



Moorebank Intermodal Precinct West

MPW Concept Modification 2

MPW Stage 2 Modification 1

Stage Significant Development Modification Assessment

MPW Concept Modification 2 (SSD-5066-Mod-2)

MPW Stage 2 Modification 1 (SSD-7709-Mod-1)

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MPW Concept Modification 2 (SSD-5066-Mod-2)

MPW Stage 2 Modification 1 (SSD-7709-Mod-1)

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Glossary

Abbreviation	Definition
AHD	Australian Height Datum
CIV	Capital Investment Value
Council	Liverpool City Council
Department	Department of Planning, Industry and Environment
DJLU	Defence Joint Logistics Unit
EES	Environment, Energy and Science Group, Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
JN	Janus National, also known as Warehouse 6
JR	Janus Regional, also known as Warehouse 5
LEP	Local Environmental Plan
Minister	Minister for Planning and Public Spaces
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
NPfl	Noise Policy for Industry 2017
Planning Secretary	Secretary of the Department of Planning, Industry and Environment
RTS	Response to Submissions Report
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
SSD-5066-Mod-2	Moorebank Precinct West Concept Modification 2
SSD-7709-Mod-1	Moorebank Precinct West Stage 2 Modification 1
TfNSW	Transport for NSW

Executive Summary

Aspect Environmental Pty Limited (on behalf of SIMTA, as Qube Holdings Limited) (the Applicant), seeks to modify the Moorebank Precinct West (MPW) Concept consent (State significant development consent (SSD-5066)) and the MPW Stage 2 consent (SSD-7709).

Background

The MPW site is part of a wider precinct (Moorebank Intermodal Precinct), which includes the adjacent Moorebank Precinct East (MPE) intermodal facility and rail link to the Southern Sydney Freight Line (SSFL), freight village and associated warehousing.

The MPW Concept consent (SSD-5066) was granted on 3 June 2016, and provides for the use of the MPW site as an intermodal terminal facility, including a rail link to the SSFL, warehouse and distribution facilities, and associated works. As a staged State significant development (SSD 5066), approval of future development applications is required for construction and operation of the MPW facility. The MPW Concept consent included approval for Early Works (Stage 1 of the development) including building demolition and remediation of contaminated land.

The Concept consent has been modified once, on 30 October 2019, to make changes to the construction boundary for site access intersection works, and to the development layout including the number and location of onsite detention (OSD) basins; consolidate the two original rail intermodal terminals into a single regional and import/export facility; permit transfer of container freight between the MPW warehouses and MPE rail terminal; provide the ability to subdivide the site in the future; and reduce the number of construction stages, resulting in the MPW site being split into two separate general stages: Stage 2 (broadly within the northern and eastern parts of the site) and Stage 3 (within the southern portion of the site).

The MPW Stage 2 consent (SSD-7709) was granted on 12 November 2019, and comprises bulk earthworks, and construction and operation of an intermodal terminal (IMT) facility to accommodate 500,000 twenty-foot equivalent unit (TEU) container throughput capacity per annum, container storage area, rail link and internal road infrastructure, 215,000 m² gross floor area (GFA) of intermodal warehouse use, 800 m² GFA freight village including retail use, stormwater management infrastructure, including six onsite detention (OSDs) basins, upgrade of Moorebank Avenue/Anzac Road intersection and ancillary works.

Proposed Modifications

Together, the proposed modifications seek to facilitate the construction and operation of two high-bay warehouses on the MPW Stage 2 site. The Applicant proposes to build the two warehouses, known as warehouse 5 or 'JR' and warehouse 6 or 'JN', at the geographic centre of the MPW site. The Applicant proposes to build warehouses 5 and 6 to 39 m and 43.25 m in height respectively and operate automated retrieval systems to deposit and retrieve goods within high racking within the warehouses.

The proposed MPW Concept modification 2 (SSD-5066-MOD-2) seeks to adjust the southern operational boundary of the MPW Stage 2 warehouse area to partially encroach into the MPW Stage 3 construction area, and amend the maximum building height established across warehouse areas 5 and 6 from approximately 21 m up to and including 45 m.

The concurrent MPW Stage 2 Modification 1 (SSD-7709-MOD-1) seeks to adjust the southern operational boundary of the MPW Stage 2 warehouse area to partially encroach into the MPW Stage 3 construction area, and amend the maximum building height established across warehouse areas 5 and 6 from approximately 21 m up to and including 45 m. Amendments are also sought to increase operational noise criteria and to allow for the storage of dangerous goods on-site at warehouse areas 5 and 6.

Engagement

The Department exhibited the Modification Applications concurrently from 10 August 2020 to 25 August 2020.

The Department received a total of 52 unique submissions for MPW Concept Modification 2, including eight submissions from public authorities and Liverpool City Council, and 44 unique submissions (plus 7 proforma submissions) from community interest organisations and members of the public. All but one of the public submissions objected to the proposal. Community concerns related to hazards and risks, visual impacts, noise, health impacts, light spill, suitability of the site, and traffic impacts. Liverpool City Council (LCC) did not object to the modification but sought clarification regarding traffic impacts, conditions ensuring the safe storage of dangerous goods, and requested further examination of noise impacts.

The Department received a total of 55 unique submissions for MPW Stage 2 Modification 1, including nine submissions from public authorities and Liverpool City Council, and 46 unique submissions (plus 7 proforma submissions) from community interest organisations and members of the public. All of the public submissions objected to the proposal. Council and community group submissions raised similar issues as for the MPW Concept Modification 2.

Comments by Government agencies on both modification applications related to application of relevant operational noise guidance under the Noise Policy for Industry (EPA, 2017), hazards and risk, and traffic.

Assessment

The Department considers the key issues associated with the proposed modifications are built form and visual impact, traffic, noise and vibration, and storage of dangerous goods. The Department has considered these issues in its assessment, along with other issues including adjustments to internal operational boundaries and layout, heritage and Aboriginal cultural heritage, signage, neighbouring residential amenity / solar impacts, soil and water, air quality and odour, bushfire, biodiversity, waste, utilities, and consistency of the MPW Stage 2 modification 1 with the Concept consent. The Department has considered the merits of the proposal in accordance with section 4.15(2) and the objects of the *Environmental Planning and Assessment Act 1979*, principles of ecologically sustainable development, and issues raised in submissions as well as the Applicant's response to these.

Based on its assessment, the Department considers that the proposed modifications are in the public interest and are approvable, subject to the recommended conditions.

The Department has carefully considered the concerns raised by Council and the community about the impacts of the increased heights for warehouses JN and JR. The Department considers that the acceptability of the increased warehouse height is informed by the appropriateness of the detailed

design of built form, having regard to the potential benefits generated by high-bay warehousing at the site. The Department acknowledges the visual impacts of the proposal cannot be fully mitigated, however considers that the proposal provides an appropriate design response to reduce the visual impacts of the high-bay warehouses and to ensure high or substantial view losses are minimised.

The Department's assessment concluded that the site of warehouses JN and JR can suitably host buildings of increased height to accommodate high-bay warehousing, given its strategic location adjacent to the SSFL and the M5 and M7 motorways, and would not unreasonably impact on the surrounding area in terms of visual or amenity impacts.

The Department considered the potential for additional traffic to be generated by the high-bay warehouses in the context of the traffic assessments underpinning the MPW Concept and MPW Stage 2 consents, the comprehensive suite of existing conditions imposing container throughput caps on the site, setting out construction and operational traffic management frameworks, requiring road network upgrades, and the voluntary planning agreement which binds the Applicant to make satisfactory arrangements for the provision of regional road upgrades.

The Department considers that, while high-bay warehousing would change the nature of trip generation to and from the precinct by intensifying trip generation at those warehouses, traffic impacts of the proposal as modified could be acceptably controlled by a combination of:

- existing conditions of consent
- enhanced road safety requirements for the proposed site access
- an audited cap on traffic numbers that would apply to the MPW Stage 2 site.

The Applicant proposed a new set of operation noise limits for the wider Moorebank Intermodal Precinct to create a precinct-based noise management level consistent with the current Noise Policy for Industry. The Department acknowledges that, while the proposed conditions increase the maximum noise limits across the precinct, the new limits reflect the previously assessed and acceptable noise impacts of the MPW Stage 2 development, are consistent with NSW noise guidelines, and would be supported by retention of existing conditions of consent requiring the Applicant to build a 5m high noise wall along part of the western boundary.

The Department considers that its recommended conditions supplement an existing comprehensive and stringent set of construction and operation conditions applying across the MPW site, which would continue to manage and mitigate the impacts of the proposal on the locality.

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1 Introduction

This report provides an assessment of two separate applications to modify the Moorebank Precinct West (MPW) Concept consent (State significant development consent (SSD-5066)) and the MPW Stage 2 consent (SSD-7709).

The MPW Concept Modification 2 (SSD-5066-MOD-2), as amended by the Applicant's Response to Submissions (RtS), seeks approval to modify the MPW Concept Proposal and Early Works (Stage 1) consent to permit:

- the adjustment of the southern operational boundary of the MPW Stage 2 warehouse area to partially encroach into the MPW Stage 3 construction area
- amendment to the building height established across warehouse areas 5 and 6 from approximately 21 m up to and including 45 m.

The MPW Stage 2 Modification 1 (SSD-7709-MOD-1), as amended by the Applicant's Response to Submissions (RtS), seeks approval to modify Stage 2 of the MPW development to:

- amend the southern operational boundary
- construct and operate the "JR" and "JN" warehouses, two high-bay warehouses to be located in the (adjusted) southern part of the MPW Stage 2 warehouse area
- amend the operation noise limits for the MPW Stage 2 development established under condition B131 of SSD-7709
- amend condition B176 to allow for Dangerous Goods to be stored on-site at relevant portions of the Site pertaining to Warehouse areas 5 & 6.

The applications were lodged by Aspect Environmental Pty Ltd, on behalf of Sydney Intermodal Terminal Alliance (SIMTA), as Qube Holdings Limited (the Applicant), under section 4.55(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.1 Background

The Moorebank Intermodal Precinct (also known as the Moorebank Intermodal Freight Precinct or Moorebank Logistics Park) is located at Moorebank Avenue, Moorebank, and is proposed to comprise an interstate, intrastate and port shuttle freight and logistics handling facility for the Sydney Metropolitan Area. The Precinct covers an area of approximately 303 hectares and extends from the M5 South Western Motorway and the Defence Joint Logistics Unit (DJLU) site in the north and north-east, to the East Hills Rail Line in the south. It is divided into two sites: MPW and Moorebank Precinct East (MPE) (**Figure 1**).

Two separate concept approvals cover the MPW and MPE sites:

- concept consent for MPW: an import/export (IMEX) port shuttle freight terminal and separate interstate/intrastate freight terminal and associated warehousing and estate works (SSD 5066) — see **Section 1.2.1**.

- concept plan approval for MPE: an IMEX port shuttle freight terminal, rail link to the Southern Sydney Freight Line (SSFL) and associated warehousing and estate works (MP 10_0193) — see **Section 1.2.3**.

Works on the MPW site have commenced under two current and active development consents:

- MPW Stage 1 early works, which provides demolition, rehabilitation, remediation of contaminated land, and the establishment of construction facilities and access including site security (as part of the SSD-5066 consent) — see **Section 1.2.1**
- MPW Stage 2, which provides for the construction and 24/7 operation of an intermodal facility and associated warehousing (SSD-7709) — see **Section 1.2.2**.

1.1.1 The site and surroundings

The MPW site is located on the western side of Moorebank Avenue, and forms the western section of the Moorebank Intermodal Precinct (**Figure 1**).

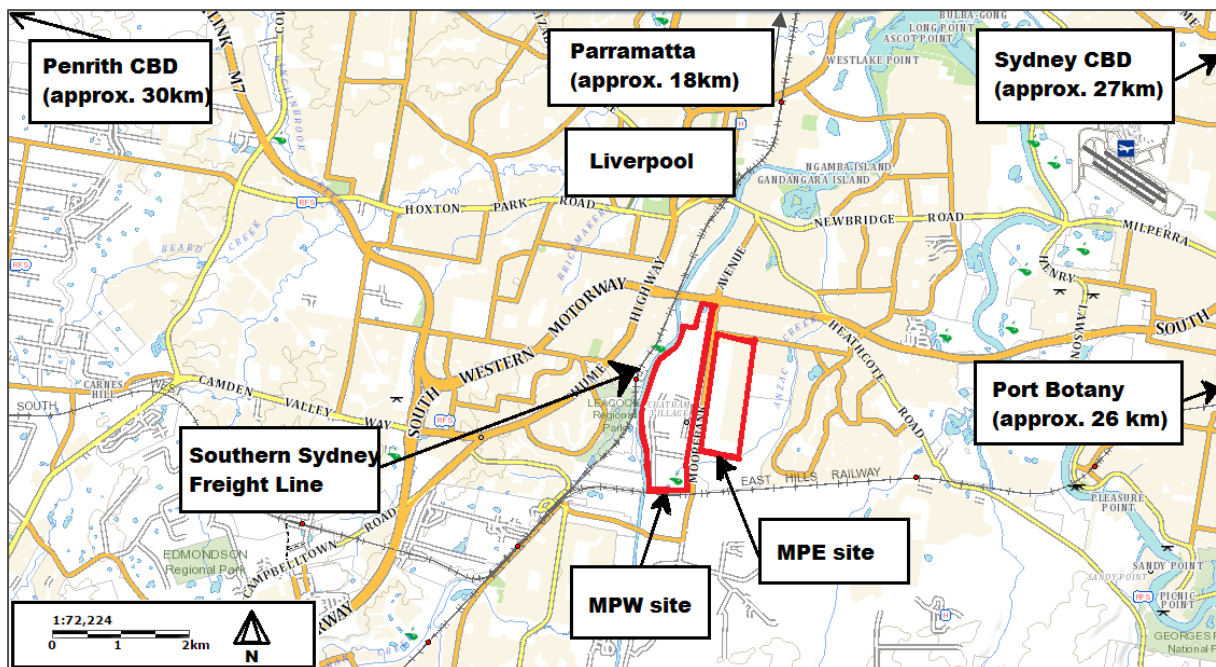


Figure 1 | Site location (outlined red) (Base source: SIX Maps)

The MPW site is irregular in shape, approximately 3 km from north to south and 960 m from east to west at its widest point, and covers an area of approximately 220 ha. It is situated between the Georges River to the west (with the SSFL running north-south to the west of the river); and Moorebank Avenue, the MPE site, densely vegetated Commonwealth Land (known as the 'Boot Land') and the DJLU site to the east. The Holsworthy Military Reserve is located south of the East Hills line.

The area surrounding the MPW site comprises a number of different land uses. To the north beyond the DJLU continuing to the north of the M5 Motorway, is a 200 ha industrial precinct, which supports a range of uses including freight and logistics, heavy and light manufacturing, office and business park developments. Residential land uses are beyond.

The closest residential properties to the site are in Casula to the west (approximately 200 m), Wattle Grove North to the north-east (approximately 650 m), Glenfield to the south-west (approximately 800 m) and Wattle Grove to the east (approximately 1 km). Surrounding land uses are shown in **Figure 2**.

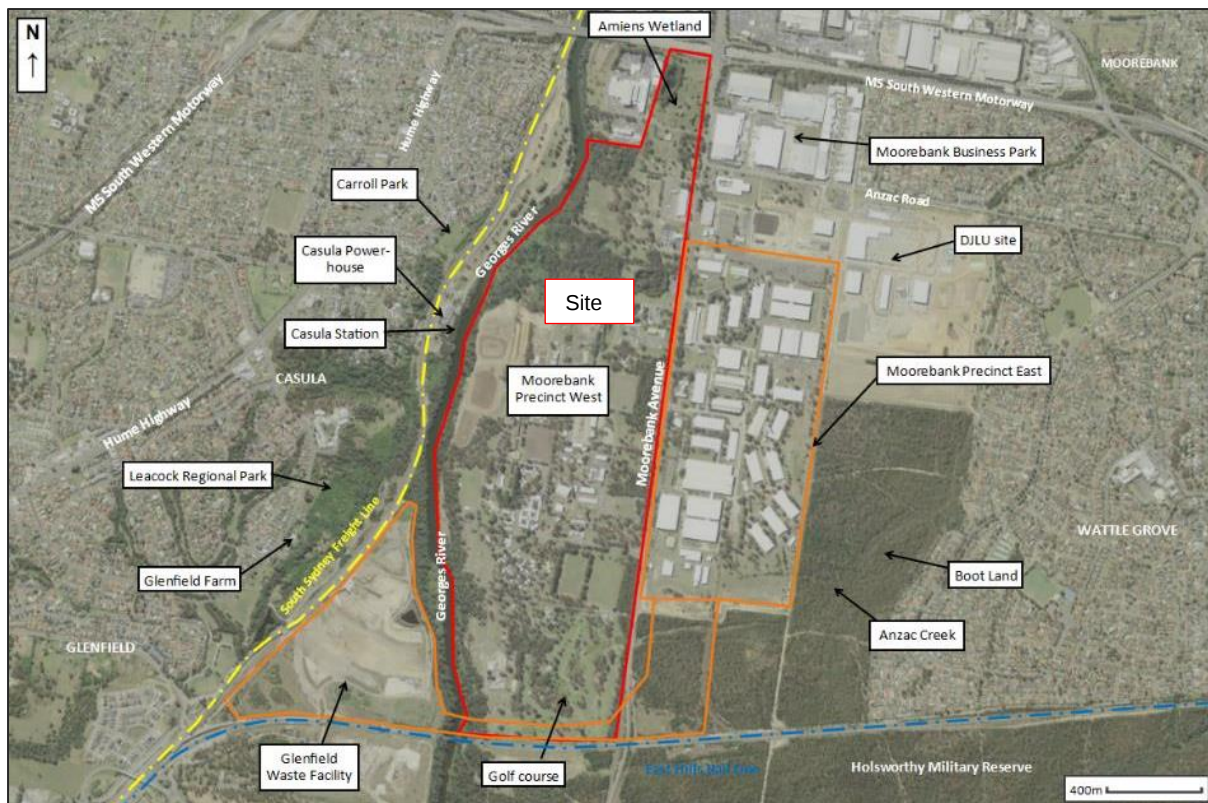


Figure 2 | Surrounding Land Uses (Base source: Nearmap)

The M5 South Western Motorway is located north of the site and the SSFL is located approximately 1 km west. The East Hills line is located to the south of the site.

In the time since approval of the MPW Stage 2 application, a number of infrastructure upgrades to the regional and State freight networks have obtained planning approval, including the duplication of the Botany (freight) Rail Line (SSI-9714) and construction and operation of a passing loop on the eastern side of the SSFL between Cabramatta Station and Warwick Farm Station (SSI-9188), both of which were approved by the Minister for Planning and Public Spaces on 28 July 2020, and would increase capacity on the freight rail network between the site and Port Botany once operational. TfNSW has commenced design on the M5 Motorway westbound traffic upgrade proposal, between Moorebank Avenue and Hume Highway, and conducted public consultation on the proposal in 2019/2020 to assist in the development of the concept design and planning. The location of the site in the context of major transport corridors and infrastructure is shown in **Figure 3**.

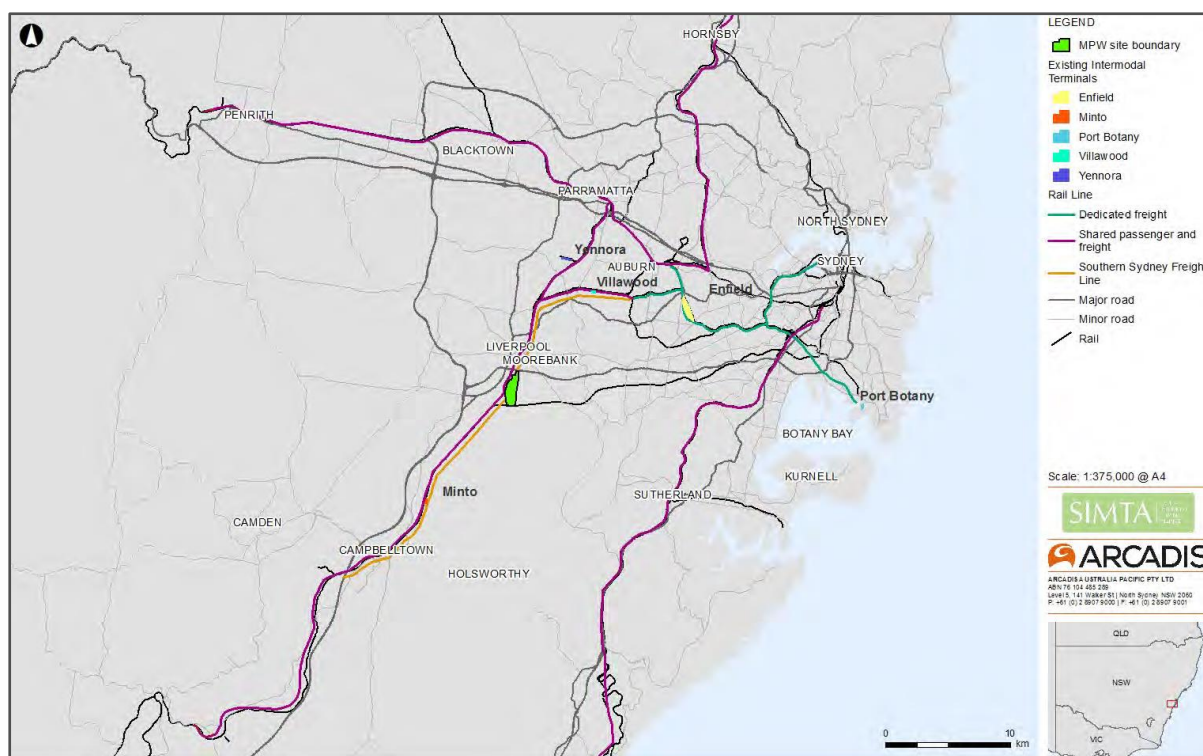


Figure 3 | Metropolitan transport context (Source: Figure 2-1, MPW Stage 2 EIS)

1.2 Approval history

1.2.1 MPW Concept consent (SSD 5066)

On 3 June 2016, development consent was granted by the then Planning Assessment Commission for the MPW Development SSD 5066. The development consent, which included conditions to be met for future development applications, was for the:

- **Concept Proposal:** involving the use of the site as an intermodal facility, including rail link to the SSFL, warehouse and distribution facilities, and associated works
- **Early Works (Stage 1):** involving the demolition of buildings, including services termination and diversion; rehabilitation of the excavation / earthmoving training area; remediation of contaminated land; removal of underground storage tanks; heritage impact remediation works; and the establishment of construction facilities and access, including site security.

On 30 October 2019, consent was granted by the Independent Planning Commission to modify the Concept Consent SSD 5066 (SSD-5066-Mod-1), to permit:

- importation of 1,600,000 m³ of fill for bulk earthworks
- amendment to the intermodal terminals (the development of a single terminal on site, and deletion of a southern terminal)
- reclassification of the northern intermodal terminal to handle interstate, intrastate and Port shuttle freight and the movement of freight between MPW warehouses and the MPE intermodal terminal

- amendments to warehousing, freight village, parking, building heights and the number of onsite detention basins
- consolidation of staging
- inclusion of the ability to subdivide the site under a future development application
- expansion of the site boundary for upgrade of the Moorebank Avenue/Anzac Road intersection, affecting neighbouring land.

1.2.2 MPW Stage 2 consent (SSD 7709)

On 12 November 2019, development consent was granted by the Independent Planning Commission for the MPW Stage 2 development (SSD 7709), which included:

- the importation, temporary stockpiling and placement of 1,600,000 m³ of clean fill over the entire site and construction of temporary ancillary facilities including for material crushing
- construction and 24/7 operation of an IMT facility to support a container freight throughput volume of 500,000, twenty-foot equivalent units (TEUs) per annum
- operation of the rail link to the SSFL (constructed under MPE Stage 1) and container freight movements by truck between the MPE IMT and MPW warehouses
- construction and 24/7 operation of a warehouse estate (215,000 m² GFA) on the northern part of the site
- intersection upgrades on Moorebank Avenue at Anzac Road and Bapaume Road
- construction and operation of onsite detention basins and bioretention/ biofiltration systems, and trunk stormwater drainage on the northern part of the site.

The MPW Stage 2 consent was granted following the Planning Secretary's certification that a voluntary planning agreement entered into between the Applicant and Transport for NSW (Roads and Maritime Services (RMS)) provided satisfactory arrangements for the provision of relevant State public infrastructure. The voluntary planning agreement is discussed in **Section 1.3**.

The MPW Stage 2 consent has not previously been modified.

1.2.3 Other relevant approvals

The Moorebank Intermodal Precinct includes the MPE development. A summary of consents and modifications for the MPE site is provided in **Table 1**.

Table 1 | Summary of MPE consents and modifications

Application (Application No.)	Development	Approval Date
MPE Concept Plan (MP 10_0193)	Use of the MPE site as an intermodal facility, which includes: • a rail link to the Southern Sydney Freight Line (SSFL) within an identified rail corridor • warehouse and distribution facilities • freight village (ancillary site and operational support services)	29 September 2014

Application (Application No.)	Development	Approval Date
	stormwater, landscaping, services and associated works.	
MPE Concept Plan Modification 1 (MP 10_0193 MOD 1)	- increasing the MPE site area and amending 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 from the northern to southern extent of the site - provision of a new and interim site access - reconfiguration of internal road layouts and use of all internal roads by both light and heavy vehicles - importation of approximately 600,000 m² of clean fill for bulk earthworks - revised warehousing and freight village locations and layouts - expansion of land-uses within the freight village - revision of the staging of the project.	12 December 2016
MPE Stage 1 [MPE Stage 1]: intermodal terminal facility including connection to SSFL (SSD 6766)	Construction and operation of the following within the intermodal site: - intermodal facility operating 24 hours a day, seven days a week, handling container freight with a volume of up to 250,000 TEU per annum, including truck processing and loading area, rail loading and container storage areas, and an administration facility and associated car parking - a rail link running adjacent to the East Hills Rail Line, connecting the southern end of the site to the SSFL - associated works including rail sidings, vegetation clearing, remediation and levelling works, and drainage and utility installation.	12 December 2016
MPE Stage 2 (SSD 7628)	Partial consent for the MPE Stage 2 intermodal warehousing development, comprising - earthworks including the importation of 600,000 m³ of fill 300,000 m² GFA of warehousing 8,000 m² GFA freight village - establishment of internal roads, connection to the surrounding road network/site access - raising the level and upgrading Moorebank Avenue, upgrade of Moorebank Avenue intersections and temporary diversion road - ancillary works including stormwater/flooding drainage infrastructure, utilities, vegetation clearing, landscaping, earthworks, remediation and signage.	31 January 2018
MPE Stage 2 (SSD 7628)	Partial consent for the staged subdivision of the MPE Stage 2 site.	4 April 2019
MPE Stage 2 Modification 1 (SSD-7628- Mod-1)	change in the timing for road upgrade design approval and completion of upgrade works.	Under assessment
MPE Stage 2 Modification 2 (SSD-7628- Mod-2)	- adjustment to the southern boundary of the site to facilitate a revised drainage system layout and design for Onsite Stormwater Detention (OSD) basin number 2 - removal of the requirement for maximum batters of 1V:4H for OSD basin number 9.	31 January 2020

Application (Application No.)	Development	Approval Date
MPE Stage 2 Modification 3 (SSD- 7628- Mod-3)	- amending the MPE Stage 2 subdivision development consent to include the subdivision of two additional lots (creating four lots) in the subdivision plan at Appendix 1 - changing the frequency for compliance reporting required under condition C21(c)(ii) from quarterly to six-monthly - revising controls relating to building signage as part of the Signage Sub Plan, set out in condition B141(f) of the consent - updating multiple conditions to correct referencing, to avoid misinterpretation and facilitate effective compliance.	18 December 2020
MPE Stage 2 Modification 4 (SSD- 7628- Mod-4)	exempt Area 1 (carparking adjacent to Warehouse 1) from the requirement to provide 2.5 m wide landscaped bays every 6-8 car spaces incorporating canopy trees for shade.	Under assessment

1.3 Voluntary planning agreement

Under the Liverpool Local Environmental Plan (LEP) 2008, the Applicant is required to make satisfactory arrangements to contribute to the provision of relevant State public infrastructure for certain development applications on the MPW site. The requirement was included in the LEP when the site was rezoned for future use as an intermodal terminal and applies where the site is developed intensively for an intermodal terminal.

Because the MPW Stage 2 proposal would significantly increase traffic to and from the site, the Applicant was required to make satisfactory arrangements to contribute to providing State and regional road upgrades, by entering into a planning agreement with RMS (now TfNSW) to provide for transport or other infrastructure relating to the MPW Stage 2 site. The Applicant made an offer to RMS, as a planning authority, to enter into a planning agreement, under which Applicant proposed to:

- make a cash contribution of \$48 million to regional road upgrades
- upgrade Moorebank Avenue south of the entrance to MPE freight terminal or, if an environmental impact assessment is completed and a separate planning approval granted at a later date, relocate Moorebank Avenue to the east of the MPE site (known as the Moorebank Avenue realignment).

The planning agreement was executed by the parties on 25 March 2019, following exhibition of the draft planning agreement between 1 November 2018 and 29 November 2018. On 23 April 2019, the Acting Deputy Secretary, under delegation from the Planning Secretary, certified in writing to the consent authority that satisfactory arrangements had been made.

2 Proposed modifications

On 24 July 2020, the Applicant lodged two modification applications, seeking to amend both the Moorebank Precinct West (MPW) Concept consent (SSD-5066) and the MPW Stage 2 consent (SSD-7709).

Together, the two modification applications seek to facilitate the construction and operation of two high-bay warehouses on the MPW site. The Applicant proposes to build the two warehouses, known as warehouse 5 or 'JR' and warehouse 6 or 'JN', at the geographic centre of the MPW site. The proposed JN warehouse and some site infrastructure and hardstand areas are proposed to be built largely on land outside the warehousing area approved as part of MPW Stage 2, in an area known as the 'southern fill area' or 'Stage 3 site'.

Therefore, both the MPW Concept modification 2 and MPW Stage 2 modification 1 applications seek approval to adjust the southern operational boundary of the MPW Stage 2 warehouse area, to include JN in the approved warehouse area.

The Applicant also seeks amend the maximum building height established under both consents for warehouse areas 5 and 6, from approximately 21 m up to and including 45 m, to allow JN and JR to be built and operated as high-bay warehouses.

Sketches of the proposed JR and JN buildings are shown in **Figure 4**.



Figure 4 | Warehouse JR (left) and JN (right) (Source: MPW Stage 2 Mod 1 RTS, Appendix 4)

Figure 5 provides a sketch of proposed warehousing on the site, including warehouses JR and JN, and the indicative building envelopes of the remaining approved warehousing on the MPW site, located to their north (to the upper left of the figure).



Figure 5 | JR and JN – North-east facing perspective drawing of proposed warehousing only (Source: MPW Stage 2 Mod 1 RTS, Appendix 4)

The MPW Stage 2 Modification 1 application also seeks to:

- increase operational noise criteria
- allow for the storage of Dangerous Goods on-site at warehouses 5 and 6
- allow for changes in vehicle trip generation from the development.

The proposed modifications are described in detail below.

2.1 Adjustment of the southern operational boundary

The proposals seek to reconfigure the MPW Stage 2 operational boundaries to incorporate the new location of warehouses 5 and 6.

The MPW Stage 2 warehouse area and layout are governed by:

- the MPW Concept consent, which specifies those parts of the site to be developed for warehousing as part of MPW Stage 2, and those parts of the site subject to development under future staged DAs
- the MPW Stage 2 consent, which defines the site boundaries, and provides for the detailed site design to be finalised within those boundaries as part of a 'development layout plan' prepared for the approval of the Planning Secretary, subject to modifications identified in the conditions of consent, and consistent with outcomes and objectives specified in the consent.

Both modifications seek approval to expand the MPW Stage 2 'warehouse area', as approved under MPW Stage 2, to the south to allow construction in an area previously deferred for warehouse development under a future stage of the overall MPW development.

The current extent of the warehouse area is shown in the site plan in Appendix 1 of the MPW Stage 2 consent. A copy of the site plan, reformatted by the Applicant to allow comparison with its new proposed warehouse area and boundary, is shown in **Figure 6**.

The Applicant proposes to construct the majority of the JN warehouse, and hardstand, truck bays and part of the bridge between JN and JR, in the area south of the existing warehouse area's southern boundary. The proposed warehouse area and boundary, also showing the proposed warehouse layout, are shown in **Figure 7**.

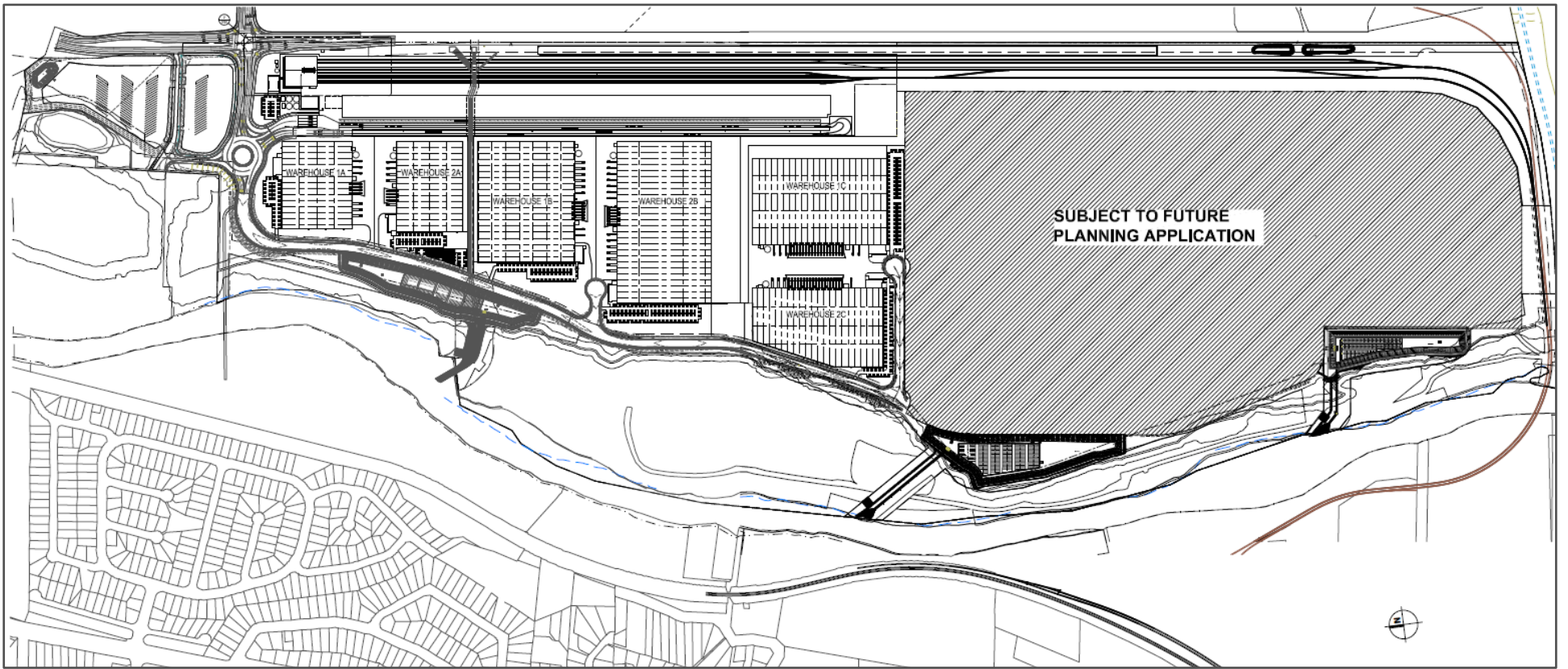


Figure 6 | The Approved Site layout (Source: RTS, Appendix 1, Precinct Plan)

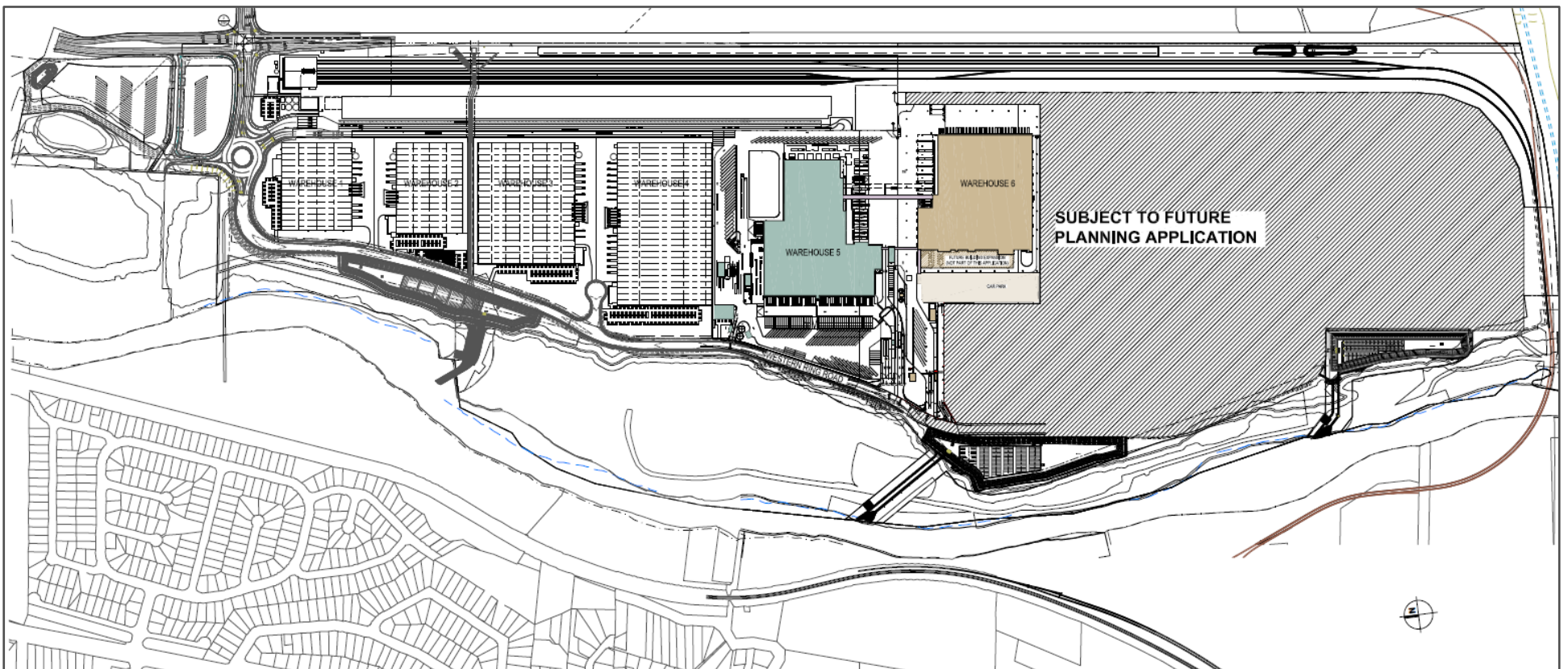


Figure 7 | The Proposed Site layout (Source: RTS, Appendix 1, Precinct Modification Plan — Proposed [sic])

2.2 Increase of building heights for the JN + JR warehouses

The Applicant also seeks to construct and operate warehouses 5 and 6 as high-bay warehouses, with heights up to 45 m. The Applicant proposes to build warehouses 5 and 6 to 39 m and 43.25 m in height respectively and to operate automated retrieval systems to deposit and retrieve goods within high racking within the warehouses.

The heights of buildings on the MPW Stage 2 site is governed by:

- the MPW Concept consent, which specifies that buildings heights across the MPW site are to be a maximum of 21 m above finished surface levels (which may not exceed 16.6m AHD).
- the MPW Stage 2 consent, which approved the Applicant's proposal for warehouses up to 13.7m in height.

The Applicant seeks approval for the following amendments to maximum heights (as measured from finished surface level), as shown in **Table 2**.

Table 2 | Approved and proposed warehouse heights

Warehouse	MPW Concept consent	MPW Concept Modification 2 — proposed concept-level height	Current approved height MPW Stage 2	MPW Stage 2 Modification 1 — proposed height of building
Warehouse 5 / JR	21m	45m	13.7m	39.4m
Warehouse 6 / JN	21m	45m	13.7m	43.25m

The proposed height of warehouse 5 / JR was reduced (from original proposal for 42.6 m) as part of the Applicant's Response to Submissions, which the Applicant's Operational Noise Management Report (Renzo Tonin & Associates 2020) concluded to be 'a more appropriate level consistent with the surrounding industrial character articulated within the Moorebank Logistics Park (MPE & MPW), as well as other surrounding industrial developments to the north of the site'.

2.3 Amendment to noise criteria

As part of the MPW Stage 2 Modification 1 application, the Applicant also seeks to amend the operational noise criteria for the site that apply under the MPW Stage 2 consent.

Currently, operational noise limits for the site are prescribed under condition B131 (among other conditions) of the MPW Stage 2 consent. That condition requires the Applicant to ensure that the noise generated by the overall precinct operations (defined as all activities approved for both MPW and MPE) does not exceed the noise limits in **Table 3** below:

Table 3 | MPW Stage 2 operational noise limits (SSD-7709, condition B131)

Location (residential receivers)	Day $L_{Aeq,15\text{ minute}}$	Evening $L_{Aeq,15\text{ minute}}$	Night $L_{Aeq,15\text{ minute}}$	Night $L_{A1,1\text{ minute}}$
Casula	39 dB	35 dB	35 dB	52 dB
Glenfield	35 dB	35 dB	35 dB	52 dB
Wattle Grove	36 dB	35 dB	35 dB	52 dB

As part of the MPW Stage 2 Modification 1 application, the Applicant seeks to apply a new whole-of-precinct operational noise limit. The Applicant commissioned Renzo Tonin and Associates to review noise impacts for approved development across the MPW and MPE sites and propose operational noise limits for a new 'Moorebank Noise Management Precinct'. The Applicant asserts the proposed noise limits are intended to cover all operations across MPW and MPE, in accordance with the precinct-based approach to noise management introduced by the Noise Policy for Industry (EPA, 2017). The proposed limits for the Moorebank Noise Management Precinct are outlined in **Table 4**.

Table 4 | Proposed Moorebank Noise Management Precinct operational noise limits

Location (residential receivers)	Day $L_{Aeq,15\text{ minute}}$	Evening $L_{Aeq,15\text{ minute}}$	Night $L_{Aeq,15\text{ minute}}$	Night $L_{A1,1\text{ minute}}$
Casula	46 dB	44 dB	39 dB	52 dB
Glenfield	49 dB	46 dB	42 dB	52 dB
Wattle Grove	44 dB	42 dB	42 dB	52 dB
Wattle Grove North	41 dB	41 dB	41 dB	52 dB

Source: Table 5-11, Operational Noise Management Report (Renzo Tonin & Associates 2020)

2.4 Storage of dangerous goods

Under the MPW Stage 2 Modification 1 application, the Applicant seeks approval for storage of dangerous good on site.

Under the MPW Stage 2 consent, total quantities of dangerous goods must be kept below screening threshold quantities and movements listed in the *Hazardous and Offensive Development Guidelines: Applying SEPP 33* (Department, January 2011).

The Applicant seeks approval to store quantities of Class 2.1 Liquified Gas (Aerosols) on site at levels exceeding the threshold, and provided a preliminary hazard analysis in support of the request as part of the RTS.

2.5 Traffic generation

As part of the MPW Stage 2 Modification 1 application, the Applicant seeks approval for the predicted traffic trip generation of the proposed JN and JR warehouses as part of the MPW Stage 2 development.

The MPW Stage 2 Modification 1 application was accompanied by a traffic impact assessment, prepared by Ason Group, which provides updated predicted heavy and light vehicle trip generation for warehouses 5 and 6. The traffic impact assessment derives assumptions about warehouse operations from previous traffic assessment and modelling for the precinct prepared as part of the MPW Stage 2 development application, and for:

- daily truck movements for JR and JN, based on warehouses at Minchinbury and Yennora (respectively), applying assumed reductions in its 'Primary' and 'Primary Connect' truck movements to reflect the integration of the MPW warehousing with the intermodal rail terminal, and the Applicant's own truck volume targets
- daily light vehicle movements, based on generic precinct-wide assumptions on indicative worker shifts and warehouse floor area.

The Applicant predicts the JR and JN development would generate:

- 1,654 heavy vehicle movements per day, including
 - 62 heavy vehicle trips in the morning peak traffic hour (8.00am-9.00am)
 - 70 heavy vehicle trips in the afternoon peak traffic hour (5.00pm-6.00pm)
- 1,988 light vehicle movements per day, including:
 - 1 light vehicle trip in the morning peak traffic hour (8.00am-9.00am)
 - 0 light vehicle trips in the afternoon peak traffic hour (5.00pm-6.00pm).

Forecast overall daily two-way truck movements from JR and JN are provided in **Table 5** below. The movements are provided as two-way (entry and exit) numbers, so equal half of the overall heavy vehicle movements shown above.

Table 5 | Predicted daily heavy vehicle movements – two-way movements

Traffic Generator	JR			JN		
	B-double	Semi-trailer	Total	B-double	Semi-trailer	Total
Primary	267	47	314	20	111	131
Primary Connect	-	-	-	17	-	17
Secondary	-	344	344	16	5	21

(Source: Table 10, MPW Stage 2 Mod 1 Modification Report, Appendix 8)

3 Strategic context

The Moorebank Intermodal Precinct is identified as an 'important freight and logistics precinct' in *Building Momentum: State Infrastructure Strategy 2018-2038* (INSW 2018). The Strategy indicates that the terminal is one of the 'highest priority investments necessary to achieve a target of carrying 40 per cent of containerised traffic on rail to and from Port Botany' to alleviate existing congestion on the road network around the site.

The *Future Transport Strategy 2056* (NSW Government 2018) emphasises the need for safe, efficient and sustainable movement of freight, and sets a series of future directions for investigation including expanding intermodal rail capacity in Western Sydney. The *NSW Freight and Ports Plan* (2018) concludes that intermodal terminals within Greater Sydney are 'critical for increasing the utilisation of the rail freight network, particularly containers to and from Port Botany'.

The Greater Sydney Commission's (GSC) *Greater Sydney Regional Plan – A Metropolis of Three Cities*, notes that freight volumes are forecast to 'almost double in the next 40 years' and 'increasing importance [is being] placed on 24/7 supply chain operations to maintain Greater Sydney's global competitiveness.' The Plan notes that 'substantial future industrial land supply', including the Moorebank Intermodal Precinct, 'will support large-scale logistics growth'.

The GSC's *Western City District Plan* states that:

Investment in potential dedicated freight corridors will allow a more efficient freight and logistics network. Moorebank Intermodal Terminal is currently under construction in western Sydney, and will provide an integrated service including interstate terminals, warehousing, retail and service offerings, and rail connection to the Southern Sydney Freight Line, which also provides dedicated freight rail access all the way to Port Botany. Transport for NSW and the Australian Government are committed to supporting efficient movement of goods close to the Moorebank Intermodal Terminal by facilitating freight rail and road access.

4 Statutory Context

4.1 Scope of Modification

The Department has reviewed the scope of the modification applications and considers that the applications:

- would not significantly increase the environmental impacts of the developments as approved
- are substantially the same developments as originally approved.

Therefore, the Department is satisfied the proposed modifications are within the scope of section 4.55(2) of the EP&A Act and do not constitute new development applications. Accordingly, the Department considers that the applications should be assessed and determined under section 4.55(2) of the EP&A Act rather than requiring new development applications to be lodged.

4.2 Consent Authority

The Minister for Planning and Public Spaces (the Minister) is the consent authority for the modification applications under section 4.5(a) of the EP&A Act. However, under the Minister's delegation dated 9 March 2020, the Deputy Secretary, Assessment and Systems Performance, may determine the applications as a political disclosure statement has not been made.

4.3 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act requires the following matters to be assessed, as identified in **Table 6**.

Table 6 | Section 4.15(2) considerations

Matter	Consideration
Whether the proposed modifications are of minimal environmental impact	The proposed modifications seek approval for construction and operation of two high-bay warehouses on the MPW Stage 2 warehouse area. The Department has considered the impacts of the proposed development, and conditions have been recommended to ensure minimal environmental impacts. The Department has considered the Applicant's assessment of environmental impacts and considers the proposed modifications would result in minimal environmental impacts.
Whether the development to which the consent as modified relates is substantially the same development	The Department considers that the approved development, as proposed to be modified, would remain substantially the same.
Whether notification has occurred, and any submissions have been considered	In accordance with the EP&A Act and the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), the modifications were exhibited.

Matter	Consideration
	The Department exhibited on the Department's website for 15 days. Liverpool City Council (Council), relevant government agencies and previous submitters were consulted regarding the modifications. Council, government agencies, three local stakeholder groups, and 48 community members provided submissions, which are considered in Section 5 and 6.
Any submission made concerning the proposed modifications has been considered.	The Department's consideration of the submissions received is discussed in Section 5 and 6 of this report.
Any relevant provisions of section 4.15(1) of the EP&A Act	The relevant provisions of section 4.15(1) of the EP&A Act are considered in this section and Section 6 of this report.
Consideration of the reasons for the granting of the consent that is sought to be modified	The Department has considered the findings and recommendations in the Assessment Reports for SSD-5066 and SSD-7709, and the key reasons for granting consent outlined in the Notices of Decision. The Department is satisfied that the key reasons for the granting of consent continue to be applicable to the development, as modified.

5 Engagement

5.1 Department's engagement

In accordance with the requirements of Schedule 2 of the EP&A Act and clause 118 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation), the Department exhibited the Modification Applications concurrently from 10 August 2020 to 25 August 2020 (16 days).

The Modification Applications were exhibited on the Department's website. The Department notified adjoining landholders and relevant public authorities including council in writing. Department representatives visited the site to provide an informed assessment of the proposal.

The Department has considered the comments raised in the public authority and public submissions during the assessment of the Modification Applications (**Section 6**) and by way of recommended conditions in the instruments of consent for each respective application at **Appendix C**.

5.1.1 Response to Submissions

Following the exhibition of the Modification Applications, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions.

On 29 October 2020, the Applicant provided a Response to Submissions (RtS) report for each of the modification applications (**Appendix A**) to address the issues raised during the exhibition. The RtS reports provided additional information, including a revised visual analysis and preliminary hazards analysis, and reduction in the maximum proposed height the JR warehouse (see **Section 2**).

The RtS reports were made publicly available on the Department's website. Following review of the revised preliminary hazards analysis, DPIE Hazards advised that they have no concerns regarding the proposed modification on risks grounds and recommended relevant conditions of consent to appropriately regulate hazards and risks on the site.

5.2 MPW Concept Modification 2 (SSD-5066-Mod-2)

5.2.1 Summary of submissions

The Department received a total of 52 unique submissions for SSD-5066-Mod-2, including submissions from public authorities, organisations and the community. A summary of the submissions received is provided in **Table 7** and copies of the submissions may be viewed at **Appendix A**.

Table 7 | Summary of submissions

Submitter	Number	Position
Public Authority	7	
Transport for NSW	√	Comment

Environment, Energy and Science Group, DPIE	√	Comment
Environment Protection Authority	√	Comment
Heritage NSW – Aboriginal cultural heritage (ACH)	√	Comment
Sydney Water	√	Comment
Rural Fire Service	√	Comment
Endeavour Energy	√	Comment
Liverpool Council	1	Comment
Community	44	43 unique objections 1 comment
TOTAL	52	43 unique objections 9 Comment

5.2.2 Public authority submissions

A summary of the issues raised in the public authority and public organisation submissions is provided at **Table 8** and copies of the submissions may be viewed at **Appendix A**.

Table 8 | Summary of public authority submissions

Public Authority
Liverpool City Council (Council) Council does not object to the proposal. However, it has concerns with regards to the proposal and requests: • clarification regarding the traffic implications that will arise as a result of the proposed modification, or confirmation whether traffic arrangements will remain unchanged under the existing consent • the provision of a pedestrian bridge from Casula train station to the MPW site • conditions surrounding the safe storage of dangerous goods must be in a manner that will safeguard the community • the consideration of acoustic impacts associated with the proposed modifications to the Concept Plan, including the examination of noise impacts attributed to the two distribution centres. It will be necessary to demonstrate that the previously submitted acoustic reports incorporate an effective assessment of the proposal comprising all modifications • the calculation of noise levels to be determined at the most affected point on or within the property boundary Council raises concern that the visual impacts of the proposed warehouses seem significant from certain vantage points in Casula, and that mitigation measures cannot be provided to enable the retention of scenic views from properties in Casula

Transport for NSW (TfNSW)

TfNSW does not object to the proposal, on the basis that the warehouse GFA was not increasing, but reiterated that its previous advice on the MPW Concept application remained applicable.

Environment, Energy and Science Group, DPIE (EES)

EES advised no comment.

Sydney Water

Sydney Water requests that a condition is included requiring the submission of approved plans to be submitted to the Sydney Water Tap In online service, to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easements.

Heritage NSW – Aboriginal cultural heritage (ACH)

ACH does not object to the proposal, and notes that the proposed modification does not appear to have any additional effect on Aboriginal cultural heritage that was not already approved under the SSD-5066 development consent.

Environment Protection Authority

The EPA considers that the proposed management measures outlined adequately address the key environmental issues, and therefore had no comments.

Endeavour Energy

Endeavour Energy does not object to the proposal. However, it notes that the higher density high-bay warehouses proposed may result in an increase in peak demand at Anzac Village Zone substation and changes to the local network to accommodate the higher loads. The proposals do not appear to address the potential impact of the modifications on the electricity infrastructure or the suitability of the site for the development in regard to whether the available electricity services are adequate for the development.

5.2.3 Public Submissions

There were 44 unique public submissions received from individuals and key local stakeholder groups (a total of 51 when including seven proforma submissions received). Local stakeholder group submissions were received by:

- RAID Moorebank Inc
- East Liverpool Progress Association
- Georges River Environmental Alliance.

Most public submissions were from Liverpool LGA residents (over 80%), mostly from suburbs surrounding the proposed development. All but one objected to the application. Key concerns are summarised in **Table 9**.

Table 9 | Summary of key issues raised in public submissions

Issue	% of Submissions
Hazards / storage of dangerous goods	69
Visual impacts	61
Noise	57
Health impacts	37
Light spill	27
General objection to MPW development	27
Traffic	25
Property values	20
Pollution and Air Quality	14
Environment/ ecological impacts	12
Modification not substantially the same development	12
Non-compliance with Liverpool LEP	6
Length of exhibition period	6
Net job losses	4
General objection	4
Cultural / heritage impacts	2

5.3 MPW Stage 2 Modification 1 (SSD-7709-Mod-1)

5.3.1 Summary of submissions

The Department received a total of 55 unique submissions for SSD-7709-Mod-1, including submissions from public authorities, organisations and the public. A summary of the submissions received is in **Table 10** and copies of the submissions may be viewed at **Appendix A**.

Table 10 | Summary of submissions

Submitter	Number	Position
Public authority	8	
Transport for NSW	√	Comment

Environment, Energy and Science Group, DPIE	√	Comment
Environment Protection Authority	√	Comment
Heritage NSW – Aboriginal cultural heritage (ACH)	√	Comment
Sydney Water	√	Comment
Rural Fire Service	√	Comment
Hazards, DPIE	√	Comment
Endeavour Energy	√	Comment
Liverpool Council	1	Comment
Community	46	46 unique objections
TOTAL	55	46 unique objections 9 Comment

5.3.1 Public authority submissions

A summary of the issues raised in the public authority submissions is provided at **Table 11** and copies of the submissions may be viewed at **Appendix A**.

Table 11 | Summary of public authority submissions

Public authority
Liverpool City Council (Council)
Council does not object to the proposal. However, it has concerns with regards to the proposal and requests: • clarification regarding the traffic implications that will arise as a result of the proposed modification, or confirmation whether traffic arrangements will remain unchanged under the existing consent • the provision of a pedestrian bridge from Casula train station to the MPW site • conditions surrounding the safe storage of dangerous goods must be in a manner that will safeguard the community • the consideration of acoustic impacts associated with the proposed modifications, including the examination of noise impacts attributed to the two distribution centres. It will be necessary to demonstrate that the previously submitted acoustic reports incorporate an effective assessment of the proposal comprising all modifications • the calculation of noise levels to be determined at the most affected point on or within the property boundary. Council raised concern that the visual impacts of the proposed warehouses seem significant from certain vantage points in Casula, and that mitigation measures cannot be provided to enable the retention of scenic views from properties in Casula

Transport for NSW (TfNSW)

TfNSW does not object to the proposal, on the basis that the warehouse GFA was not increasing, but reiterated that its previous advice on MPW Stage 2 remained applicable.

Environment, Energy and Science Group, DPIE (EES)

EES advises no comment.

Sydney Water

Sydney Water requests that a condition is included requiring the submission of approved plans to be submitted to the Sydney Water Tap In online service, to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easements.

Heritage NSW – Aboriginal cultural heritage (ACH)

ACH does not object to the proposal, and notes that the proposed modification does not appear to have any additional effect on Aboriginal cultural heritage that was not already approved under the MPW Concept and Stage 1 development consent.

DPIE Hazards

DPIE Hazards requested additional information to enable a detailed review of the Preliminary Hazard Analysis (PHA), including detailed plans/diagrams indicating the location of subject warehouses and the location of dangerous goods and hazardous chemical storages, analysis for full warehouse fire for the subject warehouses, and revisions to the submitted risk analysis to be consistent with the Department's HIPAP 4 frequency-based land use safety risk criteria.

Following review of the revised PHA submitted as part of the RtS for SSD-7709-Mod-1, DPIE Hazards raises no concerns with regard to hazards and risks associated with the proposal, and recommends a number of hazards-related conditions be included in the consent relating to:

- maximum screening threshold quantities of dangerous goods stored or transported to and from the site
- methods of storage of chemicals, fuels and oils
- provision of a Fire Safety Study and a Final Hazards Analysis to be submitted to the Planning Secretary not later than one month prior to the commencement of construction
- provision of an Emergency Plan and a Safety Management System to be submitted to the Secretary not later than two months prior to the commencement of commissioning
- ongoing reporting requirements including Hazard Audits.

Environment Protection Authority

EPA notes that the current noise limits set under Condition B131 are below the predicted noise levels and are not based on the Project Specific Noise Levels (PSNL) derived under the then-applicable *Industrial Noise Policy 2000* (now superseded by the *Noise Policy for Industry 2017*).

EPA considers that the noise limits are not achievable for MPW, nor are they achievable for the cumulative MPW and MPE sites.

EPA considers that the approach proposed in the Operational Noise Management Plan is reasonable and in line with current policy, and that the building height increase proposed could meet the proposed new noise limits provided that the proposed noise mitigation measures are adopted.

5.3.3 Public submissions

There were 46 unique public submissions received from individuals and key local stakeholder groups (a total of 52 submitters when including seven proforma submissions received). Local stakeholder group submissions were received by:

- RAID Moorebank Inc
- East Liverpool Progress Association
- Georges River Environmental Alliance.

Most public submissions were from Liverpool LGA residents (over 80%), mostly from suburbs surrounding the proposed development. All objected to the modification. Key concerns are summarised in **Table 12**.

Table 12 | Summary of key issues raised in public submissions

Issue	% of Submissions
Noise	74
Visual impacts	72
Hazards / storage of dangerous goods	66
Health impacts	53
Light spill	42
General objection to MPW development	38
Traffic	34
Pollution and air quality	19
Environment / ecological impacts	17
Property values	15
Modification not substantially the same development	9
Net job losses	9
Non-compliance with Liverpool LEP	6
Length of exhibition period	4
Cultural / heritage impacts	2
Overshadowing	2

6 Assessment

A number of issues raised in the public submissions related to the MPW and MPE precincts generally, rather than specific impacts of these proposed modifications.

The Department considers that some of these issues, such as the suitability of the site for the development, were considered in assessment of the Concept development application. Consequently, the Department has only considered issues specific to the proposed modifications currently under assessment to the approved Concept Plan and Stage 2 development.

The Department considers the key issues associated with the proposed modifications are:

- built form and visual impact
- traffic
- noise and vibration
- storage of dangerous goods.

The issues are discussed below. Other issues considered during the assessment are discussed in **Section 6.5**.

6.1 Built form and visual impact

6.1.1 MPW Concept Approval, Modification 2 (SSD-5066-Mod-2) MPW Stage 2, Modification 1 (SSD-7709-Mod-1)

The modification proposals seek approval to increase the heights of warehouses 5 and 6 (known as warehouses 'JN' and 'JR') from a maximum of 21 m under the Concept and Stage 2 approvals, to a height of 43.25 m for Warehouse JN and 39.4 m for Warehouse JR. This represents an increase in height of 106% and 88% respectively, and an increase of 106% beyond the maximum building height for the site under the Liverpool Local Environment Plan 2008 (LLEP).

The Applicant justifies the departure from the development standard under the LLEP using the template for a clause 4.6 variation request that contends the proposed height for warehouses JN and JR is appropriate for the site, and the variation would not result in any additional adverse environmental impacts. While a clause 4.6 variation request is not required for modifications to development consents, the request does provide relevant information for the Department to consider regarding whether taller warehouses are acceptable on planning grounds.

Council does not object to the proposal but raised concerns regarding the visual impacts, particularly the loss of scenic views from certain vantage points in Casula (a topographical high point in comparison to the MPW site), noting that proposed mitigation measures would not ensure these scenic views are retained. Concern was also raised in public submissions that the warehouses would obstruct views from properties at Casula, and that the modifications represent an overdevelopment of the site.

The warehouses 'as proposed' and 'as proposed (10+ years)', as viewed from a highly sensitive receiver at 46 Canberra Avenue, Casula are shown in **Figure 8**.

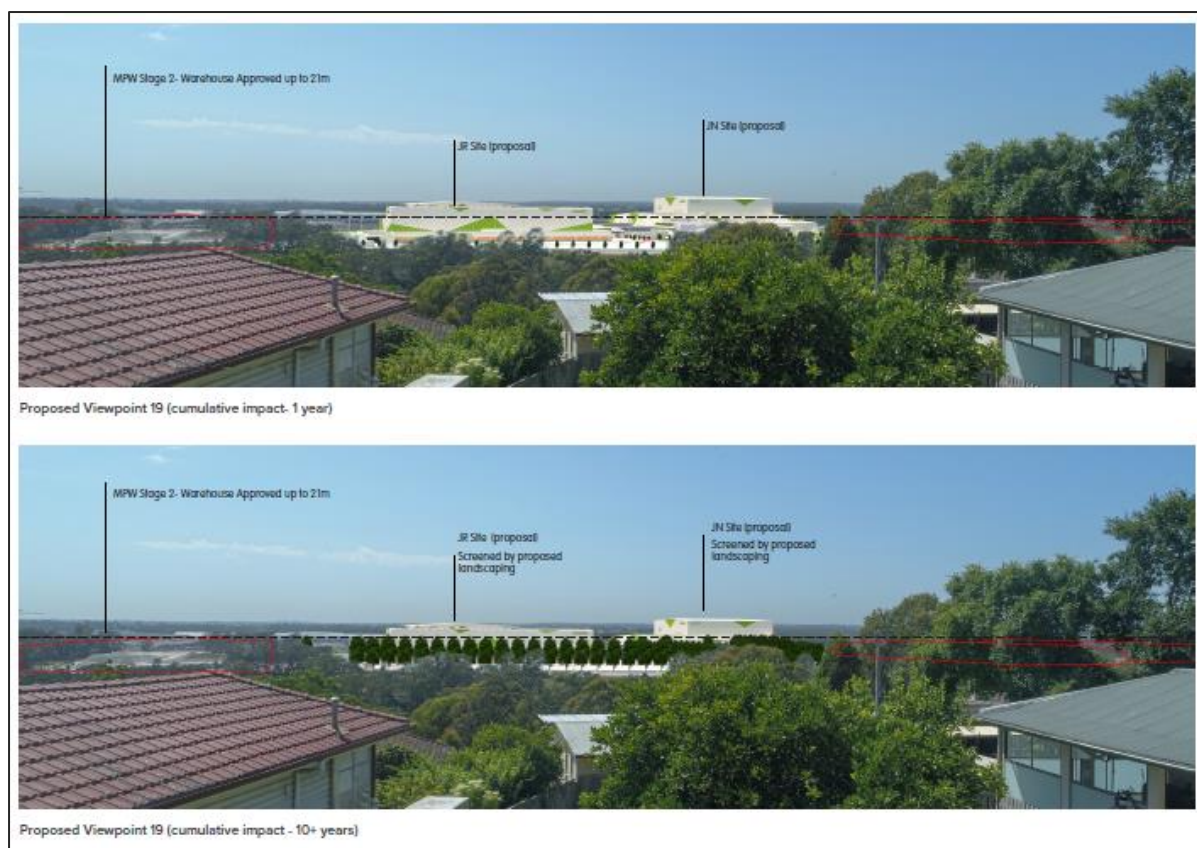


Figure 8 | Proposed views from 46 Canberra Avenue (Source: Hatch RobertsDay, 2020)

The Department has carefully considered the concerns raised by Council and the community about the impacts of the increased heights for warehouses JN and JR. The Department considers that the acceptability of the increased warehouse height is informed by the appropriateness of the detailed design of built form, and by weighing the impacts against the potential benefits generated by high-bay warehousing at the site.

The benefits of the proposed high-bay warehousing identified by the Applicant include:

- greater flexibility for end-users
- cost efficiencies of higher volume storage, noting that land values in Sydney are at a premium compared to other centres
- minimisation of footprint while maintaining pallet numbers, noting that if the same number of pallets had been stored in a standardised 13.7 m high warehouse, the footprint of the buildings would almost triple
- improved pallet retrieval times, leading to increased operational efficiencies and lower operating costs.

The Department acknowledges that the proposed modification would result in the reduction of some scenic views from properties in surrounding areas (primarily at Casula), and that this impact cannot be fully mitigated. Visual analysis undertaken on behalf of the Applicant demonstrates that, at its most significant, the proposal would have a moderate impact on views from some highly sensitive locations at Casula, namely private properties along Marsh Parade adjoining Carroll Park and 46 Canberra Avenue. The Department acknowledges that these properties benefit from landscape views given their location on a topographical high point (in relation to the MPW site). However, the topography of

the site and surrounds also ensures that the MPW site sits below, or in line with, the skyline in views from the most affected properties at Casula, which would provide some mitigation of the visual impacts of the proposal at those properties.

The Department acknowledges the visual impacts of the proposal cannot be fully mitigated, however considers that the proposal provides an appropriate design response to reduce the visual impacts of the high-bay warehouses and to ensure high or substantial view losses are minimised. In particular:

- the high-bay components of each warehouse are to be located on the eastern (JR) and south eastern (JN) sides of the warehouses, to maximise the set back from sensitive residences at Casula to the west, allowing for a reduced visual impact
- views towards the high-bay warehouses would be reduced by existing and proposed landscaping along the western boundary of the MPW site traversing the Georges River, and dispersed landscaping within the MPW site (as required within the Urban Design Development Report under condition B52 of SSD-7709)
- the Visual Impact Assessment demonstrates that the warehouses would be partially screened by landscaping from Casula (10+ year) (**Figure 3**)
- offices would be positioned towards the forefront of the site fronting the western ring road, providing façade articulation
- the high-bay warehouses are designed to avoid large expanses of blank wall, and reduce the visual bulk of the buildings by creating visual interest through the use of a variety of materials, colours, openings and design features. The use of a varied colour palette seeks to ensure that the warehouses appear as recessive elements within the skyline (**Figure 9**)
- the design approach is consistent with the overall design manner established for the wider MPW and MPE site, ensuring that the high-bay warehouses sit comfortably within the immediate surrounding context and respond to the industrial character of the site.

The Department acknowledges the modified heights would be significantly greater than that approved under the Concept Plan and the LLEP. However, the Department notes the increased operational efficiencies brought to the overall MPW site as a result of high-bay warehousing, and considers that this strengthens the benefits of the intermodal development, as discussed in **Section 3**.

Concern has also been raised in public submissions regarding increased light spill impacts from the high-bay warehouses. As discussed within the Department's recommendation report for the MPW Stage 2 SSD application, the Department is particularly cognisant of the impact of illuminated signage facing west, and the potential for light glow on properties in Casula. The existing MPW Stage 2 consent therefore includes a condition prohibiting west-facing illuminated building signage visible from residences and prohibiting internally illuminated signs that are visible from residences, which addresses much of the concern regarding light spill from the site. All high-level signage proposed for warehouses JN and JR is non-illuminated, as discussed in **Section 6.5**.

The Department notes that under the MPW Stage 2 consent, the Applicant committed to implementing appropriate flood lighting to minimise offsite light spill. The detailed architectural drawings submitted as part of the modification application demonstrate that there would be no west-facing, high-level high output luminaires installed at either warehouse. The Department therefore

considers that the proposed modification would not result in an unacceptable increase in light spill towards neighbouring residential receivers.

The Department concludes that the site can suitably host buildings of increased height to accommodate high-bay warehousing and would not unreasonably impact on the surrounding area in terms of visual or amenity impacts. Notwithstanding, it is important to note that the Department's assessment and conclusion relates solely and specifically to the JN and JR warehouses site, and no assessment has been undertaken regarding the acceptability of high-bay warehouses elsewhere within the MPW Stage 2 development area (individually or cumulatively).



Figure 9 | Proposed views from the west (Source: Hatch RobertsDay, 2020)

6.2 Traffic

6.2.1 MPW Concept Approval, Modification 2 (SSD-5066-Mod-2)

The Department notes that the modification application does not propose changes to the approved traffic generation or parking provisions under the Concept Approval. The Department's assessment has therefore focused on traffic effects of the MPW Stage 2 modification 1.

6.2.2 MPW Stage 2, Modification 1 (SSD-7709-Mod-1)

The modification seeks to facilitate changes to trip generation from the proposal, associated with the operation of warehouses 5 and 6 as high-bay warehouses.

Traffic impacts across the MPW Stage 2 site have been assessed comprehensively as part of the Department's assessments of the Concept and Stage 2 development applications, and considered in detail by the Independent Planning Commission in the granting of SSD 5066 (Concept) and SSD 7709 (MPW Stage 2) development consents. The assessments of those development applications provided detailed traffic impact assessments, which provided a series of peak time and daily traffic predictions and analysis of effects on intersection performance.

Traffic impacts of the MPW development are regulated through extensive and adaptive conditions which:

- impose container throughput caps in the MPW Concept and MPW Stage 2 consents

- set out requirements for comprehensive construction and operational traffic management frameworks, including preparation and implementation of:
 - a road safety audit for heavy vehicle movements associated with the importation of fill during construction
 - construction traffic and access management plans
 - operational traffic and access management plans
 - biannual reporting on the origin and destination of heavy vehicles accessing the precinct
 - workplace travel plan, and reporting on employee numbers
 - driver codes of conduct
- require road network upgrades, including the upgrade of the Moorebank Avenue/Anzac Road intersection that will enable ultimate access to the site and facilitate continued use of Moorebank Avenue and local road network by non-project traffic, including:
 - requiring the Applicant to obtain 100% design approval for the intersection upgrade by the earlier of 12 months from the issue of the MPW Stage 2 consent or prior to the issue of the first occupation certificate for warehousing
 - complete the upgrade prior to an occupation certificate for warehousing in excess of 100,000 m² of gross floor area
- acknowledges the Applicant's agreement to provide separate development contributions:
 - to TfNSW, including the upgrade of Moorebank Avenue and a \$48 million cash contribution, as discussed in **section 1.3**
 - to Council, in the form of a cash contribution, as defined in the consent or otherwise agreed with Council.

These requirements are in addition to the traffic-related requirements of other development consents across the Moorebank precinct, which require the Applicant to upgrade:

- Moorebank Avenue from the M5 Motorway to the northern access point of the MPE Stage 2 site
- Moorebank Avenue/Newbridge Road intersection
- Moorebank Avenue/Heathcote Road intersection
- M5 Motorway/Moorebank Avenue interchange.

While the MPW Stage 2 consent does not impose a vehicle traffic cap, the Applicant provided a traffic impact assessment that compares the trip generation of JN and JR with the traffic generation predicted for the approved MPW Concept and MPW Stage 2 applications, to enable assessment of the impacts of the modification. The Applicant's traffic impact assessment compares the JR and JN trip generation to:

- MPW Stage 2 overall daily traffic generation and peak (8.00am-9.00am and 5.00pm-6.00pm) times
- MPW Concept overall daily traffic generation.

A summary of the predicted trip generation is provided in **Table 13** below.

Table 13 | Predicted JN and JR daily trip generation

Trip type	MPW Concept	MPW Stage 2	MPW Stage 2 Modification 1 — JN and JR warehouses
Light vehicle trips	4,855	2,670	1,988
Heavy vehicle trips	5,615	1,458	1,654
Total	10,470	4,128	3,642

(Base Source: MPW Stage 2 Mod 1 Modification Report, Appendix 8, Tables 3 and 14)

The modification report also provided predicted trip generation during peak times to enable comparison of impacts on the road network during key times, as shown in **Table 14**.

Table 14 | Predicted JN and JR daily trip generation

Time	Trip type	MPW Stage 2	MPW Stage 2 Modification 1 — JN and JR warehouses
8.00am-9.00am	Light vehicle trips	75	1
	Heavy vehicle trips	102	62
5.00pm-6.00pm	Light vehicle trips	27	0
	Heavy vehicle trips	94	70

(Base Source: MPW Stage 2 Mod 1 Modification Report, Appendix 8, Table 14)

The Applicant's assessment ultimately concludes that the JR and JN facilities would generate:

- fewer trips during peak traffic hours than the overall MPW Stage 2 development (as currently approved)
- a comparable amount of daily traffic to the MPW Stage 2 development
- significantly less traffic than the overall traffic numbers assessed and approved, for the MPW precinct under the MPW concept consent.

The Department acknowledges the safe and adaptive management of the local and regional traffic network surrounding the site is a key issue for the MPW Stage 2 development, and for the community and government. In this regard, the Department acknowledges submissions provided by community members and Council raised strong concerns in relation to traffic impacts, including the overall suitability of the site. However, the Department's assessment necessarily focuses on the incremental impacts of the modification, and how this modification would change the nature and scale of the impacts of the overall MPW Stage 2 development, if it were to be approved.

As part of its assessment, the Department sought additional information to determine what the overall traffic impacts of MPW Stage 2 would be if the development consent was modified as proposed by the Applicant. The Department acknowledges the submission from Council, which asserted that it was not clear from the Applicant's Modification Report what 'traffic implications will arise as a result of the proposed modification, or if traffic arrangements will remain unchanged under the existing consents for MPW'. As such the Department subsequently sought detailed information about:

- the consolidated traffic impacts of the MPW Stage 2 site, including JR, JN and the balance of the site, including the intermodal and other warehouses
- any potential impacts on necessary timing for road network upgrades, such as the Moorebank Avenue/Anzac Road intersection, which is required to be built prior to the occupation of 100,000m³ of warehousing on the site as required by condition B84.

On 15 December 2020, the Applicant provided further information to the Department, asserting:

- JN is anticipated to commence construction in early 2021, with the JR build to commence in the following 12 months
- JN is anticipated to commence operation in early 2023
- JR and JN are unlikely to be fully operational for up to 10-15 years after start of operation
- Overall, JR and JN have a combined 80,279m² GFA. This would not trigger the need to complete the Moorebank Avenue/Anzac Road intersection under the MPW Stage 2 consent
- JR and JN, combined, would not generate traffic that exceeds either the:
 - overall vehicle numbers assessed as part MPW Stage 2 (that is, the overall vehicle prediction of 4,128 total vehicles (counted as heavy and light vehicles combined))
 - overall trip generation assessed as part of the MPW concept consent
- the Moorebank Avenue/Anzac Road intersection would service the full build of the MPW site (including future warehousing up to the full build under the concept), and the MPE site, and therefore the intersection:

will have capacity to effectively manage the 9,337 [light vehicles] and 10,798 [heavy vehicles] under the two approved Concept Plans respectively. It follows that the upgraded intersection will have capacity to manage the 5,724 LV and 8,160 HV assessed and approved under the MPW Concept Plan and Stage 1 Early Works consent (SSD 5066).

- its conclusion that:

[a]s the proposed traffic volume under the MPW 2 SSD 7709 Mod 1 application remains below both the assessed 13,884 vehicle movements under the MPW SSD 5066 consent and the assessed 4,128 vehicle movements under MPW 2 SSD 7709 consent, no further modelling of the MAAI intersection is required for the current modification application.

The Department is satisfied that overall, the MPW Stage 2 modification remains consistent with the overall approved traffic impacts under the MPW Concept. Fundamentally, where impacts of the MPW Stage 2 development remain consistent with the MPW Concept consent, the Department considers that the modification is approvable.

In this regard, the Department acknowledges reasons for the Commission's grant of consent to the MPW Stage 2 consent, which note:

- [o]perational traffic impacts are manageable, subject to the planning agreement and the upgrade of the Moorebank Avenue/Anzac Road intersection
- operation traffic is largely consistent with the assessed and approved operation traffic impacts considered as part of the assessment of the MPW Concept Plan.

The Department considers that the reasons for the Commission's decision to grant consent to the MPW Stage 2 application are not affected by the impacts of MPW Stage 2 Modification 1.

The Department's assessment, however, considered that the absence of information about the predicted traffic impacts of the balance of the site (i.e. the non-JR and JN parts of the site) requires detailed verification before those impacts can be permitted and during operation of the proposal.

Consequently, the Department has recommended additional conditions be included within the MPW Stage 2 modified consent to ensure the traffic impacts remain acceptable from road safety and network capacity perspectives. These recommended conditions include:

- the implementation of a traffic cap based on the originally approved MPW Stage 2 light vehicle numbers and the Applicant's predicted heavy vehicle numbers as presented in this modification
- require the applicant to prepare a pre-opening road safety audit for its operational site access point (unless it has completed its ultimate site entrance at the Moorebank Avenue/Anzac Road intersection)
- require traffic audits, conducted by an independent qualified person, of actual traffic generation and road network performance at key intervals during the increase of container throughput and traffic generation as the site develops
- powers for the Planning Secretary to require the Applicant to implement additional traffic mitigation, monitoring or management measures to address traffic impacts associated with the project, based on their consideration of the Traffic Audit report.

The Department considers that the proposed conditions add additional robustness to the existing and comprehensive suite of traffic and transport conditions governing the MPW Stage 2 consent, and would enhance the Applicant's own commitments to the safe and efficient operation of the precinct within the local and regional road network.

6.3 Noise and vibration

6.3.1 MPW Concept Approval, Modification 2 (SSD-5066-Mod-2)

The Department raises no concerns with regard to the impact of the proposed modification on noise, as the modification application does not constitute any proposed works. Therefore, there is no change anticipated to the predicted noise levels under the Concept Approval.

6.3.2 MPW Stage 2, Modification 1 (SSD-7709-Mod-1)

Construction noise and vibration

The Applicant's noise assessment prepared by Renzo Tonin and Associates advises that noise generated by construction activities (including construction traffic) as a result of the proposed modification is predicted to remain consistent with the levels assessed and approved under the original MPW Stage 2 development. The assessment recommends a number of noise mitigation measures to be employed during the construction phase, including the use of:

- increased distancing between source and receiver

- screening (such as earth mounds, temporary or permanent noise barriers)
- acoustic enclosures (engine casing)
- engine silencing (residential class mufflers)
- the use of electric motors rather than diesel or petrol.

The report concluded the vibration impacts of the construction phase of development are generally low, and can be managed and mitigated through the implementation of:

- a management procedure to deal with vibration complaints
- measures to ensure vibration compliance is achieved, such as modification to construction methods
- vibration testing of construction equipment on site where construction activities occurs in close proximity to sensitive receivers
- a letterbox drop for all buildings within 100 m of the construction site.

The Department considers that the mitigation measures proposed by the Applicant are acceptable and would successfully manage the construction noise and vibration impacts associated with the proposal. The Department does not require the inclusion of any additional conditions, or the modification of any conditions imposed under the SSD 7709 consent as a result of the proposed modifications.

Operational noise and vibration

The application seeks to modify condition B131 of the MPW Stage 2 approval to increase operational noise limits for all noise sources across MPW and MPE (including operational use of the Western Access Road traversing the MPW site). Noise sources associated with the operational phase of the development, and assessed under the original SSD approval, include mechanical plant, vehicle movements to and from the site, and loading dock activities.

Under the existing MPW Stage 2 consent, condition B131 sets out operational limits for noise generated by the overall precinct operations (defined as all activities approved for MPW and MPE), as shown in **Table 15**.

Table 15 | Operational Noise Limits dB(A) as stipulated by existing condition B131

Location (residential receivers)	Day LAeq, 15 minute	Evening LAeq, 15 minute	Night LAeq, 15 minute	Night LA1, 1 minute
Casula	39 dB	35 dB	35 dB	52 dB
Glenfield	35 dB	35 dB	35 dB	52 dB
Wattle Grove	36 dB	35 dB	35 dB	52 dB

Predicted operational vibration impacts

The proposed modification would not result in additional operational vibration impacts. Therefore, the Department considers that no additional or amended conditions under the MPW Stage 2 approval are necessary.

Predicted operational noise impacts

The Applicant has submitted a Noise and Vibration Impact Assessment (NVIA) and an Operational Noise Management Report (ONM), both prepared by Renzo Tonin.

Noting noise limits set out under B131 are applicable to all activities approved across both MPW and MPE, the Stage 2 project area forms only a portion of these activities. Based on the noise limits set out under condition B131, initial site noise quota allocations for the modification site were provided: 32 dB(A), 28 dB(A) and 28 dB(A) for the day, evening and night-time periods respectively.

For noise modelling purposes, the Applicant has determined the design of the modified project based upon the most sensitive noise receivers at Casula. Following the initial screening modelling, and to meet the conditions of consent, the site noise quota allocations have been lifted to 36 dB(A) for the day and 32 dB(A) for the evening and night-time periods.

The Applicant's noise assessment predicts operational noise from mechanical plant sources would not be materially altered as a result of the modification. However, it is predicted that noise associated with vehicle movements to and from the site and loading dock operations would not comply with the condition B131 noise limits during the day, evening and night time periods. The predicted operational noise impacts at receiver locations are outlined in **Table 16** below. The noise report considered impacts with potential mitigation in the form of an 8m noise wall, and without.

Table 16 | Predicted $L_{Aeq, 15min}$ Operational Noise Levels, dB(A)

Receiver	Predicted $L_{Aeq, 15min}$ Noise Level (dBA)				Noise Criteria (dBA) ⁵			Exceedance (dB) ⁶
	Day 1,3	Evening 1,3,4	Night		Day 1	Evening 1	Night 1	
			Calm 2	Adverse 3,4				
No noise barrier within the site								
R1 – 9 Casula Road, Casula	40	38	34	39	39	35	35	Up to 4
R2 – Casula Powerhouse Arts Centre	38	36	32	37	45 (external, when in use)			0
R3 – All Saints Catholic Senior College, Casula	35	33	29	34	45 (external, when n use)			0
Mitigated design ⁷ – 8 m high noise barriers within the site up to 325 lineal metre								
R1 – 9 Casula Road, Casula	39	37	32	37	39	35	35	Up to 2
R2 – Casula Powerhouse Arts Centre	38	36	31	36	45 (external, when in use)			0

R3 – All Saints Catholic Senior College	35	32	28	33	45 (external, when in use)	0
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Notes:

1. Daytime (7.00am-6.00pm); Evening (6.00pm-10.00pm); Night (10.00pm-7.00am)
2. 'D' atmospheric stability class with 0m/s wind – calm or neutral meteorological conditions
3. 'D' atmospheric stability class with 3m/s winds – adverse meteorological conditions
4. 'F' atmospheric stability class (evening and night-time only as per Fact Sheet D of Noise Policy for Industry (EPA, 2017) – adverse meteorological conditions
5. Noise criteria as per Table 4 in Condition B131 of SSD 7709
6. Exceedances of up to 7 dB (no noise barrier within the site) and 5 dB (mitigated design) are predicted when assessed against allocated noise quota levels, per Section 5.1 of the NVIA prepared by Renzo Tonin
7. Design aimed to implement feasible and reasonable mitigation to achieve the allocated noise quota levels.

(Base source: MPW Stage 2 Modification Report)

When assessed against the noise quota levels per condition B131, exceedances of up to 7 dB (no noise barrier within the site) and 5 dB (noise barrier up to 8 m high within the site) are predicted as a result of the proposed modification. During the night period under calm meteorological conditions, the predicted noise levels would comply with the site noise quota limits; however, this would be exceeded by 4 dB for the JR and JN warehouses during adverse meteorological conditions. The Department notes that the 8 m noise wall used to inform the modelling presented in **Table 16** represents a potential mitigation measure, in addition to the 5 m noise wall required by condition B129. This is discussed further below (under 'Proposed noise mitigation').

The Department acknowledges concerns raised by members of the community regarding the location chosen for survey readings, including that these readings have not been undertaken at the most affected point on or within relevant property boundaries in order to take into consideration the elevated nature of some dwellings in Casula. The Applicant advises that the noise survey locations were informed by the locations used for the noise surveys provided within the MPW Concept Approval (SSD 5066) and the MPE Stage 1 approval (SSD 6766), noting that the survey locations were chosen in accordance with the Noise Policy for Industry (EPA, 2017) (NPfI) and the superseded Industrial Noise Policy (EPA, 2000) (INP), which was the applicable guideline during the course of assessment for the MPW Concept and MPE Stage 1 approvals. The Department therefore does not consider it necessary for further noise surveys from additional locations as part of this modification application to be required.

Proposed amended operational noise limits

The modification therefore proposes an increase to the operational noise limits for all noise sources across MPW and MPE. The revised limits, which have been derived in accordance with the NPfI 2017, are outlined in **Table 17** below.

Table 17 | Proposed Operational Noise Limits dB(A) (modified condition B131)

Location (residential receivers)	Day LAeq, 15 minute	Evening LAeq, 15 minute	Night LAeq, 15 minute	Night LA1, 1 minute
Casula	46 dB	44 dB	39 dB	52 dB

Location (residential receivers)	Day LAeq, 15 minute	Evening LAeq, 15 minute	Night LAeq, 15 minute	Night LA1, 1 minute
Glenfield	49 dB	46 dB	42 dB	52 dB
Wattle Grove	44 dB	42 dB	42 dB	52 dB
Wattle Grove North	41 dB	41 dB	41 dB	52 dB

The Department acknowledges that the noise limits as set out under the Stage 2 consent are more stringent than the noise criteria proposed within the MPW Stage 2 EIS, which was prepared in accordance with NSW EPA noise policies. The Department notes that the predicted practical (achievable) noise levels as demonstrated by the modification application, subject to implementation of all feasible and reasonable mitigation measures, are similar to noise levels predicted in the Stage 2 EIS.

The EPA has reviewed the modification application including the NVIA and ONM, taking into consideration the original MPW Stage 2 SSD documents and the noise and vibration assessment for the MPE Stage 3 (SSD 10431, currently under assessment).

The EPA advises the noise limits under condition B131 are not achievable for the MPW Stage 2 site nor for the cumulative MPW and MPE sites, as they are set below the predicted noise levels contained within the MPW Stage 2 EIS, and not based on the Project Specific Noise Levels (PSNL) derived under the then applicable INP 2000 (superseded by the NPfI 2017). The EPA advises that operational noise management methods proposed by the Applicant are reasonable, accord with the NPfI, and that the modified development could meet the proposed new noise limits subject to the implementation of the proposed mitigation measures.

In reviewing the modification application, the Department commissioned Northrop to conduct an independent review of the Applicant's noise and vibration impact assessment and operational noise management review. The review considered the Applicant's NVIA and OMP, and a Gap Analysis was provided for Applicant comment. Within their Gap Analysis, Northrop agrees with the Applicant's assertion that the noise limits as stipulated by condition B131 are not suitable, and that the proposed noise criteria should be adopted. They advise that the proposed criteria are appropriate, and maintain acoustic amenity to nearby sensitive receivers.

Proposed noise mitigation

The Department notes noise mitigation measures would be implemented across the site in accordance with the conditions of the MPW Stage 2 consent, including B129 (construction of a 5 m perimeter noise wall) and conditions B136-B140 (operational noise management and mechanical plant and noise equipment monitoring). As part of the modification application, the Applicant considered the construction of additional internal acoustic fencing with a maximum length of 325 m and height of no greater than 8 m across the site of warehouses JR and JN.

The predicted noise data shown in **Table 16** demonstrate that the acoustic improvement brought by an 8 m wall is limited to 1-2 dB(A) at sensitive receivers, with exceedances still occurring in the evening and night under adverse meteorological conditions. The Department notes that operational noise compliance will be achieved at all locations, under the proposed increased operational noise limits, with

the 5 m wall as required under condition of consent B129. The 5 m wall is therefore adequate, and the Department does not consider an 8 m wall to be reasonable or necessary.

Additional proposed ‘shoulder period’ operational noise limits

The modified noise limits, as proposed in the exhibited modification report, involve an uplift of 4 dB(A) at Casula, and 7 dB(A) during the night period at Glenfield, Wattle Grove and Wattle Grove North, respectively. The Department acknowledges that this proposed increase is in line with, and informed by, current policy as advised by the EPA and the independent Gap Analysis.

In the RtS, however, the Applicant revised its proposed noise limits to include a morning ‘shoulder period’ between 5.00am and 7.00am, that would set a higher noise limit at those times than allowed under the night period limits originally proposed. The proposed shoulder period noise limits are derived taking into consideration increased background levels between 5.00am and 7.00am due to higher traffic noise on nearby arterial roads. The revised proposed morning shoulder period noise limits are compared to the originally proposed night period noise limits in **Table 17**.

Table 18 | Proposed morning ‘shoulder period’ operational noise limits dB(A)

Location (residential receivers)	As proposed under original modification application	As proposed within RtS	
	Night (10.00pm-7.00am) LAeq, 15 minute	Morning shoulder period (5.00am to 7.00am) LAeq, 15 minute	Increase beyond existing noise limits under condition B131
Casula	39 dB	43 dB	+8dB
Glenfield	42 dB	49 dB	+14dB
Wattle Grove	42 dB	44 dB	+9dB
Wattle Grove North	41 dB	41 dB	+6dB

(Base source: Applicant’s modification report; Applicant’s RtS report)

The revised proposed noise limits for the morning shoulder period, as outlined in the RtS, would represent an increase of 8 dB(A) at Casula, 14 dB(A) at Glenfield, 9 dB(A) at Wattle Grove and 6 dB(A) at Wattle Grove North respectively, during the 5.00am-7.00am shoulder period. These limits would match the proposed daytime limits at Glenfield, Wattle Grove and Wattle Grove North, and would only be 3 dB(A) less than the proposed daytime limit at Casula. The Department, however, considers that these proposed early morning noise limits would represent a significant increase beyond the existing operational limits per condition B131.

Conclusion

The Department considers the Applicant’s original review of project noise levels outlining what is cumulatively achievable across the MPW and MPE sites to be reasonable and in line with current policy, according to the EPA and the independent noise Gap Analysis. Ultimately, the proposed increase to precinct-wide operational noise limits during day, evening and night time periods, as detailed in the original NVIA and ONP assessments and shown in **Table 17** above, can be supported.

The Department, however, does not consider the revised shoulder period noise levels as proposed within the RtS to be reasonable, and concludes that the introduction of a morning shoulder period with increased noise limits between 5.00am and 7.00am, as proposed in the RtS, would not be acceptable. The proposed amended conditions, notably condition B131, provide for noise outcomes consistent with the NPfl, and the Department therefore agrees to amend the conditions as originally requested (that is, the revised night period noise limits should apply during between 5.00am-7.00am, and not the proposed shoulder period limits).

6.4 Storage of dangerous goods

6.4.1 MPW Concept Approval, Modification 2 (SSD-5066-Mod-2)

The Department raises no concerns regarding the impact of the proposed modification on the storage of dangerous goods, as the modification application does not constitute proposed works.

6.4.2 MPW Stage 2, Modification 1 (SSD-7709-Mod-1)

The proposal seeks approval for the storage and handling of a wide range of retail commodities, including small volumes of individual packages of hazardous chemicals which are to be stored and distributed in significant quantities. The application seeks to modify condition B176 of the SSD 7709 consent, which requires the total quantities of dangerous goods present at any time within the development, and transport movements to and from the development, to be kept below the screening threshold quantities and movements listed in the Department's *Hazardous and Offensive Development Guidelines Applying to SEPP 33* (January 2011).

Public submissions raised concerns regarding the hazards involved with the storage of dangerous goods, and the safety implications on nearby residents. Concern has also been raised that dangerous goods may leak into the ecosystem surrounding the site. Council specifically requested that the storage of dangerous goods be in a manner that will safeguard the community.

The Applicant has provided a Preliminary Hazard Analysis (PHA), supplemented by an advice notice prepared by Riskcon, both of which were prepared in accordance with the *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'* (NSW Department of Planning, 2011). The information provided sufficient details about the location and quantities of all dangerous goods storage within both the JN and JR warehouses, and demonstrates that the potential heat and toxic-related impacts from the worst-case fire scenarios of both warehouses will not reach neighbouring lots within the MPW precinct, or off-site land uses beyond MPW. The Department therefore considers that the modified proposal can comply with *Hazardous Industry Planning Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning'* (Department of Planning, 2011).

The Department has carefully considered concerns raised about the risk to community safety posed by the storage and handling of dangerous goods and considers these concerns to be reasonable. The Department has reviewed the PHA and supplementary dangerous goods advice notice, and considers the estimate of the impacts of the storage and transportation of dangerous goods to be very conservative, especially when noting that dangerous goods will be stored primarily within retail packages (e.g. deodorant aerosols) rather than in bulk containers or tanks.

Ultimately, the Department considers that the proposed modification will not pose an intolerable safety risk to the community but acknowledges community concerns regarding the risk of dangerous

materials leaking into the ecosystem surrounding the MPW site. The Department notes that the PHA specifies bunding around dangerous goods storage areas to contain such leaks, which is also specified within the Australian Standards relevant to dangerous goods warehouses.

Comment has also been received from Endeavour Energy, requesting that the PHA addresses the risks associated with the proximity of the warehouses to electricity infrastructure. The Applicant has confirmed that the above ground electricity infrastructure is several hundred metres away from the warehouses; underground infrastructure that supplies the warehouses is protected from dangerous goods related incident(s) by being underground. The Department has considered the concerns raised by Endeavour Energy, and notes no similar concerns were raised by DPIE Hazards and electricity infrastructure is not defined as a sensitive land use for the preparation of PHAs under SEPP33. The Department therefore does not consider it reasonable to require electricity infrastructure to be considered as part of the PHA.

The Department considers the proposed storage and handling of dangerous goods as described within the modification application is acceptable, and would not pose a risk to community or ecological safety, subject to the inclusion of the conditions recommended by DPIE Hazards which, consistent with the Department's Hazardous Industry Planning Advisory Papers, include:

- requirements for the Applicant to undertake pre-construction studies including a Fire Safety Study and a Final Hazards Analysis, and implement pre-commissioning requirements including an Emergency Plan and a Safety Management System
- Hazard Audits of the warehouse/s, and a report submitted to the Planning Secretary within one month of each audit.
- requirements for the Applicant to comply with all reasonable requirements of the Planning Secretary in respect of the implementation of the measures arising from the studies, plans and management systems above.

6.5 Other issues

Table 19 | Assessment of other issues

Issue	Findings	Recommendations
Adjustment to internal operational boundaries and layout	<u>MPW Concept Mod 2 and MPW Stage 2 Modification 1</u> • The internal operational boundaries of the MPW site would be altered, extending the Stage 2 footprint to the south. This would allow for the changes to the layout and configuration of the warehouses formerly known as 1C and 2C (now known as warehouses 5 and 6, or "JR" and "JN"), and the relocation of warehouse 6 to within the additional Stage 2 footprint to the south.	<u>MPW Concept Modification 2 and MPW Stage 2 Modification 1</u> • The Department has recommended updating the site plan presented in the MPW Stage 2 consent to reflect the new internal operational boundary.

Issue	Findings	Recommendations
	The objectives and uses approved under both the Concept Approval and Stage 2 SSD approval would remain unchanged, noting that the enlarged Stage 2 footprint forms part of the MPW site as outlined under the Concept Approval.	
Heritage and Aboriginal cultural heritage	<u>MPW Concept Modification 2 and MPW Stage 2 Modification 1</u> - The Aboriginal cultural heritage impact assessments approved under SSD-5066 and SSD-7709 delineated which Aboriginal sites and areas of archaeological potential within the MPW site would be subject to separate impacts approved under those consents. - The non-Aboriginal (European) heritage archaeological and historic investigations undertaken under SSD-5066 and SSD-7709 pertain to the land to which the proposed modification relates, and no changes are proposed. - ACH confirms that the proposed modifications do not appear to have any additional effects on Aboriginal cultural heritage that was not already approved under the relevant consents. - ACH further advises that any Aboriginal cultural heritage management actions required should continue to be undertaken in accordance with the existing conditions of consent. - The Department is satisfied that the proposed modification would not result in further impacts to Aboriginal cultural heritage or non-Aboriginal heritage values.	<u>MPW Concept Modification 2 and MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.
Signage	<u>MPW Concept Modification 2</u> The proposed modification to the Concept Approval does not include any signage.	<u>MPW Concept Modification 2</u> The Department considers that no additional conditions or amendments are necessary.

Issue	Findings	Recommendations
	<u>MPW Stage 2 Modification 1</u> - The proposal includes, for each of the JN and JR warehouses: - high-level, non-illuminated tenant identification signage towards the top of each warehouse high-bay - non-illuminated directional signage at ground floor level - illuminated street-level entry signs at the entrance fronting the western ring road - illuminated tenant identification and directional signage adjacent to and within the carparking/vehicle entrance driveways. - Warehouse JR also includes 2 x north-facing digital screens, orientated internally within the site. - The Department is aware of the impact of illuminated signage facing west, and the potential for light spill towards properties in Casula. - Condition B77 of the SSD-7709 consent prohibits the installation of west facing illuminated building signage visible from residences, and this condition remains. - Condition B78 of the MPW Stage 2 consent also restricts signage from occupying more than 10% of the façade or wall of the building. The proposed signage would not occupy more than 10% of the external walls of warehouses JN and JR.	<u>MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.
Neighbouring residential amenity / solar impacts	<u>MPW Concept Modification 2</u> The modification is limited in scope to amending maximum building heights and internal operating boundaries under the Concept Approval and does not include any built infrastructure.	<u>MPW Concept Modification 2</u> The Department considers that no additional conditions or amendments are necessary.

Issue	Findings	Recommendations
	<u>MPW Stage 2 Modification 1</u> - Concern has been raised by some neighbouring residential occupiers that the proposed high-bay warehouses would cause overshadowing at adjacent sensitive receivers. - The Department notes that the nearest residential receivers are located approximately 600 m west of warehouses JR and JN. The proposed high-bay warehouses would therefore not cause harm to solar access.	<u>MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.
Soil and water	<u>MPW Concept Modification 2</u> - The proposed modification does not include any stormwater or drainage infrastructure, and therefore the Concept Approval remains unchanged. - The Department is satisfied that the proposed modification would not result in further soil and water impacts.	<u>MPW Concept Modification 2</u> The Department considers that no additional conditions or amendments are necessary.
	<u>MPW Stage 2 Modification 1</u> - The stormwater engineering design for the MPW site has previously been undertaken as part of a Stormwater Design Development Report, in accordance with conditions B4, B5, B6 and B28 of the Stage 2 consent. Any revisions required as a result of this modification application can be undertaken as a post-approval requirement under the existing conditions of consent. - The Department is satisfied that the proposed modification would not result in further soil and water impacts.	<u>MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.
	<u>MPW Concept Modification 2</u>	<u>MPW Concept Modification 2</u>

Issue	Findings	Recommendations
Air quality and odour	- The proposed modification is limited in scope to amending maximum building heights and internal operating boundaries under the Concept Approval and does not include any built infrastructure. - The Department is satisfied that the proposed modification would not result in further impacts to air quality and odour.	The Department considers that no additional conditions or amendments are necessary.
	<u>MPW Stage 2, Modification 1</u> - Construction phase air quality and odour impacts would remain unchanged from that assessed under the original SSD approval. - During the operational phase of the development, emissions would be generated through the operation of vehicles to/from and throughout the site (including locomotives, container handling, heavy and light vehicles), and the sporadic use of four diesel generators across the two warehouses. Each of the above values were considered under the original SSD assessment. - The Applicant has advised that there is no predicted change in emissions associated with the modification to increase building heights and the operational characteristics of the Stage 2 site. - The Applicant has advised that no perishable or fresh goods will be handled at the site, and therefore the likelihood of odour emissions is low. Overall, there are no significant changes to the inputs and results of the odour assessment undertaken under the original SSD approval. - The Department is satisfied that the proposed modification would not result in further air quality or odour impacts.	<u>MPW Stage 2, Modification 1</u> The Department considers that no additional conditions or amendments are necessary.

Issue	Findings	Recommendations
Bushfire	<u>MPW Concept Modification 2</u> - The proposed modification to the Concept Approval does not include additional bushfire risk impacts as the amendment does not include any built infrastructure. - The Department is satisfied that the proposed modification to the Concept Approval would not result in additional bushfire risks.	<u>MPW Concept Modification 2</u> The Department considers that no additional conditions or amendments are necessary.
	<u>MPW Stage 2 Modification 1</u> - The original SSD approval included conditions of consent requiring the submission of a Bushfire Risk Management Plan, an Emergency Response Plan and a Bushfire Emergency and Evacuation Management Plan. - The Department is satisfied that the proposed modification to the MPW Stage 2 SSD approval would not result in additional bushfire risks.	<u>MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.
Biodiversity	<u>MPW Concept Modification 2</u> - The Concept Application assessed potential on-site impacts to biodiversity values and impacts to immediately adjoining biodiversity values. - The Applicant advised that no physical works are proposed as part of the modification to the Concept Approval. The proposed modification would not result in additional environmental impacts to those previously assessed under SSD-5066. - EES provided no comment on the proposal. - The Department is satisfied that the proposed modification would not result in further impacts to biodiversity values.	<u>MPW Concept Modification 2</u> The Department considers that no additional conditions or amendments are necessary.

Issue	Findings	Recommendations
	<u>MPW Stage 2 Modification 1</u> - The original SSD application assessed potential on-site impacts to biodiversity values and impacts to immediately adjoining biodiversity values. - The Applicant advised the proposed modifications would not result in additional biodiversity impacts at the site. - EES provided no comment on the proposal. - The Department is satisfied that the proposed modification would not result in further impacts to biodiversity values.	<u>MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.
Waste	<u>MPW Concept Modification 2</u> - The modification application would not result in amendments to the Waste Management Plan submitted as part of the original Concept Application. - The Department is satisfied that the proposed modification would not result in further waste impacts.	<u>MPW Concept Modification 2</u> The Department considers that no additional conditions or amendments are necessary.
	<u>MPW Stage 2 Modification 1</u> - The Applicant has advised that the proposed modification would not result in the generation of additional waste streams beyond those considered under the original SSD application. - Any waste impacts from the development would be mitigated and managed in accordance with management plans incorporated in the post approval stage of SSD-7709, including under conditions B49 (Ecologically sustainable development) and B180-183 (waste management).	<u>MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.

Issue	Findings	Recommendations
	The Department is satisfied that the proposed modification would not result in further waste impacts that could not be mitigated under existing management provisions.	
Utilities	<u>MPW Concept Modification 2 and MPW Stage 2 Modification 1</u> - Endeavour Energy notes that the proposed higher density high-bay warehouses may result in an increase in peak demand at Anzac Village Zone substation and changes to the local network to accommodate the higher loads. - The proposals do not appear to address the potential impact of the modifications on the electricity infrastructure or the suitability of the site for the development in regard to whether the available electricity services are adequate for the development. - The Applicant advises that the proposed increased height for warehouses 5 and 6 is not a direct correlation with increased demand for electricity. However, they note that the HV network design will require approval from Endeavour Energy prior to connection, and that an 11 kV supply from the Anzac Village Zone Substation would accommodate demand for warehouses 5 and 6. - The Department is satisfied that the proposed modifications would not result in electricity supply demands that could not be mitigated under existing management provisions.	<u>MPW Concept Modification 2 and MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.
Consistency with the Concept consent	<u>MPW Stage 2 Modification 1</u> The application was assessed against the Department's recommended conditions for the MPW Concept Modification 2 and,	<u>MPW Stage 2 Modification 1</u> The Department considers that no additional conditions or amendments are necessary.

Issue	Findings	Recommendations
	should Modification 2 be approved, the Stage 2 Modification 1 application would be consistent with the Concept as amended.	

7 Evaluation

The Department has reviewed the Applicant's Modification Reports, RtSs and additional information submitted during the assessment of the modifications, and assessed the merits of the modified proposal, taking into consideration advice from the public authorities, including Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The modifications would enable the construction and operation of two high-bay warehouses on the site, which would have the capacity to minimise the footprint while maintaining pallet numbers, and facilitate improved pallet retrieval times through automation, leading to increased operational efficiencies on the site.

The Department's assessment concluded that the site of warehouses JN and JR can suitably host buildings of increased height to accommodate high-bay warehousing and would not unreasonably impact on the surrounding area in terms of visual or amenity impacts.

The Department considered that the potential for additional traffic to be generated by the high-bay warehouses could be acceptably controlled by a combination of existing conditions of consent, enhanced road safety requirements for the site access, and an audited cap on traffic numbers that would apply to the MPW Stage 2 site.

The Department has also recommended that the operation noise limits for the site be amended to create a precinct-based noise management level consistent with the current Noise Policy for Industry. The Department acknowledges that while the proposed conditions increase the maximum noise limits across the precinct, the new limits reflect the previously assessed and acceptable noise impacts of the MPW Stage 2 development, are consistent with NSW noise guidelines, and would be supported by retention of existing condition of consent requiring the Applicant to build a 5m high noise wall.

The Department considers that its recommended conditions supplement an existing comprehensive and stringent set of construction and operation conditions applying across the MPW site, and would continue to operate to manage and mitigate the impacts of the proposal on the locality.

The Department considers that the application is consistent with the objects of the EP&A Act and continues to be consistent with strategic directions for the State. The proposed modifications do not substantially change the nature of the development or use of the site and support the broader project benefits and their contribution to the public interest, including employment and shifting freight to rail thereby reducing the impact of heavy vehicles on the road network.

Based on its assessment, the Department considers that the proposed modifications are in the public interest and are approvable, subject to the recommended conditions outlined in **Appendix B**.

8 Recommendation

It is recommended that the Deputy Secretary, Assessment and Systems Performance, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report;
- **in relation to SSD-5066-MOD-2**
 - **determines** that the application SSD-5066-MOD-2 falls within the scope of section 4.55(2) of the *Environmental Planning and Assessment Act 1979*
 - **forms the opinion** under section 7.17(2)(c) of the *Biodiversity Conservation Act 2016* that a biodiversity assessment report is not required to be submitted with this application as the modification will not increase the impact on biodiversity values of the site
 - **accepts and adopts** the findings and recommendations in this report as the reasons for making the decision to approve the modification
 - **agrees** with the key reasons for approval listed in the draft notice of decision
 - **modifies** the consent SSD-5066
 - **signs** the attached approval of the modification (**Appendix H**);
- **in relation to SSD-7709-MOD-1**
 - **determines** that the application SSD-7709-MOD-1 falls within the scope of section 4.55(2) of the *Environmental Planning and Assessment Act 1979*
 - **forms the opinion** under section 7.17(2)(c) of the *Biodiversity Conservation Act 2016* that a biodiversity assessment report is not required to be submitted with this application as the modification will not increase the impact on biodiversity values of the site
 - **accepts and adopts** the findings and recommendations in this report as the reasons for making the decision to approve the modification
 - **agrees** with the key reasons for approval listed in the draft notice of decision
 - **modifies** the consent SSD-7709
 - **signs** the attached approval of the modification (**Appendix H**).

Recommended by:



Erica van den Honert
Acting Executive Director
Infrastructure Assessments

9 Determination

The recommendation is **Adopted** by:



24.12.2020

David Gainsford

Deputy Secretary

Assessment and Systems Performance

as delegate of the Minister for Planning and Public Spaces

Appendices

Appendix A – List of Referenced Documents

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows:

MPW Concept Modification 2

1. Modification Report, including appendices
2. Submissions
3. Response to Submissions, including appendices
4. Additional information provided during assessment

<https://www.planningportal.nsw.gov.au/major-projects/project/37926>

MPW Stage 2 Modification 1

1. Modification Report, including appendices
2. Submissions
3. Response to Submissions, including appendices
4. Additional information provided during assessment

<https://www.planningportal.nsw.gov.au/major-projects/project/37931>

Appendix B – Notices of Modification

MPW Concept Modification 2

<https://www.planningportal.nsw.gov.au/major-projects/project/37926>

MPW Stage 2 Modification 1

<https://www.planningportal.nsw.gov.au/major-projects/project/37931>