

31 January 2018

**NSW Planning Assessment Commission Determination Report
Moorebank Precinct East Concept Plan MOD 2 (MP 10_0193 MOD 2)**

1. INTRODUCTION

On 20 November 2017, the Planning Assessment Commission (the Commission) received from the Department of Planning and Environment (the Department) a request from SIMTA, as Qube Holdings Limited (the proponent) to modify the Concept Plan for the Moorebank Precinct East intermodal facility that includes an intermodal terminal facility, rail corridor, warehouse and distribution facilities and freight village.

The Department referred the modification request to the Commission for determination in accordance with the Minister for Planning's delegation because the Department had received an objection from the relevant local council (Liverpool City Council) and more than 25 submissions from the public in the nature of objection.

Ms Lynelle Briggs AO, Chair of the Commission, nominated Annabelle Pegrum AM (chair), Steve O'Connor, and Peter Duncan AM to constitute the Commission to determine the modification request.

1.1 Summary of Development Application

The modification request proposes to:

- increase the Moorebank Precinct East site area (from 83ha to 95ha) and amend the site boundary to include works on Moorebank Avenue and drainage works to the south and east of the site;
- upgrade works to Moorebank Avenue, including widening to four lanes, from the northern to southern extent of the site;
- permit a diversion road, interim road and interim access to the Moorebank Precinct East site area along Moorebank Avenue during the upgrade works;
- provision of interim site access for warehousing from Moorebank Avenue;
- reconfiguration of internal road layouts and use of all internal roads by both light and heavy vehicles;
- importation of approximately 600,000m³ of clean fill for bulk earthworks within the site and part of Moorebank Avenue;
- revised warehousing and freight village locations and layouts;
- expansion of land-uses within the freight village;
- revision of the proposed staging of the project; and
- subdivision of the site following development.

The site is located in Moorebank, Western Sydney, south of Liverpool. It covers 83 hectares, is generally flat and is within the Georges River catchment area. The site context in relation to the future Moorebank Precinct West intermodal facility, proximate vegetated areas including the 'Boot Land', key watercourses, rail and roadways, existing business parks, the Defence Joint Logistics Unit (DJLU), and surrounding residential development is illustrated in Figure 1 (**Source:** proponent EIS).

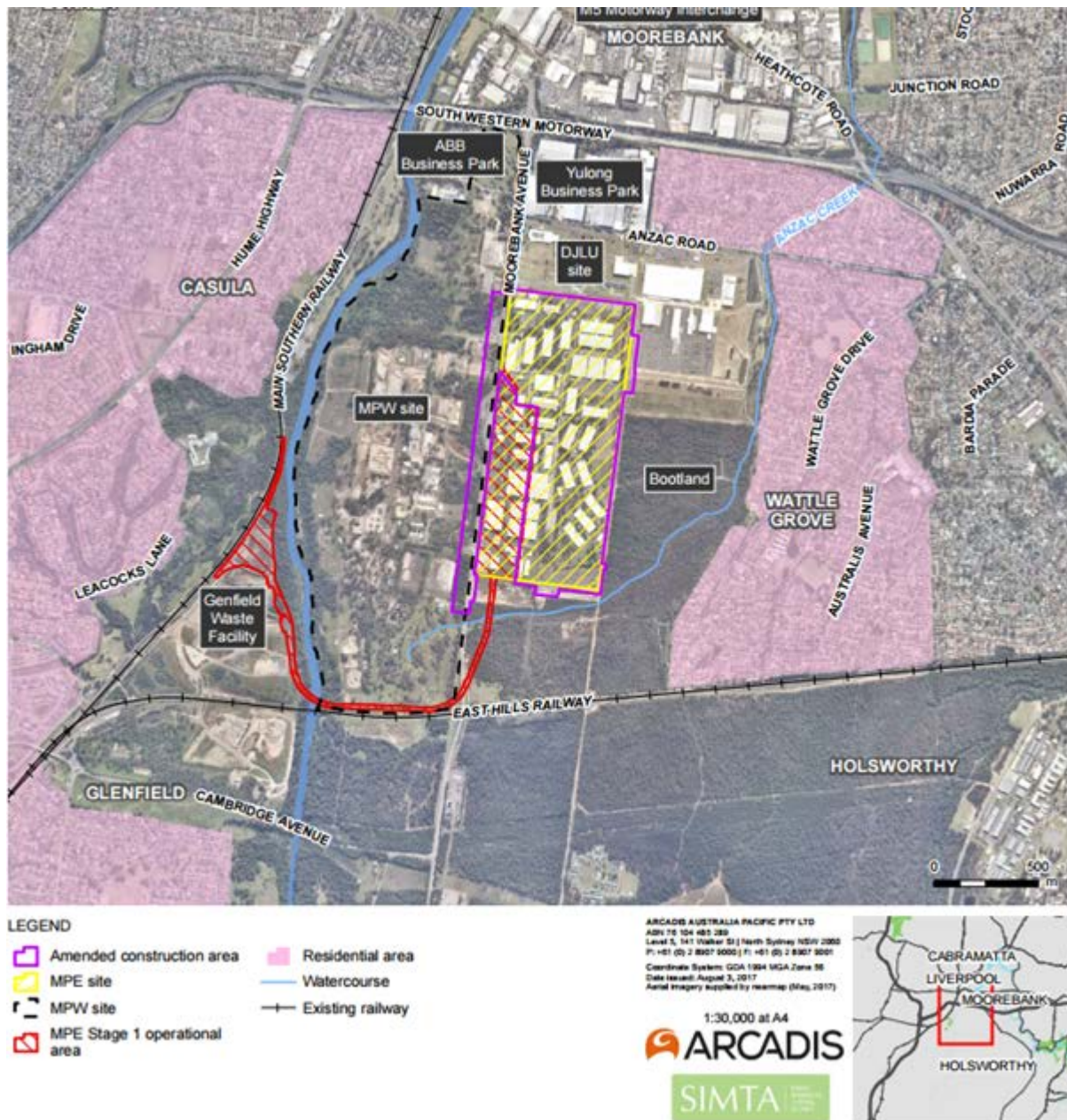


Figure 1: Moorebank Precinct East

1.2 Need for modification

The proponent states that the modification proposal responds to opportunities to optimise the operation of the intermodal terminal, accommodate drainage infrastructure, improve environmental outcomes and enhance safety. The modification proposal seeks approval for a subdivision which was not contemplated at the time the Moorebank Precinct East Concept Plan was approved on 29 September 2014. The proponent advised in the Environmental Impact Assessment and during briefings to the Commission, that the need for the modifications include:

- upgrading Moorebank Avenue to bring the existing road up to current design standards which would improve the usability and safety of the road for traffic to the intermodal facility and for the wider community;
- interim northern Moorebank Precinct East site access to allow construction and interim operational access to warehousing while avoiding direct impacts on the Defence Joint Logistics Unit site access to the north;
- internal road network changes to maximise the efficiency of operations within the Moorebank Precinct East site and to improve safety on the site;

- importation of general fill and bulk earthworks to facilitate the adequate operation and function of drainage and flooding infrastructure (including onsite detention basins ensuring that the site can be effectively drained in a 100-year annual recurrence interval event) and to make it easier to construct building foundations;
- optimising the operation and commercial viability of the freight village by moving it from the north-eastern corner of the site to the north-western corner to attract greater passing trade;
- changes to staging to allow a larger proportion of the Moorebank Precinct East site to be delivered earlier in response to market demand; and
- subdivision to facilitate long-term leases on the site and enhance the associated commercial viability of the project.

1.3 Background

Concept Plan Approval

On 29 September 2014, the Planning Assessment Commission approved a Concept Plan (MP 10_0193) for the use of the site as an intermodal terminal, including:

- a rail link to the Southern Sydney Freight Line within an identified rail corridor;
- warehouse and distribution facilities;
- freight village (ancillary site and operational support services); and
- stormwater, landscaping, servicing and associated works.

MP 10_1093 MOD 1 - Concept Plan Modification 1

On 12 December 2014, the Planning Assessment Commission approved a modification to the Concept Approval for revisions to the land description, Voluntary Planning Agreement and Statement of Commitments.

SSD 6766 – Moorebank Precinct East – Stage 1 application

On 12 December 2016, the Planning Assessment Commission approved a State significant development application for Moorebank Precinct East – Stage 1 (SSD 6766). The approval allowed for the construction and operation of the following within the Moorebank Precinct East site:

- an intermodal terminal facility operating 24 hours, 7 days a week handling container freight volume of up to 250,000 twenty-foot equivalent units per annum;
- processing and loading areas, rail loading and container storage areas, and an administration facility and associated carparking;
- a rail link connecting the southern end of the site to the Southern Sydney Freight Line; and
- associated works including rail sidings, vegetation clearing, remediation and leveling works, drainage and utilities installation.

An appeal to the Moorebank Precinct East – Stage 1 application was lodged in the NSW Land and Environment Court (Court) by Residents Against Intermodal Development Moorebank Inc (RAID). During the court proceedings, it was not contended that the development should be refused, rather that it should proceed under different conditions. The appeal was heard on 25, 26 and 27 October 2017. The Commissioner of the Court reserved her decision at the conclusion of the hearing. The Department's assessment report specifically notes that the '*appeal does not preclude the Department's or the independent PACs consideration of the ... (project) ... or PACs determination of the modification*'.

SSD 7628 – Moorebank Precinct East - Stage 2 application

A State Significant Development application (SSD 7628) was submitted by the proponent concurrently with the Concept Plan MOD 2 application. SSD 7628 seeks approval for construction and operation of warehousing and a freight village including:

- earthworks, including the importation of 600,000m³ of fill, and vegetation clearing;
- 300,000m² of gross floor area for warehouse use;
- 8,000m² GFA within the freight village;

- construction of internal roads and connection to the surrounding road network;
- raising the level of and upgrading Moorebank Avenue, generally adjacent to the Moorebank Precinct East site;
- upgrading of Moorebank Avenue intersections with Moorebank Precinct East site access points, including the provision of interim entry points;
- ancillary works including stormwater and drainage, utilities relocation/installation, remediation and signage; and
- subdivision of the site.

The Department advised the Commission that the Concept Plan was assessed (by them) independently of the SSD 7628 application and on its own merits. The Department also recognised that the SSD application would be required to be generally in accordance with Future Environmental Assessment Requirements nominated as part of this modification consideration.

2. DEPARTMENT'S ASSESSMENT REPORT

The Department's assessment report identified the key issues associated with this proposal as geotechnical/importation of fill; biodiversity; traffic impacts; air quality impacts; noise impacts; amendments to built form and layouts; stormwater and drainage; expansion of the Concept Approval site boundary; and subdivision. The Department's assessment report concluded that *'subject to the amendments recommended in relation to the Terms of Approval and Future Environmental Assessment Requirements ... the Concept Approval is acceptable and future development applications will be capable of demonstrating a satisfactory level of amenity to neighbouring properties and will not have a negative visual impact'*.

3. COMMISSION'S MEETINGS AND SITE VISIT

As part of its assessment of the proposal the Commission met with the Department; the Department's stormwater expert; Roads and Maritime Services (RMS) and Transport for NSW; Council; the proponent, including an accompanied tour of the site; and conducted a public meeting in Liverpool. Notes from these meetings are provided in **Appendices 1, 2 and 3**.

3.1 Briefing from the Department

On 11 December 2017, the Department briefed the Commission on the following matters:

- project background;
- traffic and Moorebank Avenue;
- fill;
- noise;
- biodiversity;
- subdivision;
- stormwater and urban design;
- the likely existence of Poly-Fluoroalkyl (PFAS); and
- operation and construction hours.

On 18 December 2017, the Department's stormwater expert briefed the Commission on the following matters:

- stormwater impact management;
- the adequacy/inadequacy of the application;
- the short-comings of the project in delivering best practice stormwater management; and
- the draft conditions of consent.

3.2 Briefings from Other Agencies

On 18 December 2017, the Commission met with RMS and Transport for NSW agencies. The Commission was briefed on the following matters:

- RMS's position on the modification;

- predicted impacts on the network based on the traffic modelling;
- future impacts on Moorebank Avenue, 'the weave' on the M5 Motorway, Heathcote Road and Newbridge Road;
- interactions of the project with Moorebank Precinct West; and
- RMS' response to associated conditions proposed by the proponent.

3.3 Briefing from the proponent and Site Tour

On 11 December 2017, the Commission met with the proponent and toured the site. The proponent briefed the Commission on the following matters:

- the interaction between Moorebank Precinct East and Moorebank Precinct West;
- amendment to a number of conditions;
- traffic impacts;
- noise impacts;
- stormwater and the use of onsite detention basins; and
- offsetting and biobanking agreements.

The meeting was followed by a tour of the Stage 1 works being undertaken, existing drainage canals, the sheds to be demolished and connections between the site and the Defence Joint Logistics Unit and Boot Land.

3.4 Meeting with Liverpool City Council

On 11 December 2017, the Commission met with officers from Council who briefed the Commission on the following matters:

- the need for Moorebank Precinct West to be considered as part of this modification;
- traffic impacts and Moorebank Avenue;
- local traffic impacts;
- road ownership concerns;
- monetary contributions payable to Council;
- stormwater impacts;
- urban design;
- monitoring impacts; and
- the need for a formal consultation strategy.

Subsequently on 12 January 2018 Council provided the Commission with a summary of its issues related to the applications for the Concept Plan modification and SSD 7628. Council noted that in its view *'along with the inconsistencies within the MPE applications currently under consideration ... the determination for MPE cannot be made in isolation of MPW'*. Council requested that the Commission defer its decision for both the current MPE applications *'until the Department's recommendation for the MPW applications ... are brought forward and scrutinised'*.

3.5 Public Meeting

The Commission conducted a public meeting at Club Liverpool on 12 December 2017 to hear the public's views on the proposal. A list of the 14 speakers that presented to the Commission is provided in **Appendix 2**. A summary of the issues raised by the speakers and provided in written comments is provided in **Appendix 3**. In summary, the main issues of concern include:

- dust and other air quality impacts;
- freight and traffic generally;
- noise and vibration impacts;
- safety impact on local road networks;
- impact on nearby residential developments;
- stormwater and drainage;
- impact on the Georges River including environmental and public safety;
- site suitability;

- effects of importing fill onto the site;
- construction and operational noise;
- health and environmental impacts;
- lack of consultation by the proponent; and
- various other matters.

A number of written comments and speakers at the public meeting requested the original concept approval not proceed in its entirety and raised issues that were unrelated to and outside of the scope of this modification application.

The Commission notes that it is unable to revisit whether the original Concept Plan approval should proceed. The Commission is limited to making a determination only on the modification application before it.

4. ADDITIONAL INFORMATION

On the 19 December 2017, the Commission sought additional information from the proponent related to the subdivision request within the modification application. The proponent responded to the Commission on the 21 December 2017.

On 22 December 2017, the Commission again sought additional information from the proponent to more directly/comprehensively address the proposed Future Environmental Assessment Requirement 2.1 *Subdivision*. The proponent responded to the Commission on the 5 January 2018. The Commission has considered this additional information in making its determination (see Section 5.13).

5. COMMISSION'S CONSIDERATION

The Commission has considered carefully:

- information provided by the proponent;
- the Department's assessment report;
- advice and recommendations from other government agencies;
- comments and submissions from Council;
- comments and submissions from the community;
- relevant matters for consideration specified in section 79C of the *Environmental Planning and Assessment Act 1979* (EP&A Act), including:
 - relevant environmental planning instruments;
 - the *Environmental Planning and Assessment Regulation 2000*;
 - the likely impacts of the development on both the natural and built environments;
 - social and economic impacts in the locality;
 - the suitability of the site for the development;
 - written and verbal submissions from the public; and
 - the public interest, including the objects of the EP&A Act.

The key matters considered by the Commission's include:

- the relationship between the current Concept Plan MOD2 application and the concurrent SSD 7628 application for the Precinct East intermodal facility;
- the relationship between the current Concept Plan MOD2 application and applications under assessment for the Precinct West intermodal facility;
- geotechnical/importation of fill;
- biodiversity;
- traffic impacts including on the local network;
- air quality impacts;
- noise and vibration impacts and construction hours;
- stormwater, flooding and drainage;

- visual impacts;
- reconfiguration of Concept Plan Approval intermodal layout;
- freight village and land use changes;
- expansion of the Concept Plan Approval site boundary; and
- subdivision.

5.1 Moorebank Precinct East SSD 7628

Concurrent with this application, the Commission also received the Moorebank Precinct East SSD 7628 for determination. The Commission notes that although SSD 7628 provides additional context for this application, the modification to the Concept Plan was assessed and determined by the Commission independently and on its own merits.

5.2 Moorebank Precinct West applications

The Commission noted advice from the Department that a modification to the Concept Plan (SSD 5066 MOD 1) and a State Significant Development application (SSD 16_7009) have been submitted by Qube for the Moorebank Precinct West site. The Commission also noted Council's request to defer consideration of the Moorebank Precinct East applications until the Department's assessment of the Moorebank Precinct West applications is completed.

The Commission acknowledges that the development and operation of the east and west intermodal facilities will be closely linked and may have cumulative impacts. However, as the two Moorebank Precinct West applications are still under assessment by the Department, the Commission cannot take them into consideration as part of this Concept Plan modification application. The Commission must consider the application that it has before it on its merits and cannot defer its determination pending other current or future applications which may or may not be sent to the Commission for determination at some future date.

5.3 Geotechnical/importation of fill

The proponent's modification sought approval for approximately 600,000m³ of clean general fill material for bulk earthworks largely to support the functionality of the site's stormwater and drainage systems. The proponent contends that the adjustment to the site's final levels through the importation of general fill for bulk earthworks will help to achieve the minimum gradients required for site drainage infrastructure upstream of the on-site detention basin, ensuring the site can be effectively drained in a 100-year annual recurrence interval event. The Department's report notes that the original '*Concept Approval did not envisage the importation of fill to the site for bulk earthworks*'.

The Department considered that the requirement of Future Environmental Assessment Requirement 2.1 *Soil and Water 'are generally sufficient to ensure future development applications include adequate assessment of the impact of any importation of fill to the site'*. The Department's assessment therefore found that in light of the impacts, the proposed importation of fill to the site was acceptable subject to strengthening of the Future Environmental Assessment Requirement 2.1.

The Department's assessment also queried the total volume of fill proposed as it varied amongst the EIS report's prepared by the proponent. The Commission sought clarification from the proponent who confirmed that only 600,000m³ of fill would be required.

The community raised concerns at the public meeting over potential impacts of this fill on neighbouring residences, including impacts in terms of air quality, noise, and stormwater and drainage. Council raised concerns about the contamination risk associated with any fill that it brought to the site and claimed that this risk had not been satisfactorily addressed. In addition, Council expressed the view in their submission dated 12 January 2018 that "*There are no clear measures for quality control (documenting/ testing at source and destination).*"

The Commission has reviewed the modification request and the Department's proposed amendments to the Future Environmental Assessment Requirement 2.1 *Soil and Water*. The Commission finds that this Future Environmental Assessment Requirement (as amended) will adequately ensure that future development of the Moorebank Precinct East site will exclude the importation of contaminated fill and will require a thorough assessment of, and management/control measures for, the importation, deposition and mitigation of fill impacts, including dust.

5.4 Biodiversity

At the public meeting, the community raised concerns regarding the project's capabilities to protect threatened and vulnerable flora and fauna species within the vicinity of the project. The community were concerned that clearing on the site, along Moorebank Avenue and within the Boot Land could jeopardise remnant vegetation.

The modification would facilitate a development outcome requiring clearing of all vegetation within the revised project boundary. The modification would result in the clearance of 79 vulnerable plants, 110 critically endangered plants and 12 endangered plants. The proponent acknowledges that the overall proposal *'would result in the removal of structurally intact woodland, highly disturbed area with scattered trees and landscaped vegetation providing habitat for fauna'*. The proponent proposes to provide offsets for impacted flora species within the Boot Land adjoining the site. The Commission noted the Department's advice that a biobanking application had been lodged with the Office of Environment and Heritage to determine the required biodiversity offsets.

The proponent's assessment also identified that two threatened fauna species, the Eastern Freetail-bat and Little Lorikeet, have a high likelihood of occurrence. The proponent will be required to offset the impacts to these threatened fauna species.

The Department's assessment found that the requirements of Future Environmental Assessment Requirement 2.1 *Soil and Water* are generally appropriate. However, given the direct impacts expected with the expanded reconfiguration of the site boundary and the Moorebank Avenue upgrade works, the Department recommended that this requirement be amended to ensure both direct and indirect impacts would be assessed as part of future development applications.

The Commission has reviewed the Future Environmental Assessment Requirements and the proposed amendments recommended by the Department. The Commission finds that Future Environmental Assessment Requirement 2.1 *Soil and Water* together with Future Environmental Assessment Requirement 2.1 *Biodiversity* (as amended) will adequately ensure that future development applications can sufficiently assess, mitigate, and manage biodiversity impacts.

5.5 Traffic impacts

The impact of traffic on the local catchment was raised as a significant concern by Council, during the public meeting and within written comments. A critical concern was that construction and operation of the intermodal facility would place greater pressures (including for public safety) on a road network already near capacity. Adding to these concerns was a strong view that the modelling of the impacts was inadequate and was not transparent.

The Commission considered the potential traffic impacts having particular regard to the proposed upgrade of Moorebank Avenue, construction traffic impacts, and operational traffic impacts and site access. After meeting with Council and convening the public meeting, the Commission also met with officers of RMS and of Transport for NSW.

Upgrade of Moorebank Avenue

The proposed modification to Moorebank Avenue includes:

- modification to the existing land configuration, including some widening;
- earthworks, including construction of embankments and tie-ins to existing Moorebank

- Avenue road level at the southern and northern extents;
- raking of the existing pavements and installation of new road pavements;
- establishment of temporary drainage infrastructure, including temporary basins and/or swales;
- raising the vertical alignment by about 2m from the existing levels, including kerbs, gutters and a sealed shoulder;
- signaling and intersection works; and
- upgrading four existing intersections along Moorebank Avenue.

The proponent stated that the Moorebank Avenue upgrade *'had been designed to accommodate four lanes over the full extent of the Moorebank Precinct East site and the future works would meet Roads and Maritime Services design standards'*.

The Department assessed that the proposal would:

- improve the road to RMS standards, which would also improve the usability and safety of Moorebank Avenue for project traffic and for the wider community;
- require detailed design of the road to be provided with future development applications supported by traffic assessments and associated technical justification;
- require necessary road closures or diversionary works but only of a temporary nature and managed through appropriate mitigation measures; and
- provide biodiversity offsets to compensate for impacts to threatened species.

The Department noted that Transport for NSW recommended a new Future Environmental Assessment Requirement in response to the proposed modification of Moorebank Avenue. It required the proponent to enter into a Works Authorisation Deed regarding the design of the road and signals and to prepare a Staging and Construction Traffic Management Plan. The Department agreed and drafted an amendment to the relevant Future Environmental Assessment Requirement accordingly.

Council and the community raised concern that there were inaccuracies in previous traffic modelling and that the local road network was not capable of supporting a fully operational intermodal facility to the scale of what is proposed. If the project was to proceed, the community wanted assurance that Moorebank Avenue would be upgraded to a satisfactory standard to accommodate the demands of increased traffic.

RMS advised that they have undertaken a significant amount of background work, studies and modelling over the past five years covering both the surrounding regional area of Sydney and this specific project. Its internal modelling shows that there will be generally less than a 5% traffic increase resulting from the project on the local network, including the M5 "weave" and key intersections. RMS advised that they have had a number of consultations regarding what intersection upgrades are required. The upgrades proposed as a result of these consultations are considered adequate and have been modelled as part of a longer term 2036 demand model. Therefore the concerns raised by Council in their submission dated 12 January 2018 that *"The only improvements to the local transport network as part of the concept plan is the upgrade of Moorebank Ave .."* is considered to be unjustified.

Part of Moorebank Avenue is currently not dedicated as a public road as it is Commonwealth owned land. However, RMS has recommended that Moorebank Avenue should be given a temporary Local Road classification to more effectively facilitate the required Moorebank Avenue upgrade works. Council indicated to the Commission that it did not want the road to be classified as a Local Road as it did not want long-term responsibility for the road and it considers the road warrants classification as a Regional Road. RMS informed the Commission that it is prepared to take over as the managing Roads Authority once the road is temporarily classified as a Local Road to facilitate the upgrade works.

RMS also indicated that during the Moorebank Avenue upgrade works stage it would be possible for the longer-term road classification and ownership of the road to be considered in line with the standard policy framework for the review of road classifications.

The Commission has reviewed the new Future Environmental Assessment Requirement requested by Transport for NSW and the concerns of Council and the community. The Commission finds that the new Future Environmental Assessment Requirement 2.1 *Traffic and Transport* will provide the community with certainty that Moorebank Avenue can be upgraded appropriately noting in particular that the design requires approval by RMS, Transport for NSW and other relevant agencies.

Construction traffic impacts

The modification seeks approval to allow for the importation of fill to the site and the upgrade of Moorebank Avenue from the northern to the southern extent of the Moorebank Precinct East site. The proponent submitted a Traffic and Transport Memorandum which considers the predicted construction traffic impacts arising from the modified proposal. The Traffic and Transport Memorandum predicted that the proposal would generate 1,030 heavy vehicle and 430 light vehicle two way traffic movements per day during construction. The proponent concluded that the *'construction traffic would not have an adverse impact on the performance of key intersections near the Moorebank Precinct East site and those intersections would operate at an acceptable level of service during the AM and PM peak periods'*.

Concerns were raised by Campbelltown City Council and in public submissions to the Department about the construction traffic impacts associated with the modification. Transport for NSW did not object noting that construction traffic impacts would be temporary.

The Department's assessment found that the construction traffic impacts can be adequately managed through the preparation and implementation of relevant construction management plans and would be further considered during the assessment of future development applications.

The Commission has reviewed the Future Environmental Assessment Requirements and finds that on balance the *Traffic and Transport* assessment requirement will ensure future development applications undertake a full assessment of construction traffic impacts. The Commission is satisfied that the traffic impacts from the construction of future development applications can be assessed and managed.

Operational traffic impacts and site access

The modification proposes amendments to site access, including the provision of a new access point along the northern boundary of the site. Council requested clarification of the purpose of the revised interim site access point and Campbelltown City Council raised concerns that reduction in the number of access points could have an adverse traffic impact. The proponent stated that the interim access via Moorebank Avenue would allow construction and interim operational access to warehousing facilities while avoiding direct impact on the Defence Joint Logistics Unit to the north. The proponent's modelling found that the new and interim site access intersections will operate satisfactorily.

The Department, however, concluded that the proponent had not provided sufficient justification for the proposed interim site access or the likely duration of its use. In addition, no modelling had been provided to confirm the proponent's statements that the intersections would continue to operate satisfactorily. The Department therefore recommended that the Terms of Approval 1.1 be amended to confirm that the proposed interim access point not be approved as part of the modification.

The Commission has reviewed the Department's recommended approach to removing the proposed site access from the adjoining Defence Joint Logistic Unit site. The Commission supports the Department's recommendation and has adopted the amendments to the Terms of Approval 1.1.

The community was particularly concerned about increased traffic movements and congestion resulting from the operation of intermodal development. Many were of the view that the traffic modelling prepared by the proponent did not accurately assess such traffic impacts. The community sought surety that the development would not have an adverse traffic impact on the local community.

The Commission notes that the Future Environmental Assessment Requirement 2.1 *Traffic and Transport* requires future applications to include a Traffic Impact Assessment identifying upgrades and mitigation measures to achieve the objective of not exceeding the capacity of the local road network. The Commission is satisfied that this Future Environmental Assessment Requirement is reasonable and will ensure operational traffic impacts are adequately considered.

5.6 Air quality impacts

The importation of fill, site disturbance and the associated dust impacts were raised by a number of individuals at the public meeting and within written comments. It was suggested that the project would increase air-born particulate matter during the construction stages of the development at nearby sensitive receivers. Residents in close proximity to the Stage 1 development currently underway cited significant increases in levels of dust since Stage 1 construction commenced.

The modification seeks to import fill which could generate additional dust emissions greater than what was assessed under the original Concept Plan Approval.

The proponent prepared a review of air quality impacts in support of this modification which assessed construction and operational impacts. Their response to submissions report noted that the revised assessment demonstrated in terms of the peak daily scenario, that the modelling impacts would not result in additional exceedances of the 24-hour impact assessment criteria with the exception of maximum cumulative 24-hour PM₁₀ (noting that the proposed real-time boundary monitoring for each phase of construction was designed to eliminate the risk of this occurrence).

The Environmental Protection Authority (EPA) recommended that future development applications include consideration of the maximum daily operation intensity and management measures to prevent exceedances of applicable air quality assessment criteria. The Department agreed and recommended that the Future Environmental Assessment Requirement 2.1 *Air Quality* be updated to align with the EPA's comments.

The Commission noted concerns raised by the community over the potential impact of truck diesel emissions on the Liverpool local government area and Western Sydney region, including that the high volume of truck movements using the outer Sydney road network were already having an impact on air quality across the region. The Commission acknowledges that although the average CO, NO₂ and SO₂ concentrations have declined since the 1980s (*Air Quality Trends in Sydney*, OEH, July 2014), future development applications will need to consider impacts on regional air quality.

The Commission has reviewed the proposed Future Environmental Assessment Requirement 2.1 *Air Quality* and is satisfied that future development applications will be required to undertake a comprehensive assessment of air quality impacts.

The Commission notes that one of the Future Environmental Assessment Requirements included within the Concept Plan's initial approval is 2.1 *Best Practice Review*. This requires (within any future development application) the preparation of a comprehensive review of intermodal operational best practice functions which includes the adoption of best practice emission controls. The inclusion of this Future Environmental Assessment Requirement will encourage future development applications within the Moorebank Precinct East area to adopt global leading technologies, minimising the potential impacts on the regional environment and nearby residents.

5.7 Noise and vibration impacts and construction hours

Some local residents raised noise impacts from the intermodal development as a concern to the Commission during the public meeting and within written comments. Residents, some of whom were within 500m of the boundary of the Moorebank Precinct East, wanted surety that there would be only minimal noise disturbance from the development.

The modification seeks to import fill to the site, upgrade Moorebank Avenue and amend the internal road network. These works have the potential to alter the noise impacts assessed as part of the original Concept Plan Approval. The proponent provided a Review of Noise and Vibration Impacts in support of the modification to assess the construction and operational impacts resulting from the proposed modification.

The Review of Noise and Vibration Impacts predicted that the modified proposal would not result in exceedances of the recommended Noise Management Levels at the sensitive receivers surrounding the site during the standard hours of construction. The proponent also stated that the operational noise impacts will be reduced for sensitive receivers at Wattle Grove and Wattle Grove North as the indicative warehousing layout provides additional acoustic shielding. The Review of Noise and Vibration Impacts predicted that the noise impacts associated with the modification would be reduced by up to 10 decibels.

The Department's assessment noted that the EPA disputed some of the assumptions made by the proponent's Review of Noise and Vibration Impact. However, in considering the modification's noise and vibration impacts, the Department found that sufficient information had been provided at the preliminary concept stage to address these impacts. The Department acknowledged that the Future Environmental Assessment Requirement 2.1 *Noise and Vibration* requires the proponent to prepare a noise impact assessment which will include management and mitigation measures where possible. Nevertheless, the Department has recommended amendments to strengthen Future Environmental Assessment Requirement 2.1 *Noise and Vibration* by requiring the proponent to investigate the potential noise impacts of the revised roads along the eastern boundary of the site at the development application stage.

The Department noted that public submissions raised concern regarding the allowance of construction work outside the standards hours of construction. The EPA also raised concern that insufficient justification for the additional hours had been provided by the proponent. The Department believes that the additional hours of construction works should be considered as part of the assessment of future development applications provided that the concerns of the public and the EPA are addressed as part of those determinations.

The Commission acknowledges that the allowance of construction work outside of standard hours of construction could have substantial benefits to the wider community. For example, the transportation of fill to the site outside the standard hours of construction could reduce the number of trucks on the road at peak times, minimising congestion. Whilst not all forms of construction are suitable to be undertaken outside normal hours, permitting certain works to occur out of hours can shorten the duration of the construction phase thereby reducing the period of impact on the local community without additional noise impacts. The Commission agrees with both the EPA and with the Department and considers that future development applications should ensure that adequate assessment has been undertaken to mitigate the potential impacts of any construction permitted outside of the standard hours.

The Commission notes that Future Environmental Assessment Requirement 2.1 *Noise and Vibration* requires all construction and operational noise and vibration impacts to be in accordance with the *NSW Industrial Noise Policy*, *Interim Construction Noise Guideline*, *Assessment Vibration: a technical guide*, *Rail Infrastructure Noise Guideline*, *Development Near Rail Corridors and Busy Roads Interim Guideline*, and with the *NSW Road Noise Policy 2011*. In addition, the Commission has amended the

Noise and Vibration Future Assessment Requirement 2.1 to also include that future development applications shall be prepared in accordance with the EPA's *Noise Policy for Industry 2017*. The Commission is satisfied that with this amendment the modification now adequately addresses the requirements for the assessment of future noise and vibration impacts.

5.8 Stormwater, flooding and drainage

Concerns were raised by Council and members of the public over the impacts of flooding and stormwater resulting from the intermodal facility. Residents were concerned that runoff from the site into local creeks and water catchments could alter hydrological flows. Residents echoed similar concerns as those raised by the Office of Environment and Heritage that by altering hydrological flows, local catchments could be adversely impacted and flood patterns could be modified and/or exacerbated.

OEH raised concern about the impact that cut and fill depths along the eastern and southern boundary of the site would have on the high biodiversity values of the adjoining Boot Land. In particular, changes in hydrology resulting from the fill could lead to sedimentation, weed infestation and deleterious impacts on downstream waterways. OEH also recommended additional flora surveys be undertaken within 30m of the eastern and southern boundaries of the site. The Department noted that vegetation impacts and removal were considered as part of the original Concept Plan Approval and were deemed acceptable subject to securing the relevant biodiversity offsets.

The Department concluded that additional stormwater impacts associated with the importation of fill are best considered as part of the assessment of future development applications. The Department consequently updated the Future Environmental Assessment Requirement 2.1 *Biodiversity* to require future development applications to consider direct and indirect impacts of fill on flora and fauna.

The Commission has reviewed the proposed Future Environmental Assessment Requirement 2.1 *Biodiversity* and *Soil and Water* to determine if adequate requirements have been included to ensure future development applications thoroughly assess stormwater and drainage impacts in relation to water capture and use. The Commission finds that there is a deficiency in the Future Environmental Assessment Requirement 2.1 *Soil and Water* for future development applications to sufficiently address contemporary water sensitive urban design principles. The Commission considers that it will be important for future development applications to adopt water sensitive urban design principles given the size of the site, the potentially large areas of hard landscape/road surfaces and of roof area and large water catchment during rain events. The Commission amended Future Environmental Assessment Requirement 2.1 *Soil and Water* to strengthen this provision. The Commission is satisfied that the amended Future Environmental Assessment Requirements allows for a comprehensive assessment of stormwater impacts to be undertaken.

5.9 Visual Impacts

The Commission heard from the community that residents of Casula will be subject to visual impacts from the proposed modification. The Department considered that the likely visual impacts of the Moorebank Precinct East development would be minimal given the surrounding built environment is predominantly light industrial. Minor increases in the visibility of buildings could be mitigated and the cumulative impacts would be minimal given the distance from nearby residential areas.

The Commission reviewed the Department's new recommended Future Environmental Assessment Requirement 2.1 *Visual Amenity, Urban Design and Landscaping*. The Commission considered that it should be strengthened to ensure future development applications also adequately consider the visual impacts and public safety impacts of onsite detention basins. The Commission has amended the Future Environmental Assessment Requirement accordingly.

The Commission notes that the visual impacts of the intermodal facility will primarily relate to building design and form, which will also be the subject of future development applications. The Commission

has reviewed the proposed Future Environmental Assessment Requirements and, subject to the changes recommended by the Commission requiring assessment of visual and safety impacts of onsite detention basins, is satisfied that future development applications can adequately assess visual impacts.

5.10 Reconfiguration of Concept Plan Approval intermodal layout

The modification seeks approval for a reconfiguration of the internal site layout including:

- relocation of the freight village from the north-east corner to the north-west corner of the site;
- provision of warehousing in the north-west corner of the site;
- reduction in the size of the intermodal terminal facility to accommodate the relocated freight village and additional warehousing area; and
- amendments to the indicative road layout.

The proponent considers that the amended layout will improve the overall efficiency and safety of the Moorebank Precinct East precinct. Council raised concerns that the location of a perimeter road on the eastern boundary of the project would cause significant impacts on the residents of Casula and Wattle Grove particularly in terms of light spill, noise and vibration and poor air quality. It also raised concerns that there Boot Lands would be negatively impacted in a similar fashion.

The Department concluded that the reconfiguration of the layout was generally acceptable and that the revised locations of the freight village and warehousing were appropriate. However, the Department found that the reconfiguration of the road network and the proposed future subdivision of the development did not demonstrate:

- direct heavy vehicle access between the intermodal terminal and the warehouses;
- internal light vehicle and pedestrian movements internally within the Moorebank Precinct East site; and
- the provision and responsibility of maintaining internal access.

The Department commissioned an independent acoustic assessment of the project which demonstrated that there would not be significant noise impacts on residents of Casula and Wattle Grove as a result of the reconfiguration of the layout of the project. However, the Department did raise concerns as noted above about the provision and maintenance of internal access arrangements and therefore recommended that these issues be considered in greater detail as part of Future Environmental Assessment Requirements. The Department therefore recommended Future Environmental Assessment Requirement 2.1 *Traffic and Transport* be amended to require future applications include an assessment of internal access and connectivity between intermodal activities, including the terminal, warehousing and freight village.

The Commission's notes that the modification request contained limited information detailing the internal layout and future subdivision of the development. The Commission agreed that the principles of the site reconfiguration are appropriate subject to the amended Future Environmental Assessment Requirement 2.1 *Traffic and Transport* and Future Environmental Assessment Requirement 2.1 *Subdivision* (See Section 5.13). Further assessment of the subdivision layout, site configuration and the internal traffic movements will be required to be documented in future development applications.

5.11 Freight village

The modification proposes to expand the land-uses within the freight village to include retail, commercial and light industrial uses, that would not normally be ancillary to an intermodal facility. The proponent concluded that *'the provision of the freight village is expected to be primarily to service employees of the intermodal terminal and warehousing facilities'* and not primarily to serve general members of the public.

The Department concluded that the proponent had not provided sufficient information to justify the expanded land uses and that the expansion of land-uses within the freight village is contrary to the original intent of the Concept Approval. However, the Department considered that with the appropriate safeguards, these proposed uses could be considered in future development applications provided they are not standalone retail or commercial developments independent of the intermodal development. To ensure this safeguard is met, the Department recommended amendment to the Future Environmental Assessment Requirement 2.1 *Freight Village*.

The Commission has reviewed the proponent's modification request and considers that expanded land uses within the freight village towards the northern end of the Moorebank Precinct East site would be appropriate if ancillary to the intermodal development. The Commission noted that under the original Concept Plan approval, a maximum 8,000m² gross floor area limit had been set for the freight village. The Commission was also advised by RMS that it is not concerned with the scale of the freight village in relation to traffic generation or impacts subject to assessment at detailed application stage. The Commission agrees that the 8,000m² gross floor area limit, in conjunction with the need for land uses within the freight village to be ancillary to the intermodal facility, will significantly restrict the potential for inappropriate (non-ancillary) land uses or intensity of uses to develop.

The Commission is satisfied that the Future Environmental Assessment Requirement 2.1 *Freight Village* (as amended) will adequately ensure that any proposed development within the freight village will need to demonstrate that they are ancillary to the function of the intermodal development.

5.12 Expansion of Concept Plan Approval site boundary

The proponent proposes to extend the Concept Plan site boundary to include:

- Moorebank Avenue, from the northern to the southern extent of the Moorebank Precinct East site;
- part of the Moorebank Precinct West site, to allow for the construction and use of a diversion road during construction of Moorebank Avenue; and
- two areas located at the north-western and southern sides of the site, for stormwater infrastructure.

The Department assessed the heritage and archaeological, contamination and hazards and biodiversity impacts of the site boundary expansion. The Department considers the expansion of the Concept Plan Approval site boundary would not alter the nature of the development or the conclusions reached in the determination of the Concept Plan. The Department is satisfied that any impacts associated with an expanded site boundary can be appropriately managed and mitigated where necessary.

The Commission agrees and is satisfied that the extended site boundary is not material and will not markedly alter the impacts of the proposed development.

5.13 Subdivision

The proponent proposes to subdivide Moorebank Precinct East as part of future development applications. The Department recommended the inclusion of a new Future Environmental Assessment Requirement 2.1 *Subdivision* requiring a subdivision plan with all necessary supporting documentation, including to identify the responsibility for delivery and ongoing maintenance of the intermodal site and provide overarching operational management details.

The Commission sought additional information from the proponent regarding ownership and agreements in place for the Moorebank Precinct East site. The Commission notes that the requirements of the Future Environmental Assessment Requirement 2.1 *Subdivision* are intended to ensure (among other things) that any proposed subdivision is appropriate to the purpose and to the ongoing sustainable management of the facility and site.

The Commission also notes that future development applications to subdivide the Moorebank Precinct East site will need to ensure the intent of the original Concept Plan approval, namely that it be an integrated intermodal facility.

Accordingly, the Commission supports the principle and logic of subdivision for the Moorebank Precinct East site, subject to detailed assessment of any subdivision proposals in future development applications.

6. COMMISSION'S FINDINGS AND DETERMINATION

The Commission notes that development of the Moorebank intermodal will contribute to improving the productivity of the freight network, including to minimise road congestion and boost the economic potential of the greater Sydney Region.

The Commission has considered carefully the proponent's proposed amendments, the Department's assessment report and the relevant matters for consideration under section 75W of the EP&A Act. The Commission considers that the proposed changes are within the scope of section 75W.


The Commission has considered the advice and recommendations from Council and government agencies including RMS, Transport for NSW and the OEH. The Commission has also listened to the concerns of members of the community at the public meeting in Liverpool and notes that many of these concerns were reiterated in written comments received by the Commission.

The Commission notes that a number of the concerns raised relate to fundamental objections to the approval of an intermodal facility in Moorebank. This approval is already in place. The Commission has therefore had regard to those comments only as they relate to the specific aspects of this particular modification application.

The Commission has responded to concerns expressed at the public meeting and in written submissions by making amendments to the Future Environmental Assessment Requirements and other conditions.

The Commission finds that the proposed modification of the Moorebank Precinct East Concept Plan does not fundamentally change the essential nature of the development in its currently approved Concept Plan. The Concept Plan approval, as modified, will continue to provide the intended integrated intermodal facility while further optimising the operation of the terminal, accommodating drainage infrastructure, improving environmental outcomes and enhancing safety. The modification proposal will also permit appropriate subdivision not contemplated at the time the Moorebank Precinct East Concept Plan was approved.

For the reasons set out in this report, the Commission has determined to grant consent to the modification request subject to the conditions set out in the instrument of modification.



Annabelle Pegrum AM (Chair)
Member of the Commission



Steve O'Connor
Member of the Commission



Peter Duncan AM
Member of the Commission