions 1(h) and 2(f) above), and for this reason also consent should be refused.
4. The assessment failed to consider cumulative impacts.
 - a. In both the concept approval and the SEARs, as well as the general requirements for environmental assessment in Schedule 2 of the EPAR, the applicant was required to consider the cumulative impacts of traffic from the development and from adjoining developments.
 - b. On one view, the direct impacts of traffic from the development necessarily included the development of the adjoining land because by the time the application was lodged, the landowners and developers had agreed to do so in tandem, and concept approvals had been given.
 - c. Whether that is so or not, no cumulative assessment of traffic impacts from MPW, MPE and other proposed or approved developments was undertaken in the EIS. Rather, the EIS claimed that precinct modelling utilising the RMS AIMSUN model “to verify upgrades identified to reduce traffic impacts on the surrounding road network (i.e. at 15 key intersections) arising as a result of the ultimate full-build scenario (i.e.

1.55 million TEUs INT terminal capacity and 850,000 M2 warehouse GFA) for the entire Moorebank intermodal precinct (Precinct Model)” was undertaken by the joint venture partner, MIC. The EIS states that this modelling “would be available in November 2016” and asserts that it was relevant to the MPW concept approval but not to the proposal (to implement the concept approval), and therefore would not be discussed further (EIS, p. 172.8-9).

- d. If indeed this was modelling in accordance with the AIMSUN model developed by the RMS, then it would have been discussed at the September 2016 meeting (see contention 2) and, if not completed when the EIS was published in October 2016, would have been readily available shortly thereafter. It should have been published in the EIS, or in a supplementary EIS or, at the very latest, in the Response to Submissions. It was not. To this day, the results of that model, whether accounting for development traffic or precinct traffic, have not been disclosed.
- e. Given that at least fifteen intersections and possibly more were within the scope of the model, and only eight intersections (of which five are or will be at capacity) were assessed for this project, the SEARs requirement for a cumulative impact study including traffic from MPE, or for that matter any traffic sitting underneath the concept approval for either or both parts of the Moorebank intermodal, has never been satisfied.
- f. Statements by the IPC in its reasons that the so-called whole of precinct modelling “provides a representative assessment of the expected construction and operational traffic-related impacts” (reasons, para 87) is incomprehensible, because the IPC never sought or obtained the modelling (from para 86, it is clear that the reference is to the precinct-wide modelling).
- g. The full-build scenario (i.e. 1.55 million TEUs terminal capacity and 850,000 m2 warehouse GFA) for the entire Moorebank intermodal precinct (Precinct Model)” is arrived at via commercial agreement. It is more than either party individually applied for, but less than the combined 2.2 million TEUs derived from MPE Concept and MPW Concept approvals. Cumulative scenarios tested as part of the MPW Concept application approval and considered by the IPC, are essentially alternative spatial distributions of the same TEU throughput, based on an assumption that the TEU throughput is limited by available rail capacity. Rail capacity is likely to increase, and there is an application by the NSW Government before Infrastructure Australia to do so. Excluding total rail capacity is not evaluating the true traffic generating potential of both sites, as they have been rezoned for the specific intermodal use. Cumulative assessment should have considered the total maximum traffic generating capacity of the rezoned land, not an arbitrary lower total across both sites,
- h. At the heart of the assessment of this project lies a cavity, which must be filled before any responsible decision can be made to approve the project.

5. The modelling is out of date.

- a. The critical traffic arteries in the Liverpool / Moorebank area are the M5, the Hume Highway, Heathcote Road and Newbridge Road.
- b. These roads are notorious for their high accident records. The EIS only analysed crash data between 2010 and 2015 and did not consider numerous locations on the Hume Highway and Newbridge Road, which will be affected by this development where accidents have occurred (see Figure 7-5).

- c. The EIS used data no later than 2015. That data did not consider the effect of the M5 widening works. Nor have the predicted traffic flows in 2019 been correlated with actual flows in that year, to calibrate the EIS predictions. If traffic has increased at a greater rate than predicted, then that brings forward the impacts of the project.
- d. The assumption in the EIS was that the project would only operate at two thirds of its capacity until the tenth year of operation (EIS, p. 199). However, the recent announcement by Woolworths that it will establish an automated distribution warehouse at the intermodal suggests that the uptake of warehouse space and therefore truck traffic may be sooner than predicted. That has the effect of increasing the impacts in the near term before background traffic growth causes those impacts in any event.
- e. For these reasons consent should not be given to the proposal until the traffic modelling has been fully disclosed, and supplemented by current actual traffic data, using realistic assumptions concerning the build-out of the development.

6. No adequate traffic modelling of impacts has been undertaken.

- a. Modelling should have used a combination of strategic traffic modelling, operational (mesoscopic and microsimulation) modelling and intersection modelling;
- b. Best practice required the following modelling methodology:
 - i. Forecasting of background traffic demand undertaken using four-step strategic model of Sydney GMA (Sydney Strategic Traffic Model);
 - ii. Assessment of proposal impacts using wide-area simulation traffic model combining mesoscopic and microscopic simulation (LMARI) based on demand inputs from the strategic model, with intersection performance, travel times and merge-weave analysis reported from this model;
 - iii. SIDRA intersection and HCM (Highway Capacity Manual) used as supplementary design tools, but not for reporting of proposal impacts.

This methodology has been the minimum standard for environmental assessment of transport-related projects since 2015. The modelling methodology does not conform with industry best practice.

- c. The modelling should not include as a mitigation measure the optimisation of signal phase times using vehicle-actuated signals. That type of improvement is done anyway as part of TfNSW's ordinary business activities. TfNSW does not usually accept proposals by development proponents to re-time signal phases as a legitimate impact mitigation measure.
- d. The EIS does not adequately document the impact of the proposal. The modelling methodology is not clearly articulated.
- e. Traffic modelling outputs are missing, including key performance metrics, such as network wide statistics (VKT (vehicle kilometres travelled), VHT (vehicle hours travelled), average network speed), travel times on key routes through the study area for cars and public transport, queue lengths on critical intersection approaches and merge / weave performance.

- f. The EIS fails to consider induced traffic and rat running, where traffic will seek to avoid congested arteries and intersections by using sub-regional or local roads. None of that traffic has been considered or modelled in the EIS.
 - g. Proposed mitigation measures lack detail particularly where intersection upgrades are required. No conceptual intersection upgrades have been provided nor is it known whether such upgrades are feasible or capable of construction (and see contention 7).
 - h. The EIS assessment of traffic impacts falls short of the standard set by other traffic and transport assessments undertaken for proposals that will have a substantial impact on the State road network, such as the M12 motorway and Western Harbour Tunnel and Warringah Freeway Upgrade.
 - i. TfNSW has recently published the Moorebank Intermodal Terminal Road Access (MITRA) “strategy”. It identifies generic “work” on roads and intersections for the intermodal traffic and background growth. It includes roads and intersections that were not considered in the EIS. It has no commencement date for the works, merely identifying them as medium term and long term.
7. The mitigation measures for model impacts are inadequate, untimely and uncertain.
- a. The direct impacts of the proposal require reconfiguration of local roads which will be carried out by the developer.
 - b. The EIS makes it clear that additional impacts on intersections, beyond existing and future growth, will be caused by the proposal.
 - c. The EIS fails to model the regional impacts and provides a narrow rather than a broad area where impacts will be experienced.
 - d. On 2 July 2019, the RMS explained to the IPC the general methodology used to calculate the State infrastructure contribution of \$48 million for “the broader regional network” upgrades under the VPA. The RMS advised “There is no obligation of time in (sic) to be spent or which works will be delivered as part of that” contribution.
 - e. If the contribution is in fact spent on works within Liverpool/Moorebank, then:
 - i. the works have not been identified;
 - ii. it is unknown whether the works relate to the development;
 - iii. the time for completing the works is unknown;
 - iv. whether funding is available for those works has not been explained;
 - v. there is no certainty that the works will ever be carried out.
 - f. The IPC accepted the RMS apportionment modelling results without reviewing it.
 - g. The RMS refer to the model in which apportionments for the contribution of the developments at Moorebank to the overall traffic growth were drawn as the RMS Static Model. It appears that it modelled the base case, and there is no evidence that future year 2036 “with development, do minimum” and 2036 “with development, with upgrades” models were undertaken or independently reviewed. Without

disclosure of information concerning the use of the model, no one could be confident that the apportionment is sufficient to mitigate the proportionate impacts generated by MPW in total or MPW stage 2 specifically.

- h. The VPA imposes no obligation on the RMS to carry out the works or to fund the balance of the costs needed to construct the mitigatory works. The RMS may choose to spend the funds on other works unrelated to the project within the region.
 - i. Unlike conditions for direct works to mitigate development impacts, the VPA provides no certainty that the impacts will be mitigated at the times that they are generated. The outcomes of the VPA condition are uncertain.
 - j. As an already constrained network, if operation of the development precedes the works required to deliver the capacity upgrades, the consequences will be significant because parts of the surrounding network are at or near capacity. There is limited or no spare capacity to be used to mitigate the time difference between the creation of the impacts and the delivery by the RMS of the required upgrades.
8. Consequential impacts of errors in modelling are significant.
- a. The road network is at or near capacity. Additional truck and commercial traffic will further degrade the network.
 - b. This has consequences for other traffic. It reduces the safety of the network for all traffic, it induces traffic to use non-arterial roads through residential areas, it forces impacts in those areas where no impacts are presently experienced (particularly on quiet residential roads where children play) and it reduces amenity throughout those areas.
 - c. Idling traffic increases air emissions. Liverpool has poor air quality and each year it exceeds the PM 2.5 limits for annual emissions and on some days for daily emissions as fixed by the relevant National Environmental Protection Measure (NEPM). As at 2018: PM 2.5 Annual exceeded the limit by 2.1 u/gm, PM 2.5 Max 24hr was almost double the NEPM, PM 10 Max 24hr was more than double the NEPM and PM 10 Annual was just under the NEPM. There is little or no capacity in the Liverpool air shed to accept greater emissions from idling of engines. The development will contribute emissions from train movements, the idling of trains on-site and from truck movements on site. Those emissions may arguably be acceptable (this is an industrial area and the land has recently been rezoned for the intermodal), but it is incumbent on the developer to limit as far as reasonably possible, emissions to the air or of noise from vehicles which it has added to the regional road network, and from other vehicles that are slowed or idling because of increased congestion caused by development traffic. None of the additional emissions have been assessed in the EIS or included in its air or noise modelling.
 - d. Without certainty of timing and certainty of performance, the mitigation measures either should not be included in the assessment, or consent to expansion should not be granted until specific mitigation works have occurred. TfNSW has developed a strategy for dealing with some of the impacts from the intermodal, MITRA. However, that strategy (a one page map of potential works) is deliberately vague about the works themselves and when if at all the works will be delivered.
 - e. Part of the justification for the development is that it will be removing some truck traffic from Port Botany to the east of the intersection between the M5 and Moorebank Avenue. Whatever benefits that might bring, it will concentrate truck traffic at that intersection and on surrounding roads. It will induce traffic and to the

extent that the warehouse space is used to break bulk from the containers, it may significantly increase the volume of small truck and commercial traffic in the locality. Small errors in modelling may cause out of size effects, given the saturation of the current road network.

9. In breach of former s 78A(8A) of the Act, the DA was not accompanied by an EIS prepared on behalf of the applicant in the form prescribed by the Regulations, and consent must accordingly be refused.
 - a. The EIS was certified on 21 October 2016.
 - b. As at 21 October 2016, s 78A(8A) provides:

“A development application or State significant development is to be accompanied by an environmental impact statement prepared by or on behalf of the applicant in the form prescribed by the Regulations.”
 - c. Schedule 2.5 of the EPAR applies Part 3 of Schedule 2 to an EIS prepared under s 78A(8A) of the Act.
 - d. As at 21 October 2016, Schedule 2.6 (in Part 3) provided that:

“An EIS must contain the following information:

...

 - (f) A declaration by the person by whom the statement is prepared to the effect that:
 - (i) the statement has been prepared in accordance with this Schedule, and
 - (ii) the statement contains all available information that is relevant to the environmental assessment of the development... to which the statement relates, and
 - (iii) that the information contained in the statement is neither false or misleading.”
 - e. Wesley Owers stated on p. xxi of the EIS that an EIS is attached which addresses all matters in accordance with Part 4 of the EPA Act and Schedule 2.7(1)(e) of the EPAR and:

“I certify that I have prepared the contents of this EIS in accordance with the Secretary’s environmental assessment requirements (SEARs) (ref SSD 14-6766) dated December 2014, and that to the best of my knowledge, the information contained within this EIS is not false or misleading.”
 - f. We put to one side the inadequate declaration that qualifies para (iii) of Schedule 2.6(f) of the Regulation.
 - g. There is no declaration that the statement contains all available information that is relevant to the environmental assessment of the development to which the statement relates.

- h. The making of that declaration is obligatory. It is a critically important accountability obligation. It is in the nature of an assurance to regulators, statutory authorities, the community and the consent authority that the author of the EIS has included all available information relating to the development. It plays the same role as an audit certification, or the certification of construction plans. If the actors in the system cannot rely upon EISs as truthful and complete documents, the system breaks down. An EIS has not been provided in accordance with the Act for this project and approval cannot be given to it.
- i. That this is not a mere technicality is evident from the purpose of the provision, but also the facts of the case. There is a real contest in this matter about the sufficiency of the EIS because of its failure to include "all available information" about the modelling of traffic impacts for the project. Clearly there was available information about regional impacts and precinct wide impacts, and modelling methodology which were not disclosed in the EIS. It is not a problem that can be cured, especially as a declaration made today could not truthfully say that all available information is in the EIS, as it is not, if only because of the staleness of the data. Whether the applicant for consent can cure the problem in some other way, is a matter for it.

10. Conditions

- a. Best practice emission standards should be obligatory for diesel trains, container stackers and diesel trucks, from the outset. For all On Site Diesel, Tier 4 emission standards should apply. For all Diesel Locomotives accessing the site, Tier 4 or higher emission standards should apply. For trucks, Euro 5 or higher should be obligatory. Compliance should be monitored, recorded and enforced.
- b. The conditions should specify the off-site works to relieve congestion in the network which must be completed before development works can commence.

Dated: 07 July 2020



.....
 Erik Rakowski
 Secretary
 Residents Against Intermodal Development Moorebank Inc.