ENVIRONMENTAL IMPACT STATEMENT

520 Gardeners Road,
Alexandria

Prepared for
CHARTER HALL
23 March 2022

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

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SIGNED DECLARATION

Project details		
Project name	Ascent Logistics Centre	
Application number	SSD-32489140	
Address of the land in respect of which the development application is made	520 Gardeners Road, Alexandria	
Applicant details		
Applicant name	Charter Hall Holdings Pty Ltd	
Applicant address	Level 20, 1 Martin Place, Sydney NSW 2000	
Details of people by whom this EIS was prepared		
Names and professional qualifications	Jennifer Cooper Bachelor Town Planning (Hons) (UNSW)	Holly Rhoades Master of Spatial Planning (UCL)
Address	Level 8, Angel Place, 123 Pitt Street, Sydney NSW 2000	

Declaration

The undersigned declares that this EIS:

- has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;
- contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the EIS relates;
- does not contain information that is false or misleading;
- addresses the Planning Secretary's environmental assessment requirements (SEARs) for the project;
- identifies and addresses the relevant statutory requirements for the project, including any relevant matters for consideration in environmental planning instruments;
- has been prepared having regard to the Department's *State Significant Development Guidelines - Preparing an Environmental Impact Statement*;
- contains a simple and easy to understand summary of the project as a whole, having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development;
- contains a consolidated description of the project in a single chapter of the EIS;
- contains an accurate summary of the findings of any community engagement; and
- contains an accurate summary of the detailed technical assessment of the impacts of the project as a whole.

Signatures	 Jennifer Cooper, Director	 Holly Rhoades, Senior Consultant
Date	23 March 2022	

GLOSSARY AND ABBREVIATIONS

Reference	Description
ACHA	Aboriginal Cultural Heritage Assessment
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACM	Asbestos Containing Material
AEP	Annual Exceedance Probability
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
AIA	Arboricultural Impact Assessment
ANEF	Australian Noise Exposure Forecast
AQIA	Air Quality Impact Assessment
ARI	Average Recurrence Interval
AS	Australian Standard
ASS	Acid Sulfate Soils
ASSMP	Acid Sulfate Soil Management Plan
BC Act	*Biodiversity Conservation Act 2016*
BC Reg	*Biodiversity Conservation Regulation 2017*
BDAR	Biodiversity Development Assessment Report
bgs	Below Ground Surface
CBD	Central Business District
CEMP	Construction Environmental Management Plan
CER	Civil Engineering Report
CIV	Capital Investment Value
CMP	Construction Management Plan
COPC	Contaminants of Potential Concern
CoS	City of Sydney
CPT	Cone Penetrometer Test
CTMP	Construction Traffic Management Plan
DA	Development Application
dB(A)	A frequency-weighted Decibel
DCP	Development Control Plan
DMP	Dust Management Plan
DP	Deposited Plan
DPE	New South Wales Department of Planning and Environment

Reference	Description
DSI	Detailed Site Investigation
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA Regulation	*Environmental Planning and Assessment Regulation 2000*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPI	Environmental Planning Instrument
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically Sustainable Development
EPA	New South Wales Environment Protection Authority
FRA	Flood Risk Assessment
FTP	Framework Green Travel Plan
GANSW	Government Architect New South Wales
GFA	Gross Floor Area
GPOP	Greater Paramatta and the Olympic Peninsula
GTP	Green Travel Plan
HIS	Heritage Impact Statement
HVAC	Heating Ventilation and Air Conditioning
HVLS	High Volume Low Speed
kv	Kilovolt
LAeq	A frequency-weighted Equivalent Continuous Sound Level
LEC	Land and Environment Court of New South Wales
LEP	Local Environmental Plan
LGA	Local Government Area
LSPS	Local Strategic Planning Statement
MUSIC	Model for Urban Stormwater Improvement Conceptualisation
NML	Noise Management Level
NO_2	Nitrogen Dioxide
NSW	New South Wales
NVIA	Noise and Vibration Impact Assessment
Pa	Pascal
PA	Public Address
PADS	Potential Archaeological Deposits
PASS	Potential Acid Sulfate Soils

Reference	Description
$PM_{2.5}$	Particulate matter with an aerodynamic diameter of 2.5 µm or less
PM_{10}	Particulate matter with an aerodynamic diameter of 10 µm or less
PMF	Probable Maximum Flood
PSI	Preliminary Site Investigation
PV	Photovoltaic
Q20	1 in 20-year ARI storm event
Q100	1 in 100-year ARI storm event
RAP	Registered Aboriginal Party
RL	Reduced Level
RMS	Roads and Maritime Services NSW (now TfNSW)
SDCP	*Sydney Development Control Plan 2012*
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SHR	New South Wales State Heritage Register
SIA	Social Impact Assessment
SIDRA	Signalised & Unsignalised Intersection Design and Research Aid
Site	520 Gardeners Road, Alexandria Lot 302 in Deposited Plan 1231238
SLEP	*Sydney Local Environmental Plan 2012*
SQID	Stormwater Quality Improvement Device
SRD SEPP	*State Environmental Planning Policy (State and Regional Development) 2009*
SSD	State Significant Development
SSDA	State Significant Development Application
SWMP	Soil and Water Management Plan
TA	Transport Assessment
TfNSW	Transport for New South Wales
TSP	Total Suspended Particulates
VENM	Virgin Excavated Natural Material
VIA	Visual Impact Assessment
WCM	Water Cycle Management
WCMS	Water Cycle Management Strategy
WMP	Waste Management Plan
WSUD	Water Sensitive Urban Design

SUMMARY

This Environmental Impact Statement (**EIS**) has been prepared on behalf of Charter Hall Holdings Pty Ltd in support of a State Significant Development Application (**SSDA**) for the site at 520 Gardeners Road Alexandria.

Charter Hall has identified an opportunity to replace the former hardware and building supplies building with a modern warehouse and distribution centre, strategically located to Sydney Airport, Port Botany and the local and regional road network, to serve Sydney and the wider catchment. The intended outcomes of the project are to:

- Provide for the highest and best use of the site through the development of a brownfield site to deliver sustainable development.
- Provide a state-of-the-art multi-level warehouse and distribution centre, strategically located to Sydney Airport, Port Botany, the regional road network and the local Sydney area.
- Deliver 274 jobs through the construction phase and up to 659 jobs once operational.
- Achieve a high-quality design that is consistent and compatible with the surrounding site context to deliver an improved urban outcome for the site.
- Integrate landscaping and tree planting to ensure a high standard of architectural, urban and landscape design is provided.
- Minimise disruption to surrounding residents and businesses during the construction phase.

The proposal is for the purposes of warehouse or distribution centre with a capital investment value of $76,016,898. Accordingly, it is classified as a State Significant Development (**SSD**) under Clause 12, Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*.

An aerial photograph of the site is provided at **Figure 1**.

Figure 1 Aerial photograph

Source: Urbis

Feasible Alternatives

Various project alternatives were considered for the proposed warehouse and distribution centre. A 'do nothing' approach would fail to deliver the sustainable development of the site to provide up to 933 jobs through the construction and operation phases.

Alterative locations were considered by Charter Hall for the warehouse and distribution centre. These were not preferred as they were not as well located close to gateway infrastructure and the regional and local road networks. They also did not also allow for a satisfactory site layout and design to allow for the proposed operation of the warehouse and distribution centre.

Consideration was also given to alternative designs in relation to the removal of trees on site and the design of the warehouse breezeways and loading docks. These options were dismissed, as the former did not allow for the project objectives to be delivered or achieve highest and best use of the brownfield industrial site within the Southern Enterprise Area, and the later as it was found to result in unacceptable noise impacts.

The Proposal

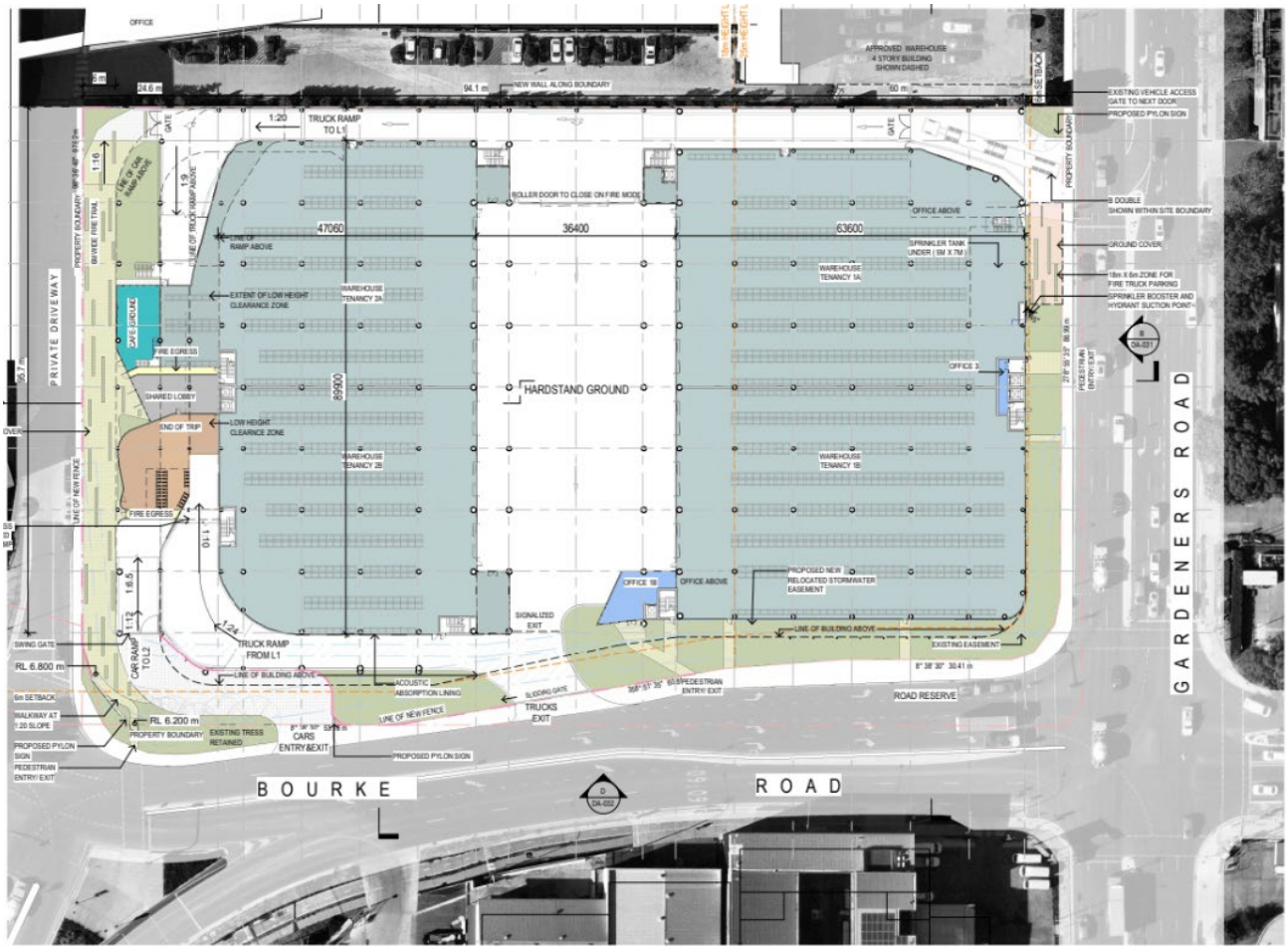
The site was identified as being the most suitable location to deliver the project objectives, including delivery of a state-of-the-art multi-level warehouse and distribution facility that respects and contributes to the local context. The proposal will optimise use of a vacant site within an established industrial precinct to deliver a variety of employment opportunities, while minimising any potential impacts on local amenity.

Broadly, the proposed development involves:

- Site preparation including minor bulk earthworks.
- Upgrades to existing on-site infrastructure.
- Construction, fit out and operation of a three-level warehouse and distribution centre comprising approximately 27,509m^2 GFA including:
  - 21,952m^2 of warehouse and distribution GFA; and
  - 5,557m^2 GFA of ancillary office space.
- Approximately 4,511m^2 of hard and soft landscaping at ground level and an additional 1,634 m^2 of soft landscaping at second floor level.
- Replacement of the existing vehicular access from Bourke Road with two new access driveways from Bourke Road and widening of the Gardeners Road vehicular access.
- Provision of internal vehicle access routes, two-level central breezeway and loading docks.
- Provision of 64 bicycle parking spaces at ground level and 144 car parking spaces at second floor level.
- Provision of 3 car share spaces at second floor level.
- Provision of on-site amenities including gym and cafés.
- Building identification signage.
- Operation 24 hours per day seven days per week.

The proposal will be undertaken in accordance with the Architectural Plans prepared by Nettleton Tribe at **Appendix B**. The proposed site plan is provided at **Figure 2**:

Figure 2 Proposed site plan



Source: Nettleton Tribe

Consultation

Community and stakeholder engagement has been undertaken by Urbis and the project team in the preparation of the SSDA. This includes direct engagement and consultation with:

- Adjoining landowners and occupants.
- Government, agency and utility stakeholders.

The outcomes of the community and stakeholder engagement have been incorporated into the proposed final design for the warehouse and distribution centre.

Justification of the Project

This EIS assesses the development in accordance with relevant planning instruments and policies and outlines the mitigation measures to be implemented to avoid unreasonable or adverse environmental effects. Additionally, the proposed development satisfies the Secretary's Environmental Assessment Requirements (**SEARs**) issued for the project.

The key issues for all components of the project identified in the SEARs have been assessed in detail, with specialist reports underpinning the key findings and recommendations. It has been demonstrated that for each of the likely impacts identified in the assessment of the key issues, the impact will either be positive or can be appropriately mitigated.

Overall, it is concluded the proposal represents a positive development outcome for the site and surrounding area for the following reasons:

- **The proposal is consistent with state and local strategic planning policies:**

  The proposal is consistent with the relevant goals and strategies contained in:

  – *Greater Sydney Region Plan: A Metropolis of Three Cities*

  – *Our Greater Sydney 2056: Eastern City District Plan*

  – *City of Sydney Local Strategic Planning Statement*

  – *Future Transport Strategy 2056*

  – *Better Placed*

- **The proposal satisfies the applicable local and state development controls:**

  The proposal is permissible with consent and satisfactorily addresses the relevant statutory requirements of the relevant environmental planning instruments, including

  – *State Environmental Planning Policy (State and Regional Development) 2011*

  – *State Environmental Planning Policy (Infrastructure) 2007*

  – *State Environmental Planning Policy No 33 – Hazardous and Offensive Development*

  – *State Environmental Planning Policy No. 55 – Remediation of Land*

  – *State Environmental Planning Policy No 64 – Advertising and Signage*

  – *Sydney Local Environmental Plan 2012* (**SLEP 2012**)

- **The design responds appropriately to the opportunities and constraints presented by the site:**

  – The design responds to the corner position of the site as well as neighbouring land uses and the surrounding built form, to deliver an attractive, modern warehouse and distribution facility.

  – The design utilises both Gardeners and Bourke Roads to facilitate one-way circular vehicle movement and separation of heavy vehicle and car movements.

  – The built form responds to both functional and spatial requirements to achieve a state-of-the-art warehouse and distribution centre which is compatible with the character of the locality, including both industrial and mixed-use development.

  – The proposal seeks to present a built form, façade treatment and materiality that enhances the quality of the site, complemented by new landscaping to deliver an improved streetscape.

- **The proposal is highly suitable for the site:**

  – The warehouse and distribution centre use in permitted in the IN1 zone and satisfies the zone objectives, including delivery of new warehousing and associated employment opportunities in an appropriate manner which minimises adverse effect of industry on other land uses.

  – The development satisfactorily responds to the relevant provisions in SLEP 2012 and Sydney Development Control Plan 2012 (**SDCP 2012**) including acoustic amenity, built form, setbacks, car parking and landscaping.

  – The site is within an established industrial area and the character and scale of the development is compatible with the adjoining and surrounding development.

  – The site is highly accessible to transport and regional freight networks and the rail network and optimises use of a brownfield site to deliver sustainable development.

- **The proposal is in the public interest:**

  – The proposal is consistent with relevant State and local strategic plans and substantially complies with the relevant State and local planning controls.

- The proposal will provide up to 274 jobs during the construction phase, and up to 659 jobs once complete and fully operational. The proposal will stimulate local investment and contribute significant economic output and value add to the economy each year. This project is fully funded and ‘shovel ready’ for commencement of construction as soon as possible next year.
- Subject to the implementation of the mitigation measures recommended by the specialist consultants, there will be no unacceptable, social or economic impacts during the construction and ongoing operation of the facility. Based on the assessment of noise, air quality and traffic, the proposal will not result in any adverse cumulative impacts.
- Any issues identified during the community and stakeholder engagement have been addressed through the assessment of the impacts of the modified project.

In view of the above, it is considered that this SSD Application has significant merit and should be approved subject to the implementation of the mitigation measures described in this report and supporting documents.

1. INTRODUCTION

This section of the report identifies the applicant for the project and describes the site and proposed development. It outlines the site history and feasible alternatives explored in the development of the proposed concept, including key strategies to avoid or minimise potential impacts.

1.1. APPLICANT DETAILS

The applicant details for the proposed development are listed in the following table.

Table 1 Applicant Details

Descriptor	Proponent Details
Full Name(s)	Charter Hall Holdings Pty Ltd
Postal Address	Level 20, 1 Martin Place, Sydney NSW 2000
ABN	15 051 363 547
Nominated Contact	Theodore Berney

1.2. PROJECT DESCRIPTION

This EIS is submitted to the Department of Planning and Environment (**DPE**) on behalf of Charter Hall and in support of an application for SSD-32489140 at 520 Gardeners Road, Alexandria.

The SSDA seeks consent for:

- Site preparation including minor bulk earthworks.
- Upgrades to existing on-site infrastructure.
- Construction, fit out and operation of a three-level warehouse and distribution centre comprising approximately 27,509m^2 GFA including:
  - 21,952m^2 of warehouse and distribution GFA; and
  - 5,557m^2 GFA of ancillary office space.
- Approximately 4,511m^2 of hard and soft landscaping at ground level and an additional 1,634 m^2 of soft landscaping at second floor level.
- Replacement of the existing vehicular access from Bourke Road with two new access driveways from Bourke Road and widening of the Gardeners Road vehicular access.
- Provision of internal vehicle access routes, two-level central breezeway and loading docks.
- Provision of 64 bicycle parking spaces at ground level and 144 car parking spaces at second floor level.
- Provision of 3 car share spaces at second floor level.
- Provision of on-site amenities including gym and cafés.
- Building identification signage.
- Operation 24 hours per day seven days per week.

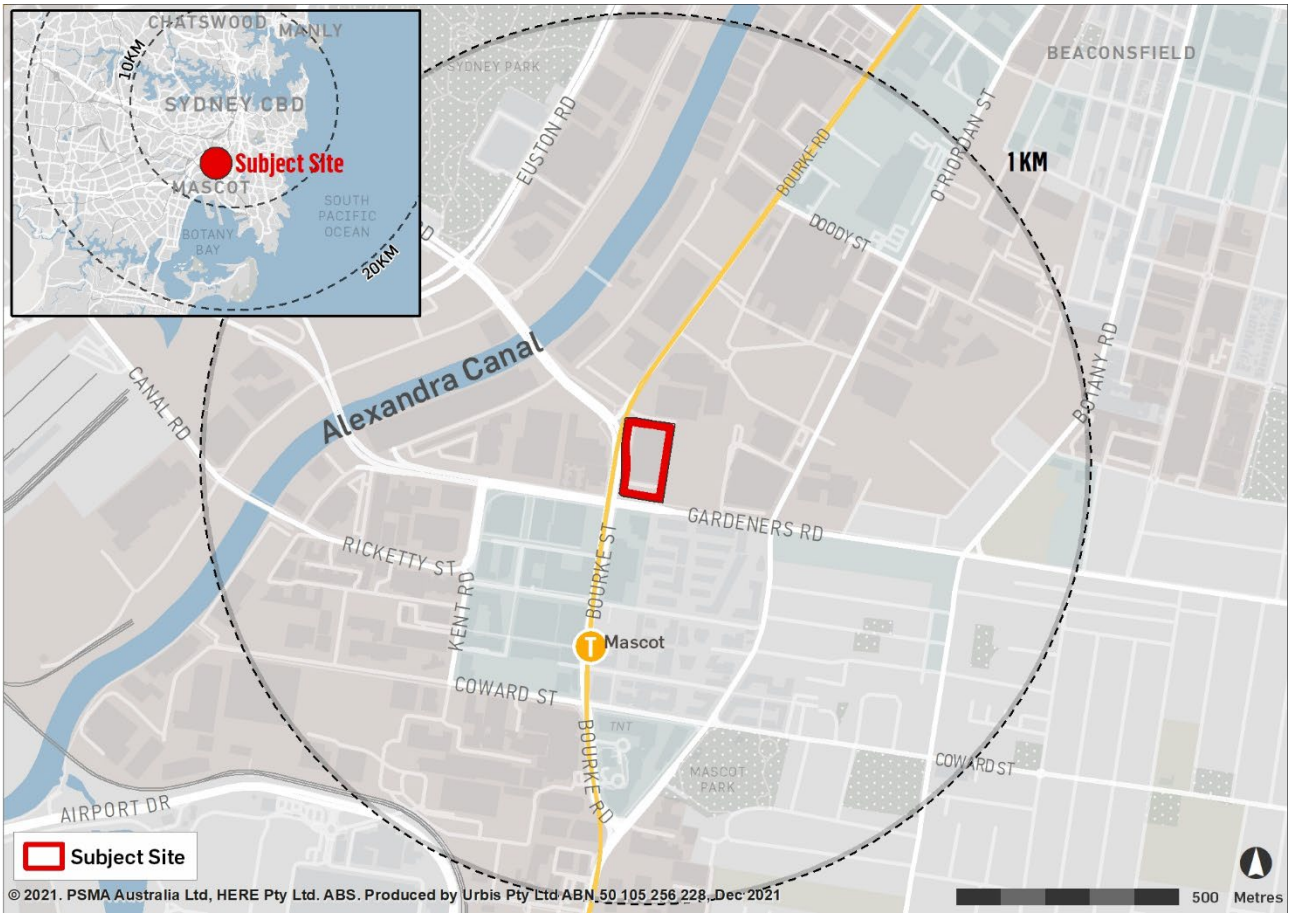
The key objectives for the proposed development and the way in which these have been achieved are summarised in **Table 2**.

Table 2 Project Objectives

Project Objective	Proposed Development
Deliver a modern multi-level warehouse and distribution centre in a strategic location.	The proposal seeks to deliver a state-of-the-art warehouse and distribution facility strategically located in the Southern Enterprise Area and well-connected to the regional road network, Sydney Airport and Port Botany.
Provide for the highest and best use through the sustainable development of a brownfield site.	The proposal is for a warehouse and distribution centre use which is permitted in the IN1 zone. The existing building is redundant and does not reflect the requirements of modern industrial uses. The proposal will optimise use of the site through sustainable redevelopment to deliver increased, long-term employment opportunities.
Provide local employment opportunities	The proposal will deliver 274 construction and up to 659 operational jobs.
Provide a high-quality design that responds to the local site context and enhances local character.	The design has been carefully considered to respond to the site context and provide a development which is consistent and compatible with the surrounding land uses. The design of the proposal addresses neighbouring uses as well as the streetscape.
Integrate landscaping and tree planting to ensure a high standard of architectural, urban and landscape design.	Landscaping and tree planting has been integrated into the proposal at both the ground floor and second floor. The selected planting will enhance the site, the public domain and employee amenity.
Minimise disruption to existing residents and businesses within the surrounding area during the construction phase.	Mitigation and management measures will be implemented during the construction and operational phases to avoid unacceptable impacts on neighbouring businesses and residents.

A map of the site in its regional setting is provided as **Map 1**.

Map 1 Regional context



Source: Urbis

1.3. PROJECT BACKGROUND

The site contains a former Bunnings hardware and building supplies store with large areas of hardstand which provided for ancillary car parking along the northern, eastern and southern boundaries.

The development application (**DA**) for the existing warehouse on site was lodged with the former South Sydney Council in 1996, with historical photographs showing the warehouse development complete by 1998. The City of Sydney (**CoS**) Council online DA tracker records more recent DAs, including reconfiguration of the car park, tree removal and landscaping works associated with the WestConnex road widening works in 2017.

Charter Hall identified the site as a unique opportunity to redevelop a redundant industrial site in the core employment precinct of Alexandria. The site is ideally located for freight logistics and/or last mile facility having regard to strong tenant demand and access to major infrastructure hubs and the Sydney CBD. The site provides direct access to the WestConnex St Peters and is within walking distance of Mascot train station and public bus services.

The site also forms a regular shaped lot to provide for an efficient development footprint. It is also appropriately zoned to accommodate a warehouse and distribution centre which is consistent and compatible with surrounding land uses.

1.4. RELATED DEVELOPMENT

The SSDA also seeks to relocate an existing drainage line to accommodate the footprint of the proposed development.

A City of Sydney inter-allotment drain is located on the west of the site, beginning on the Gardeners Road boundary and traversing north to the private road to the north of the property. The drain conveys stormwater run-off from Gardeners Road through the site to the north and ultimately to Alexandra Canal.

The proposed realignment will traverse a similar route, However, it is to be relocated closer to the site frontages to optimise the development potential of the site. The proposed realignment has been designed to avoid impacts to upstream and downstream properties or drainage systems.

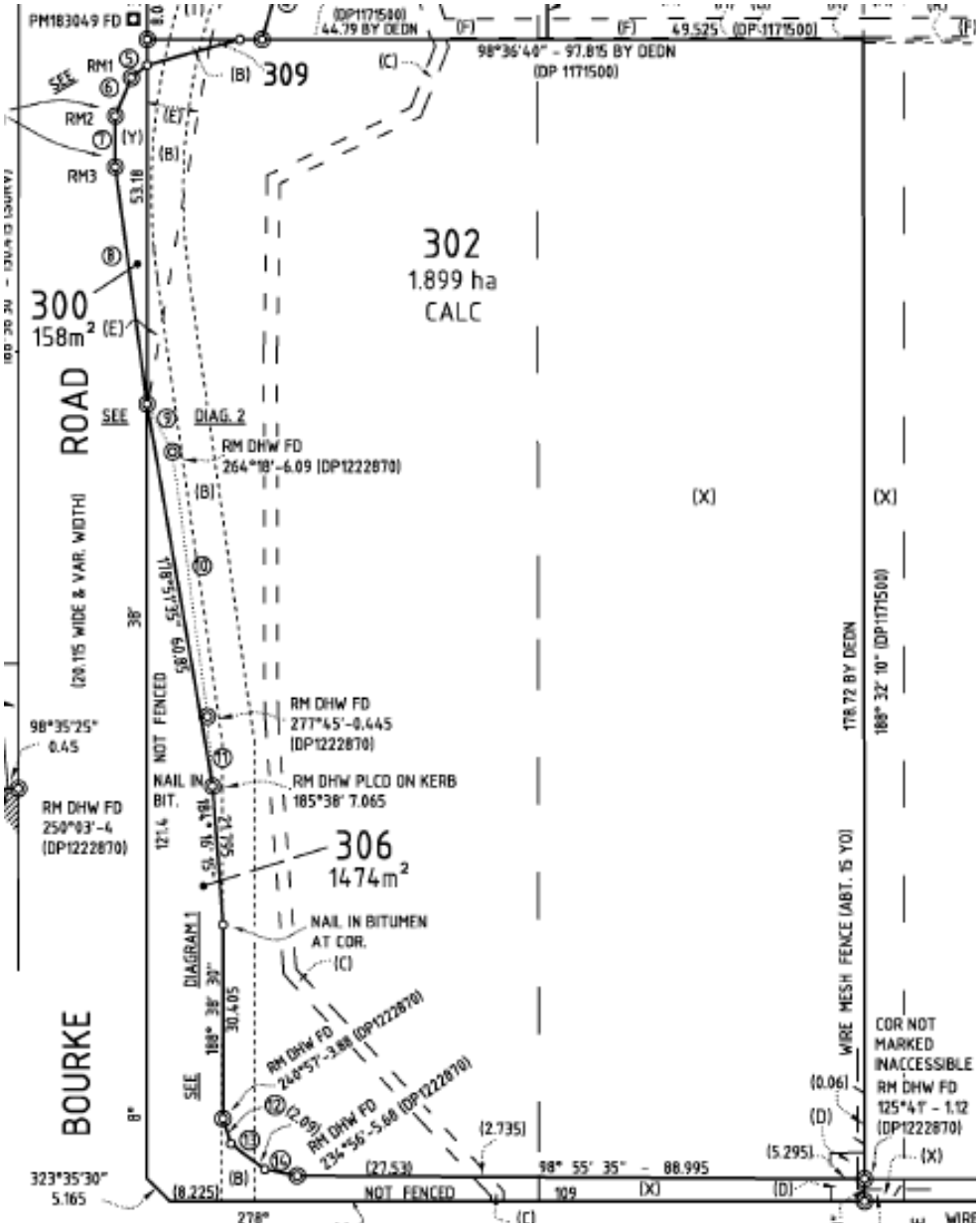
1.5. RESTRICTIONS AND COVENANTS

The site is affected by the following easements and restrictions:

- Five metre wide easement for electricity running generally parallel along the western boundary: **Figure 3**, (B).
- Two metre wide easement to drain water in the western part of the property: **Figure 3**, (C).
- A subterranean stratum easement acquired for State Rail Authority in the north-western corner: **Figure 3**, (E). The easement is located approximately 9 metres below ground level.

The site is also affected by a lease to Ausgrid (with sub-leases to various parties listed on the land title) associated with the substation in the south-eastern corner.

Figure 3 Easements plan



Source: NSW Land Registry

2. STRATEGIC CONTEXT

This section of the EIS describes the way in which the proposal addresses the strategic planning policies relevant to the site. It identifies the key strategic issues relevant to the assessment and evaluation of the project, each of which are addressed in further detail in **Section 7** of this EIS.

2.1. PROJECT JUSTIFICATION

The proposed development is aligned with the State, district and local strategic plans and policies applying to the site as outlined below.

2.1.1. Greater Sydney Region Plan: A Metropolis of Three Cities

The *Greater Sydney Region Plan* (**Region Plan**) provides the overarching strategic plan for growth and change in Sydney. It is a 20-year plan with a 40-year vision that seeks to transform Greater Sydney into a metropolis of three cities – the Western Parkland City, Central River City and Eastern Harbour City. It identifies key challenges facing Sydney including increasing the population to eight million by 2056, 817,000 new jobs and a requirement of 725,000 new homes by 2036.

The Region Plan includes objectives and strategies for infrastructure and collaboration, liveability, productivity and sustainability. The following matters are relevant to the proposed development:

- *Objective 15: The Eastern, GPOP and Western Economic Corridors are better connected and more competitive*

  The proposal will deliver increased job opportunities within Alexandria and the Eastern Economic Corridor. The proposal is strategically located close to Port Botany and Sydney Airport and will support growth of these areas as nationally significant trade gateways.

- *Objective 16: Freight and logistics network is competitive and efficient*

  The proposal will provide additional floor space to assist with the growth of the freight and logistics networks. It is strategically located close to WestConnex, Port Botany and Sydney Airport which are both key parts of Sydney's freight and logistics network.

- *Objective 23: Industrial and urban services land is planned, retained and managed*

  The proposal will deliver 27,509m^2 of high-quality, modern industrial floor space, supporting the retention and management of industrial land and generating 659 direct jobs during operation.

2.1.2. Our Greater Sydney 2056: Eastern City District Plan

The *Eastern City District Plan* (**District Plan**) is a 20-year plan to manage growth in the context of economic, social and environmental matters to implement the objectives of the Greater Sydney Region Plan. The intent of the District Plan is to inform local strategic planning statements and local environmental plans, guiding the planning and support for growth and change across the district.

The District Plan contains strategic directions, planning priorities and actions that seek to implement the objectives and strategies within the Region Plan at the district-level. The District Plan identifies the key centres, economic and employment locations, land release and urban renewal areas and existing and future transport infrastructure to deliver growth aspirations.

The planning priorities and actions likely to have implications for the proposed development include:

- *Planning Priority E9: Growing international trade gateways*

  The proposal is strategically located close to Port Botany and Sydney Airport which are both international trade gateways. The proposal will provide additional floor space for warehouse and distribution centres that will assist in the growth of these key trade gateways.

- *Planning Priority E12: Retaining and managing industrial and urban services land*

  The proposal will deliver 27,509m^2 of high-quality, modern industrial floor space, supporting the retention and management of industrial land and generating 659 direct jobs during operation.

2.1.3. City of Sydney Local Strategic Planning Statement

City of Sydney *Local Strategic Planning Statement* (**LSPS**) 2036 provides the framework and vision for land use planning for the next 20 years in the City of Sydney Local Government Area (**LGA**). The LSPS seeks to implement the Region Plan and District Plan, recognising the strategic importance of the Eastern Economic Corridor and retaining and protecting industrial zoned land for industrial manufacturing and warehousing uses and urban services.

One of the Key Moves is to '*Protect and evolve business in the Southern Enterprise Area*'. This is supported by Priority P3 – '*Protecting industrial and urban services in the Southern Enterprise Area and evolving businesses in the Green Square-Mascot Strategic Centre*'.

The Proposal supports this Key Move and Priority as it proposes to retain and redevelop an existing industrial site for industrial and warehouse uses. The proposal will provide 27,509m^2 of high-quality, modern industrial floor space and generate up to an additional 659 direct jobs which will help support the growth of the Southern Enterprise Area and Green Square-Mascot Strategic Centre.

2.1.4. Better Placed

In August 2017, the Government Architect for NSW (**GANSW**) released *Better Placed* which seeks to establish priorities and objectives that shape design to create well-designed built environments. It presents a collection of priorities and objectives that aspire to shape design that addresses key challenges and directions and creates good design outcomes for NSW.

The proposed development is consistent with the Better Placed objectives as it will:

- Be readily absorbed into the industrial context and character of the surrounding area (Objective 1).
- Incorporate sustainability measures to improve the environmental performance of the building (Objective 2).
- Be capable of complying with relevant accessibility provisions to ensure equitable access (Objective 3).
- Be fit for purpose in response to engineering and logistical requirements (Objective 5).
- Contribute significant economic output and value add to the economy each year (Objective 6).
- Incorporate architectural treatments and screen planting to soften views towards the development (Objective 7)

By adopting the objectives of the *Better Placed* policy, development responds to the key challenges and directions for NSW.

2.2. KEY FEATURES OF SITE AND SURROUNDS

The site is located at 520 Gardeners Road, Alexandria and within the City of Sydney LGA. The site is legally described as Lot 302 in Deposited Plan in 1231238 and is currently owned by The Trust Company (Australia) Limited (as custodian for Bieson Pty Ltd as Trustee of CLP Alexandria Trust) c/o Charter Hall.

The location of the site is illustrated in **Map 2**. Photographs of the current site condition are provided in **Figure 4**.

Map 2 Local context

Source: Urbis

Figure 4 Site photographs

Picture 1 Western elevation facing Bourke Road

Picture 2 Northern elevation facing Gardeners Road

Picture 3 Bourke Road entry and exit driveway

Picture 4 Gardeners Road entry and exit driveway

Source: Urbis

The key features of the site which have the potential to impact or be impacted by the proposed development are summarised in the table below.

Table 3 Key Features of Site and Locality

Descriptor	**Site Details**
Land Configuration	▪ Site area: 1.89 hectares ▪ Site dimensions: 112 metres x 179 metres (approximate) ▪ Site topography: The site is generally flat, sloping from north to south
Land Ownership	The site is owned by The Trust Company (Australia) Limited (as custodian for Bieson Pty Ltd as Trustee of CLP Alexandria Trust)
Existing Development	The site contains a former Bunnings hardware store with large areas of hardstand providing ancillary car parking along the northern, eastern and southern boundaries.
Local Context	The site is on the southern boundary of the Southern Enterprise Area (formerly known as the Southern Employment Lands) which comprises the enterprise zoned land, business parks and industrial and urban services land within the City of Sydney LGA. The surrounding locality is described in further detail below: ▪ **North**: the Southern Enterprise Area is located to the north and comprises a variety of employment-generating land uses. The property immediately north of the site accommodates a two-storey data centre, with more traditional warehouse-style buildings further north along Bourke Road. An east-west access driveway provides for vehicle entry/exit to the data centre buildings to the north and east via a signalised intersection on Bourke Road. The driveway sits below the existing ground level of the site. ▪ **East**: the land to the east (and north of Gardeners Road) is also located within the Southern Enterprise Area. The immediately adjoining property includes a three-storey data centre, with large scale

Descriptor	Site Details
	(bulky goods) retailing further to the east (The Emporium Alexandria). The data centre benefits from dual access to Gardeners Road and Bourke Road, with the east-west driveway providing access via the signalised intersection described above. City of Sydney Council has recently granted development consent for a four-storey data centre immediately to the east of the site, fronting Gardeners Road (D/2021/45). ▪ **South**: the land to the south of Gardeners Road includes a two-storey commercial and warehouse style building on the corner of Bourke Road and a mixed-use development including retail and commercial uses on the ground floor with four residential storeys above. The land to the south of Gardeners Road is located within the Bayside LGA and has been rezoned and redeveloped to accommodate mixed-use development of up to 16 storeys within walking distance of Mascot railway station. ▪ **West**: a vehicle hire premises is located on the corner of Bourke Road and Gardeners Road. A mixed use three-storey building comprising commercial offices, medical consulting and showrooms is located at 85 Bourke Road, with older-style warehouse/industrial buildings to the north. Photographs of the surrounding land uses are provided as **Figure 5**.
Regional Context	The site is on the southern boundary of Alexandria, approximately six kilometres south of the Sydney Central Business District (**CBD**), one kilometre north of Sydney Airport and six kilometres north-west of Port Botany.
Infrastructure	The site is strategically located close to the St Peters Interchange which was opened on 5 July 2020 and provides access to the M8 Motorway Tunnel via Gardeners Road and Euston Road. The M4-M5 Link Tunnels (currently under construction) will link the St Peters Interchange to the new M4 Tunnels in Haberfield and the Rozelle Interchange (also under construction). The existing and future connections provide excellent access from the site to the regional road network. The site also benefits from both-south and east-west road connections which provide access to the local road network and surrounding areas, including the Sydney CBD, Sydney Airport, Port Botany and surrounding eastern, inner west and inner southern suburbs. The Sydney trains T8 Airport & South line tunnel is located adjacent to the site under Bourke Road.
Site Access	There are currently two existing site accesses, located on Bourke Road and Gardeners Road. The Bourke Road access is a left-in / left-out priority-controlled intersection. The existing Bourke Road access is approximately 30 metres south of the Campbell Road Bridge/Bourke

Descriptor	Site Details
	Road intersection and 100 metres north of the Bourke Road/Gardeners Road intersection. The Gardeners Road access is a signalised intersection that permits left and right inbound movement and left-out only outbound movements. The Gardeners Road access is approximately 80 metres east of the Bourke Road/Gardeners Road intersection and 240 metres west of the O'Riordan Street/ Gardeners Road intersection. The site is well-serviced by public transport, including Mascot Railway Station (approximately 350 metres walking distance) and several bus stops along Gardeners Road and Bourke Road which provide access to the inner-city, eastern suburbs and inner west via Route 305 (Gibbons Street/Redfern Station-Stamford Hotel), Route 357 (Bondi Junction-Mascot Station) and Route 418 (Kingsford-Burwood). The site benefits from active transport connections via the separated off-road cycleway on Bourke Road and an off-road shared path along Gardeners Road.
Easements and Covenants	▪ Five metre wide easement for electricity running generally parallel along the western boundary ▪ Two metre wide easement to drain water in the western part of the property ▪ Stratum easement acquired for State Rail Authority in the north-western corner. ▪ Lease to Ausgrid (with sub-leases to various parties listed on the land title) for substation in the south-eastern corner
Services	The site is served by existing services connections for power, water and telecoms.
Acid Sulfate Soils	Site characterisation assessment data available for subsurface conditions identified the occurrence of potential acid sulfate soil material, primarily natural soils at a depth greater than 2 metres below ground surface.
Contamination	A Detailed Site Investigation has been undertaken which concludes the site is suitable for commercial/industrial land use.
Stormwater and Flooding	The site is not affected by significant regional flood affectation or significant local overland flow paths for events up to the 1% AEP event (as per City of Sydney Council's flood study and the WestConnex New M5 EIS Appendix P: Technical Working Paper: Flooding (SSI-6788)).
Bushfire Prone Land	The site is not bushfire prone land.
Flora and Fauna	The site predominantly cleared except for a small number of trees in the north-western and south-eastern parts of the site.
Aboriginal Heritage	A draft Aboriginal Cultural Heritage Assessment has been undertaken which finds no Aboriginal objects or Aboriginal places are registered within the site. Due to the high level of historical ground disturbance, there

Descriptor	Site Details
	is nil to low potential for Aboriginal sites within the disturbed soil layers to depths of approximately 2m below the existing ground surface.
European Heritage	The site is not located in proximity to any identified heritage items or within a conservation area.

Figure 5 Locality photographs

Picture 5 Data centre building to north

Picture 6 Data centre building to east

Picture 7 Development to west of Bourke Road

Picture 8 Residential development to south-east

Source: Urbis

2.3. DEVELOPMENT HISTORY

The planning history for the site as identified by the City of Sydney Council's DA tracker is detailed in the table below.

Table 4 DA history

DA reference	Description of Development	Decision
D/2017/250/B	Section 96(1A) modification of consent for alterations to the Bunnings Warehouse site including reconfiguration of the car park, removal of 5 trees and landscaping works. Proposed changes are to delete Condition	Approved

DA reference	Description of Development	Decision
	49 which requires the Bourke Road driveway to be restricted to left turn entry and exit movements only.	
D/2017/250/A	S96(1a) - Modification to various conditions to correct errors and amend public domain and access requirements.	Approved
D/2017/250	Alterations to the Bunnings Warehouse site including reconfiguration of the car park, removal of 5 trees and landscaping works.	Approved
D/2009/732	Installation of ventilation system comprising large diameter HVLS fans and roof mounted exhaust fans.	Approved
D/2008/140/A	S96(1A) application to replace and relocate approved rainwater tank.	Approved
D/2008/140	Installation of 2 x 22,500 litre rain water tanks each 2.5m high and 3.65m diameter.	Approved
D/2006/670	Alteration to trolley bay to increase car parking numbers from 243 to 254 on-site car parking spaces and provision of a timber sales yard.	Approved

2.4. CUMULATIVE IMPACTS WITH FUTURE PROJECTS

The site is located within the southern precinct of Alexandria. The Southern Enterprise Area has seen progressive renewal over the last 5-10 years. Approved and likely future developments which may be relevant in the cumulative impact assessment of the proposal are summarised in the following table.

Table 5 Approved and Likely Future Developments

DA Reference	Development Description	Current Status
D/2021/45	Four storey data centre fronting Gardeners Road (Stage 2)	Approved
DA-2015/22	Construction of a 14 storey mixed use building containing commercial at ground floor and 117 residential apartments above the ground floor, with a proposed building height of approximately 45.5m above the existing ground level and a proposed floor space ratio of approximately 3.39:1; Provision of a total of 158 car parking spaces, provided over 2 basement levels as well as at the western portion of the ground floor; Ancillary works to facilitate vehicle access, drainage landscaping, and road widening.	Approved
DA2014/453	Construction of new three storey industrial building for use as a data centre, with hours of operation 24 hours a day, Monday to Sunday inclusive. Includes new driveway to Bourke Road, car parking, fencing, gates and landscaping. The site has a frontage to Bourke Road.	Approved
DA/2017/1797	Concept approval of a 3 and 4 storey building for use as high technology industry, including the approval of Stage 1 buildings works comprising construction of the 3 storey building, internal roads, car parking and landscaping.	Approved

DA Reference	Development Description	Current Status
SSI-6788	WestConnex - New M5	Approved

The potential cumulative impacts of the project are addressed in **Section 6** of the EIS in accordance with the DPE *Assessing Cumulative Impacts* guidelines.

2.5. FEASIBLE ALTERNATIVES

Clause 7 in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (**the Regulation**) requires an analysis of any feasible alternatives to the proposed development, including the consequences of not carrying out the development.

Charter Hall identified three project alternatives which were considered in respect to the identified need for the proposed warehouse and distribution centre. Each of these options is discussed in the following table.

Table 6 Project Alternatives

Option	Assessment
Option 1 - Do Nothing	This option was dismissed as the objectives of the project would not be met. If the proposal was not to proceed, the site would remain vacant and the existing building would likely deteriorate. The site would not realise its employment generating potential or contribute to economic development within the precinct.
Option 2 - Alternative Location	Consideration to alternative sites was given, however the locations were not considered to be the preferred option as they were not as well located in proximity to gateway infrastructure and the regional and local road networks. The alternate sites also did not also allow for a satisfactory site layout and design to allow for the proposed operation of the warehouse and distribution centre. The alternative sites were dismissed as the subject site resulted in the most beneficial outcomes for the proposal and ensures that significant infrastructure investment results in employment opportunities as: ▪ the site is consistent and compatible with adjoining and surrounding industry and employment generating uses; ▪ the potential environmental impacts of the proposal can be suitably mitigated to avoid unacceptable impacts on the amenity of nearby residential apartments; ▪ the proximity of the site to the regional road network provides increased economic benefits for freight and logistics or last mile delivery; ▪ the proposal will not affect any area of heritage or archaeological significance; and ▪ the proposal can be developed with appropriate visual amenity given its surrounding context. The proposal is justified on the basis it is compatible with the locality in which it is proposed while having no adverse economic, environmental or social impact.

Option	Assessment
Option 3 - Alternative Design	Consideration to an alternative design which sought to avoid the removal of trees on site. This option was dismissed as the alternative design did not allow for the project objectives to be delivered in relation to the construction of a state-of-the-art warehouse and distribution centre that meets the needs of modern warehouse and distribution uses now and into the future. An alternative was also considered in relation to the design of the warehouse breezeways and loading docks. This option was however dismissed as the alternative design was found to result in unacceptable impacts in relation to noise impacts on nearby residential receivers. Neither of the alternative designs were considered to achieve highest and best use of the brownfield industrial site within the Southern Enterprise Area.
Option 4 - The proposal (preferred option)	The site was identified as being the most suitable location for the proposed warehouse and distribution centre and the final design presents the optimal outcome for the following reasons: ▪ the proposal facilitates the orderly and efficient use of a brownfield site and represents sustainable development; ▪ the development is permitted within the IN1 General Industrial zone and is consistent with the relevant zone objectives; ▪ the proposal will generate employment opportunities within the Eastern Economic Corridor, close to Sydney Airport, Port Botany and Sydney CBD; ▪ the site benefits from access to the regional road network and sustainable transport modes; ▪ the proposal is compatible with surrounding development and will result in minimal impact on the environment, subject to implementation of suitable mitigation measures; and ▪ the proposal will not result in unacceptable environmental impacts including in relation to ecology, biodiversity, heritage, noise and views.

The proposal was identified as being the most suitable option as it allows for warehousing and distribution uses within an established industrial precinct. The final siting and design are compatible and consistent with the existing and likely future development, as outlined within the objectives and permitted uses for the IN1 zone. The built form responds to the industrial and mixed-use context and is sensitive to the surrounding environment.

3. PROJECT DESCRIPTION

The following sections of the EIS summarise the key numeric components of the proposed development and describe the site preparation, construction and operational phases in further detail.

3.1. PROJECT OVERVIEW

The key components of the proposed development are summarised in **Table 7**. A copy of the architectural drawings is attached as **Appendix B**.

Table 7 Project Details

Descriptor	Project Details
Project Area	The site has a total area of 18,988m^2. The total site area is expected to be physically disturbed by the project.
Site Description	Lot 302 in Deposited Plan 1231238.
Project Description	The project comprises the construction of a three-level warehouse and distribution centre development, with ancillary offices, parking and associated works, including site preparation, earthworks and landscaping.
GFA	Total GFA of 27,509m^2, broken down as follows: ▪ Warehouse and distribution: 21,952m^2 – Warehouse tenancy 1A: 2,693m^2 – Warehouse tenancy 1B: 2,662m^2 – Warehouse tenancy 2A: 2,372m^2 – Warehouse tenancy 2B: 2,117m^2 – Warehouse tenancy 3: 6,085m^2 – Warehouse tenancy 4A: 2,073m^2 ▪ Warehouse tenancy 4B: 2,141m^{2}Ancillary office: 5,557m^2 – Office space 1A: 183m^2 – Office space 1B: 239m^2 – Office space 2A: 264m^2 – Office space 2B: 300m^2 – Office space 3: 3,967m^2 – Office space 4A: 300m^2 – Office space 4B: 305m^2 ▪ Service vehicle storage: 1,278m^2 ▪ Café: 149m^2 ▪ Ancillary gym/wellness: 143m^2
Access	The existing vehicular access from Bourke Road is to be extinguished and replaced by two new access driveways. One new access will be for left-in/left-out for vehicles up to 6.4 metre long (small rigid vehicles) located

Descriptor	Project Details
	approximately 5 metres north of the existing Bourke Road access. The second new access will be for left-out truck egress only, located approximately 40 metres south of the existing Bourke Road access. The existing Gardeners Road vehicular access is to be converted from an entry/exit access to an entry-only access, including left-in and right-in movements for heavy vehicles. The existing driveway is proposed to be widened to accommodate heavy vehicle movements from the left lane on Gardeners Road.
Maximum Height	24.65 metres (RL 31.4) and three storeys
Parking Spaces	On-site parking will be provided for: 144 car spaces 12 motorcycle spaces 3 care share spaces
Cycle Parking	64 bicycle spaces
Loading	Heavy vehicle parking for loading and unloading is provided within the warehouse ground floor and level 1 breezeways
Landscaped area	4,511m^2 of hard and soft landscaping at ground level and an additional 1,634 m^2 of soft landscaping at second floor level
End of Trip Facilities and Amenities	End of trip facilities are provided on the ground level, accessed from Bourke Road. On site amenities are provided on the ground level (café and gym) and level 2 (café).
Construction hours	Standard hours of construction: 7:30am to 5:30pm on Monday to Friday; and 7:30am to 3:30pm on Saturday No work on Sundays and Public Holidays (unless permitted otherwise)
Hours of operation	24 hours per day, seven days per week
Capital Investment Value	$76,016,898 (excluding GST)

3.2. DETAILED DESCRIPTION

3.2.1. Project Area

The site has a frontage of approximately 179 metres with Bourke Road to the west and approximately 112 metres with Gardeners Road to the south. To the east of the site is a three-storey data centre and approval for a four-storey data centre. To the north of the site is a private road beyond which is a two-storey data centre.

The brownfield industrial site contains a vacant hardware and building supplies store and surrounding hardstand. The site has been extensively modified and is generally clear of vegetation, except for a small

number of existing trees in the south east and north west corners of the site. The site is not affected by significant regional flood affectation or significant local overland flow paths up to the 1% AEP event.

The site is on the southern edge of an established industrial and business area. Industrial zoned land is to the north, east and west, accommodating various employment-generating land uses. The land to the north-east is zoned B7 Business Park with a mix of business and retail uses. Land to the south beyond Gardeners Road is zoned B4 Mixed Use with a mix of warehouse, commercial and residential land uses. The nearest residential receivers are located approximately 35 metres to the south of the site at 635 Gardeners Road.

The total site area is expected to be physically disturbed by the proposal as shown in **Figure 6** below.

Figure 6 Project area

Source: Urbis

3.2.2. Physical Layout and Design

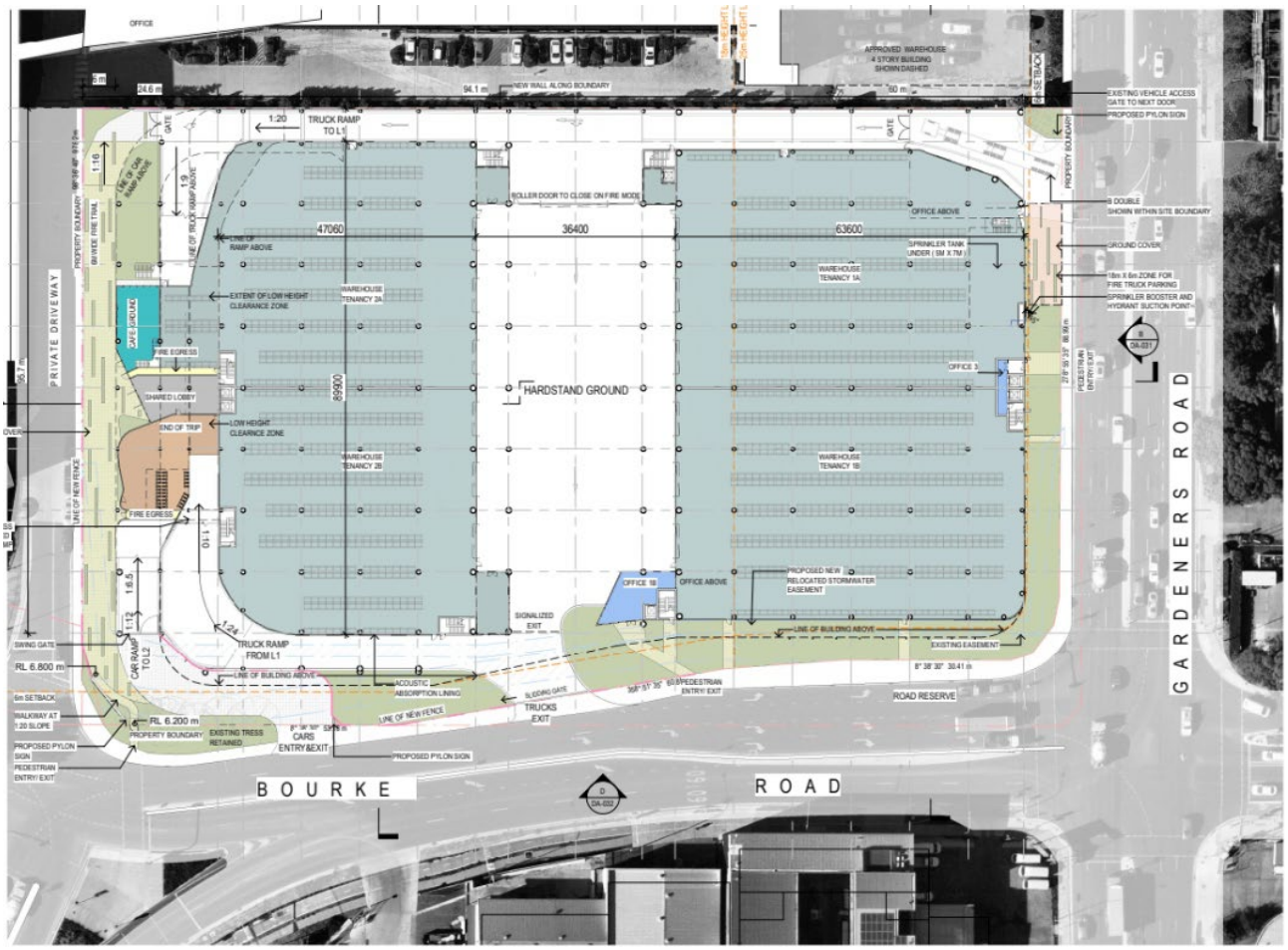
3.2.2.1. Site Layout

The site layout has considered the existing site conditions and the functional requirements of the warehouse and distribution uses. As shown in **Figure 7**, the proposal will involve:

- Construction of a warehouse and distribution centre (27,509m^2) sited centrally to the site with three levels, including two levels of warehouse space with ancillary offices connected by a central enclosed breezeway and ancillary offices and roof-top car parking on level 2.
- Internal circular access for heavy vehicles, entering from Gardeners Road and exiting to Bourke Road. Ramps at the northern end of the building provide access to and from level 1 and the roof-top car park on level 2. The existing driveway on Bourke Road will be closed, with two new driveways providing for separate movements of light and heavy vehicles, and the existing driveway from Gardeners Road will be widened.
- Landscaping within the front setbacks along Gardeners and Bourke Roads, with additional planting on level 2 within the ancillary car park and outdoor office amenity area.

- On-site amenities including two cafés, a gym and communal rooftop garden which have been sited and designed to meet the needs of employees.

Figure 7 Proposed site plan



Source: Nettleton Tribe

3.2.2.2. Design and Built Form

The proposal represents best-practice design for a modern multi-level warehouse and distribution centre. The built form has been designed to respond to the relevant planning controls and be compatible and consistent with the surrounding development.

The southern portion of the building including the ancillary office space has a maximum height of 24.65 metres at RL 31.4. Most of the northern portion has a maximum height of 18.5 metres at RL 25. Architectural elements of the rooftop car park are up to approximately 22.6 metres in height such as the covered ventilation shafts and stair and lift overruns.

Most of the building is setback six metres from the Gardeners Road and Bourke Road boundaries, including the entire ground level, allowing for comprehensive landscaping to be provided along each of the street frontages. The southern part of the building facing Bourke Road is setback approximately four metres at levels 1 and 2, with the remaining frontage setback at least six metres.

The design responds to the needs of the primary tenant for the warehouse and ancillary office space, Schindler Lifts Australia. The Gardeners Road and Bourke Road façades incorporate materials and detailing reminiscent of historic lifts. The elevational treatment seeks to create visual interest and avoid large blank areas of building façade. A design screen is proposed to the eastern façade to reflect the landscaping to the other site frontages, with trailing planting proposed to the upper level of the façade (see **Figure 8** below). A complementary palette of materials including brick effect finish concrete, fenestration and glazing, cladding and perforated screening, will enhance the site and streetscape.

The location and design of the vehicle ramps have been carefully considered to minimise their appearance when viewed from the public domain. The ramps are to the north/rear of the building, away from the primary

viewpoint at the Gardeners and Bourke Roads intersection. The ramps have been integrated into the building design and are screened by integrated façade elements.

The ancillary offices have been orientated to Gardeners Road and Bourke Road to provide increased activation to the primary façades and public domain. The associated glazing and ground level pedestrian entrances on Bourke Road and Gardeners Road will increase visual interest and activation.

Solar panels are proposed to be distributed on the roof to the southern office space. All panels will be flush mounted on standard fixings and will sit below the 25 metre height limit for that part of the site.

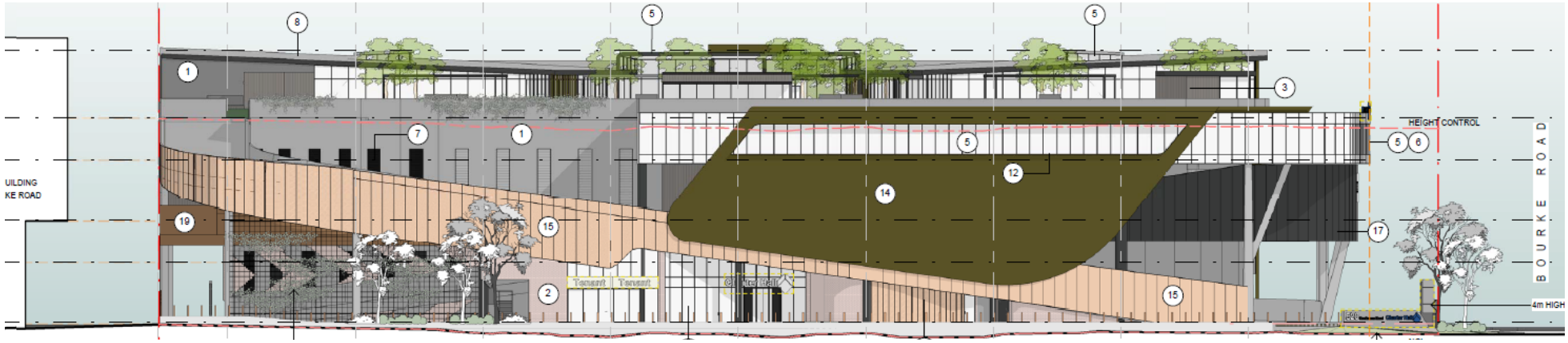
Business and building identification signage is proposed in the form of a pylon signs, totem signs and façade signage. Proposed signage has been designed to integrate with the building design including both building and tenant signage. Building façade signage is proposed to be illuminated with backlighting to lettering.

Figure 8 Proposed eastern elevation

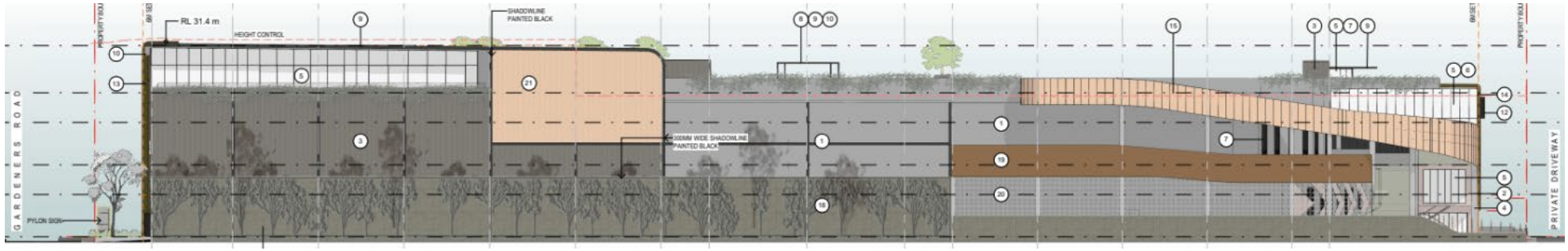
Source: Nettleton Tribe

Figure 9 Proposed elevations

South elevation



North elevation



East elevation

West elevation

Source: Nettleton Tribe

3.2.2.3. Landscaping

The landscape strategy establishes diverse landscapes that provide safe, comfortable and inviting spaces. Consideration is given to the microclimate (wind, shade and solar access), practicality and fit for purpose, demonstrating an appreciation of the natural environment and improving ecological value with a planting palette of diverse natives that offer flowering and habitat flora which are drought tolerant and low maintenance.

The boundary treatment provides for a green frontage to Bourke and Gardeners Roads, with large street trees species including, *Lophostemon confertus* (Brush Box), *Corymbia eximia* (Yellow Bloodwood), *Corymbia maculate* (Spotted Gum), increasing tree canopy cover at the site. Where existing and proposed easements are located within the Bourke and Gardeners Road site setbacks, planting has been designed and specified to be placed outside of these easements with a minimum two metre offset. In addition, new and existing utilities in these easements are proposed to be wrapped with root protection barrier membrane.

The landscape design provides for comfortable external spaces adjoining the ancillary offices (accessible by all). This includes a café garden, central courtyard and terraces which allow for respite and recovery for breaks and lunchtime, for individuals or small groups to enjoy.

Landscaping, including deep soil planting, is proposed within the southern, western and northern setbacks, with retention of existing trees, where feasible. Planting at ground level includes a range of endemic species including *Corymbia maculate* (Spotted Gum), *Melaleuca ericifolia* (Swamp Paperbark) and *Acacia longifolia* (Golden Wattle).

Roof-top planter boxes will accommodate a range of indigenous species including trees and flowering shrubs. The courtyard garden on level 2 will provide a high level of amenity for staff, including employees within the adjoining office space, as well as others across the ground level and level 1. The roof-top amenity space includes a range of landscaped and seating areas, a café and wintergarden spaces.

Figure 10 Proposed landscaping plans

Ground level

Level two

Source: Urbis

3.2.3. Uses and Activities

The proposal is for a warehouse and distribution centre use with ancillary office space. The warehouse and distribution uses are proposed to operate 24 hours a day, 7 days a week, with on-site activities including:

- Handling of goods and materials for storage and distribution, including loading and unloading.
- Heavy service vehicle movements and car parking, including arrival and departure of employees.

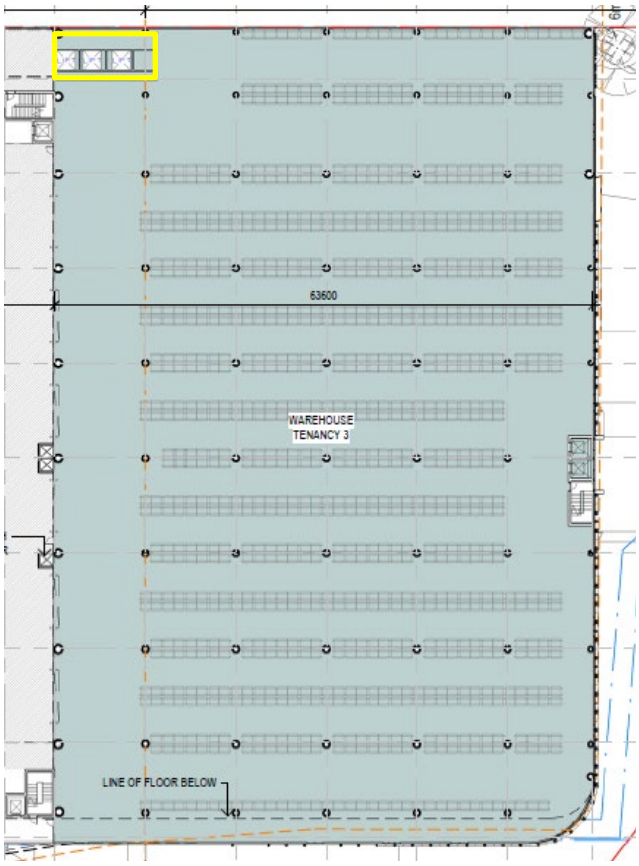
The ancillary offices are located to service the primary warehouse or distribution uses. This includes small ancillary offices at the ground level and mezzanine and level 1 mezzanine, with a larger ancillary office on level 2 to meet the needs of the incoming tenant.

Schindler Lifts Australia is proposed to occupy the southern part of the level 1 warehouse floorspace (warehouse tenancy 3) and the ancillary office space on level 2 (office tenancy 3), with internal connectivity via the lifts. The combined warehouse and ancillary office space will enable Schindler Lifts Australia to service the nearby Sydney CBD and inner city employment areas. Service vehicles, parts and tools will be stored within the warehouse, with service vehicles stored in a dedicated outdoor storage area adjacent to the ancillary car park.

Three lifts are proposed in the eastern part of warehouse tenancy 3 on level 1 which will be used by Schindler Lifts Australia for training of staff. These lifts are wholly contained within the warehouse and do not form part of the vertical access arrangements. An example of similar training lifts used within another Schindler facility are shown in **Figure 11** below. The lifts will facilitate training of engineers and the apprenticeship programme regarding the operational components of the lifts. The proposal does not include any manufacturing or testing of the lift components. The training lifts form a very minor component of the overall tenancy (approximately 70m^2 as outlined in yellow in **Figure 11** below) and any training activities are ancillary to the primary warehouse and distribution use.

Figure 11 Warehouse tenancy 3 training lifts

Picture 1 Example training lifts



Picture 2 Location of proposed training lifts

Source: Nettleton Tribe

To provide amenities for the employees and visitors to the development, ancillary café and gym/wellness space is provided on site. 112m^2 of café space and 143m^2 for a gym/wellness space is provided at ground floor level and 37m^2 of café space is provided at second floor level.

The cafés are proposed to operate from 6:00am – 6:00pm and will be accessible to all tenants and visitors to the site. It is proposed that the cafés will be operated by retail tenants, separate to the proposed warehouse or distribution centre land use activities.

The gym/wellness space is proposed to operate on a 24/7 basis, consistent with the primary warehouse or distribution centre activities. This space will only be available for use by tenants of the development enable the amenity to be available for all staff across the working day.

3.2.3.1. Site Preparation and Earthworks

Demolition of the existing building on site is proposed to be undertaken by Charter Hall under a separate approvals process.

Site preparation and earthworks will include the installation of site services and infrastructure and minor bulk earthworks. The limited bulk earthworks on the site will involve the minor import of fill to provide a level of RL 7.0m AHD and 0.5m above the level of Bourke Road for flood planning purposes.

3.2.3.2. Stormwater Management

Stormwater runoff will be collected by the proposed stormwater management system and directed through several pollution treatment devices as outlined in the Civil Engineering Drawings at **Appendix R**.

3.2.3.3. Transport and Parking

Construction

Construction vehicles will enter and exit the site via the existing driveway from Bourke Road. The Gardeners Road driveway may be used for egress as required. During construction, heavy vehicle movements will be generated from minor bulk earthworks and fill importation and the delivery of construction equipment and materials. Vehicle movements will primarily be during standard construction hours, however, limited out-of-hours movements may be required to minimise disruption to the road network.

Operation

Heavy vehicles will access the site from Gardeners Road with a one-way circular heavy vehicle route through the site to the covered breezeways on the ground level and level 1. Heavy vehicles will exit the site via a new driveway to Bourke Road.

Cars and service vehicles will enter and exit the site from a new driveway on Bourke Road, separated from the heavy vehicles. The ramp at the northern end provides access to and from the roof-top parking and service vehicle storage area. A total of 144 car parking spaces will be provided on-site for employees and visitors including seven accessible spaces. 47 spaces are provided for storage of service vehicles. 12 motorcycle spaces and 64 bicycle parking spaces are provided at the ground level.

Loading and servicing bays are within the covered breezeways at the ground level and on level 1. The breezeways have been designed with sufficient space for unloading of the largest anticipated vehicles (26m B-double) and through-movements of heavy vehicles via the one-way circulation route. Adequate space is also provided for waste collection vehicles.

3.2.4. Development Timing

3.2.4.1. Stages

The development is proposed to be carried out in one stage.

3.2.4.2. Phases

Construction of the proposal will be carried out in three phases as listed below:

- Site preparation, earthworks and infrastructure (approximately three months)
- Warehouse construction and fit-out (approximately 10 months)
- Site demobilisation, landscaping and finishing works (approximately three months)

The tasks required in the second and third phases can be undertaken partly concurrently, providing an overall construction programme of approximately 14 months. Site establishment is anticipated to commence in April 2022 (subject to development approval).

3.2.4.3. Sequencing

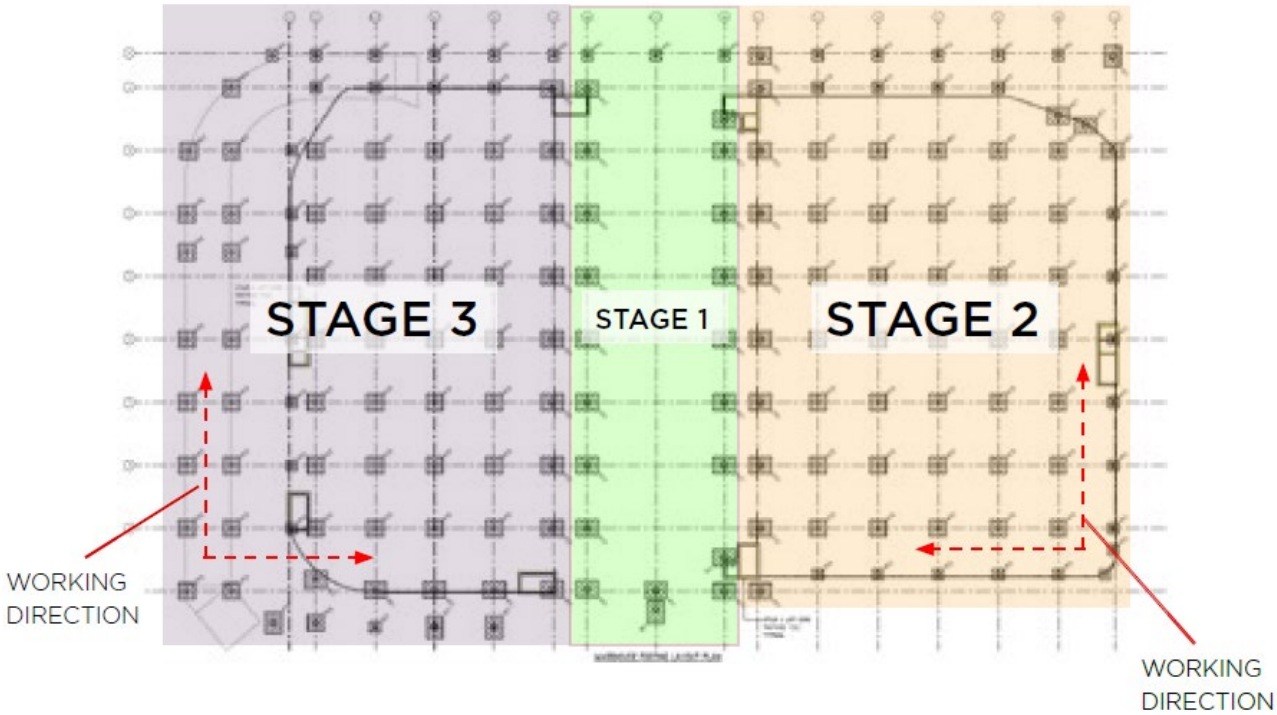
A site compound is proposed to be established adjacent to the site entrance/exit on Bourke Road as shown in **Figure 12**. The first construction phase will include piling works in three stages across the site as shown in **Figure 13**. It is estimated that the piling works will take approximately two months.

The concrete hardstand for the ground level breezeway will commence while the foundations for the northern and southern portions of the warehouse are being completed (**Figure 14**). This will allow the hardstand to be used for all-weather access and a staging area for the construction, allowing for safer setup of construction machinery and minimising the risk of environmental issues in relation to silt and soil.

Figure 12 Preliminary site establishment plan

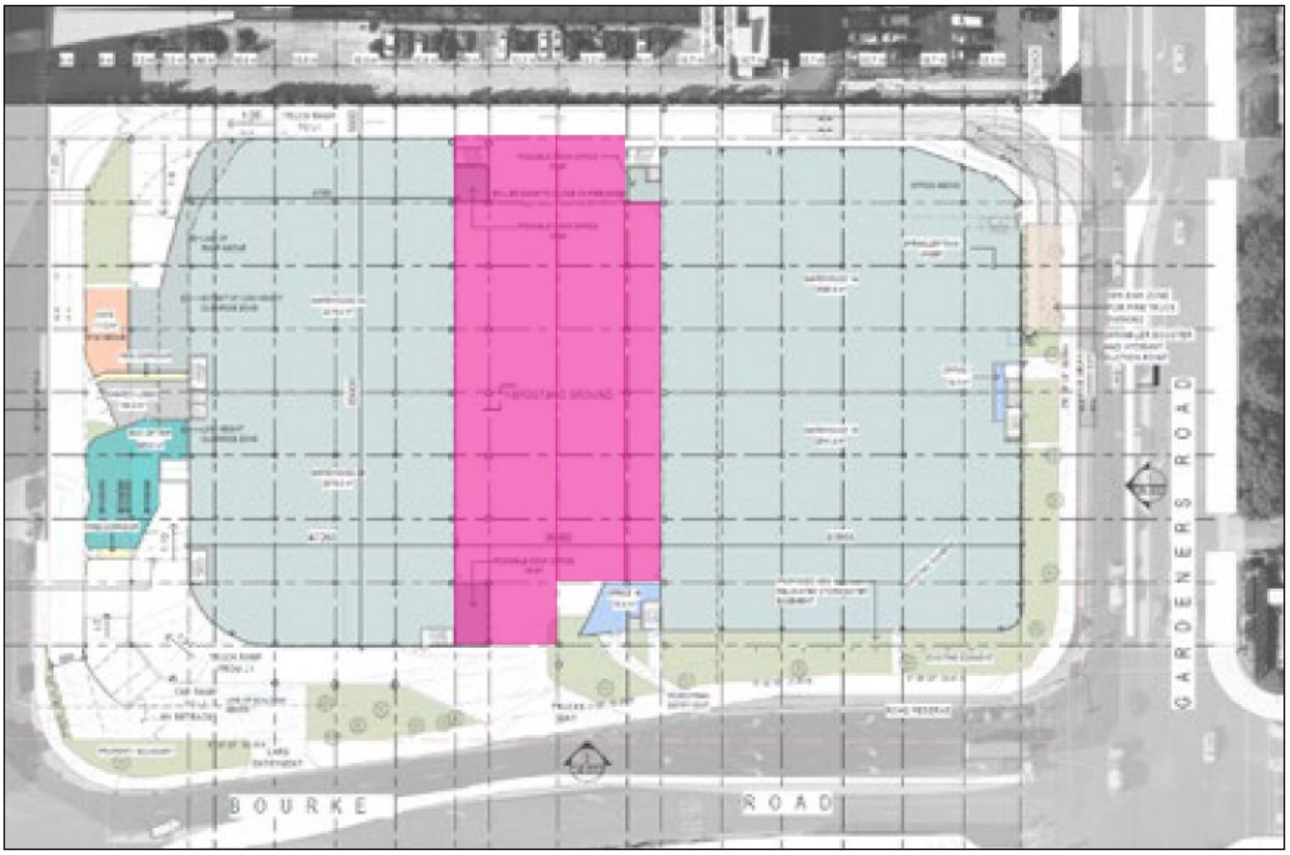
Source: Richard Crookes Constructions

Figure 13 Anticipated piling sequence



Source: Richard Crookes Constructions

Figure 14 All-weather access and staging area



Source: Richard Crookes Constructions

Structural steel construction will then be undertaken, followed by roofing and façade, pouring of internal slabs and steel and curtain wall for the level 2 office.

Fit out works are anticipated to take approximately 7 months. External works and landscaping will be undertaken concurrently with the fit out works, commencing following completion of the façade works.

It is anticipated that physical construction works will be complete by the end of May 2023 followed by approximately one month of testing and commissioning.

4. STATUTORY CONTEXT

This section of the report provides an overview of the key statutory requirements relevant to the site and the project, including:

- *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*
- *NSW Biodiversity Act 2016*
- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning Assessment Regulation 2000*
- *State Environmental Planning Policy (State and Regional Development) 2001*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy No 33 – Hazardous and Offensive Development*
- *State Environmental Planning Policy No 55 – Remediation of Land*
- *State Environmental Planning Policy No 64 – Advertising and Signage*
- *Sydney Local Environmental Plan 2012.*

It identifies the key statutory matters which are addressed in detail within the EIS, including the power to grant consent, permissibility, other approvals, pre-conditions and mandatory considerations.

4.1. STATUTORY REQUIREMENTS

Table 8 categorises and summarises the relevant requirements in accordance with the DPE *State Significant Development Guidelines*. A detailed statutory compliance table for the modified project is provided at **Appendix C**.

Table 8 Identification of Statutory Requirements for the Project

Statutory Relevance	Action
Power to grant approval	In accordance with Schedule 1 of the SRD SEPP, development that has a CIV of more than $30 million for the purpose of warehouse or distribution centres are classified as SSD: ***12 Warehouses or distribution centres*** *(1) Development that has a capital investment value of more than the relevant amount for the purpose of warehouse or distribution centres (including container storage facilities) at one location and related to the same operation* *(2) This clause does not apply to development for the purposes of warehouses or distribution centres to which clause 18 or clause 19 applies* *(3) In this clause –* *relevant amount means –* *(a) For development in relation to which the relevant environmental assessment requirements are notified under the Act on or before 31 May 2023 – $30 million, or* *(b) For any other development – $50 million*

Statutory Relevance	Action
	The proposed works have an estimated CIV of $76,906,578 (refer to Estimate Report, **Appendix DD**) and accordingly, the proposal is SSD for the purposes of the SRD SEPP.
Permissibility	The site is zoned IN1 General Industrial in accordance with SLEP 2012. The proposed development is appropriately categorised as 'warehouse or distribution centres' which is defined as follows: ***Warehouse or distribution centres*** *means a building or place used mainly or exclusively for storing or handling items (whether goods or materials) pending their sale, but from which no retail sales are made, and includes local distribution premises* Warehouse or distribution centres is listed as permitted with consent in the IN1 zone. As set out in **Section 3.2.3**, 112m^2 of café space is provided at ground floor level and 37m^2 of café space is provided at second floor level. The café spaces are proposed to provide on-site amenity for the employees and visitors of the development. The café use is permissible with consent in the IN1 zone. As set out in **Section 3.2.3**, a very minor portion of the Schindler Lifts warehouse tenancy (approximately 70m^2) is proposed to be utilised for training of staff. Schindler Lifts are proposing to occupy the warehouse as their Australian head office and to service the Sydney CBD and Metro area. The servicing function provided from the warehouse will be to maintain and repair Schindler lifts across the region. The proposed training area is required for new staff to learn the required skills to provide the Schindler Lifts service. The training area forms a minor component of the warehouse and is ancillary to the primary warehouse and distribution use. As set out in **Section 3.2.3**, 143m^2 for a gym/wellness space is provided at ground floor level. This space is provided to provide on-site amenity for the employees of the development. The provision of gym/wellness space on-site is to allow staff of all tenancies to make use of the space and deliver a high-quality working environment. The gym/wellness space will only be available to use of tenants of the development and is ancillary to the primary warehouse and distribution use. A small area within the site on the western boundary is zoned SP2 Infrastructure (Classified Road). It is understood that this is as a result of the zoning not correctly aligning with the updated lot boundaries when the land was acquired for the completed road infrastructure upgrades on Bourke Road. A minor portion of the proposed southern Bourke Road access driveway and adjacent landscape area is located within this SP2 zoned land.
Other approvals	
No requirements for other approvals have been identified at this stage.	

4.2. PRE-CONDITIONS

Table 9 outlines the pre-conditions to exercising the power to grant approval which are relevant to the project and the section where these matters are addressed within the EIS.

Table 9 Pre-conditions

Statutory Reference	Pre-condition	Relevance	Section in EIS
State Environmental Planning Policy No 55 - Remediation of Land (SEPP 55) - clause 7(1)	A consent authority must be satisfied that the land is suitable in its contaminated state - or will be suitable, after remediation - for the purpose for which the development is proposed to be carried out.	Potential sources of contamination exist at the site but are not expected to preclude the proposed development of the site. The Phase 2 Detailed Site Investigation confirms the site is suitable for its intended use	**Section 6.1.3**

4.3. MANDATORY CONSIDERATIONS

Table 10 outlines the relevant mandatory considerations to exercising the power to grant approval and the section where these matters are addressed within the EIS.

Table 10 Mandatory Considerations

Statutory Reference	Mandatory Consideration	Section in EIS
Consideration under the EP&A Act and Regulation		
Section 1.3	Relevant objects of the EP&A Act	**Appendix C**
Section 4.15	Relevant environmental planning instruments: ▪ SEPP – Infrastructure 2007	**Section 6.1.4** and **Appendix K**
	▪ SEPP 33 – Hazardous and Offensive Development	**Appendix BB**
	▪ SEPP 55 – Remediation of Land	**Section 6.1.3** and **Appendix T**
	▪ SEPP 64 – Advertising and Signage	**Appendix C**
	▪ Sydney LEP 2012	**Appendix C**
	Relevant draft environmental planning instruments ▪ Draft State Environmental Planning Policy (Remediation of Land) ▪ Draft SEPP – Strategic Transport Corridors	**Appendix T** **Appendix K**

Statutory Reference	Mandatory Consideration	Section in EIS
	Relevant planning agreement or draft planning agreement ▪ None are relevant to the proposed development	
	Development control plans ▪ *Sydney Development Control Plan 2012*	**Appendix C**
	The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.	**Section 6**
	The suitability of the site for the development	**Section 2, 6 & 7**
	The public interest	**Section 7**
Mandatory relevant considerations under EPIs		
SEPP 55 - clause 7	A preliminary investigation is required in accordance with the contaminated land planning guidelines.	**Section 6.1.3** and **Appendix T**
Sydney LEP 2012	Objectives and land uses for IN1 Zone ▪ Part 4 – Principal development standards ▪ Part 5 – Miscellaneous provisions ▪ Part 6 – Local provisions – height and floor space ▪ Part 7 – Local provisions – general	**Appendix C**
Considerations under other legislation		
Biodiversity Conservation Act 2016 – section 7.14	The likely impact of the proposed development on biodiversity values as assessed in the Biodiversity Development Assessment Report (BDAR). The Minister for Planning may (but is not required to) further consider under that BC Act the likely impact of the proposed development on biodiversity values.	**Section 6.1.7 and Appendix N**
Development Control Plans		
Sydney DCP 2012	Clause 11 of the SRD SEPP states that development control plans (whether made before or after the commencement of this Policy) do not apply to SSD. As such, there is no requirement for assessment of the proposal against the Sydney DCP 2012 for this SSDA. Notwithstanding this, consideration has been given to the following provisions: ▪ Section 2: Locality Statements	**Appendix C**

Statutory Reference	Mandatory Consideration	Section in EIS
	▪ Section 3: General Provisions ▪ Section 5: Specific areas	
Development Contributions Plan		
City of Sydney Development Contributions Plan 2015	Section 94 contribution rate of $4,443 per additional worker within the Southern Employment Lands, indexed at the time of payment.	**Appendix C**

5. COMMUNITY ENGAGEMENT

The following sections of the report describe the engagement activities that have been undertaken during the preparation of the EIS and the community engagement which will be carried out if the project is approved.

5.1. ENGAGEMENT CARRIED OUT

Community and stakeholder engagement has been undertaken by the project team in the preparation of the SSDA. This included direct engagement and consultation with:

- Department of Planning and Environment
- Government, agency, and utility stakeholders
- City of Sydney Council
- Community and nearby residential neighbours, specifically:
  - 635 Gardeners Road
  - 659 Gardeners Road
- Commercial and industrial neighbours, specifically:
  - Budget car rental
  - Avis car rental
  - Mascot Tech Park
  - 77 and 79 Bourke Road
  - 200 Bourke Road
  - Gillie and Marc Art
  - Copper Rose Café Mascot
  - Angry Tony's Pizza.

The following actions were taken to inform the community regarding the project and seek feedback regarding the proposal:

- Letterbox drop: A fact sheet that outlined the key features of the proposal was distributed via letter to approximately 2,150 properties (residential and industrial).
- A dedicated 1800 number and project email.
- Consultation was also undertaken with the certain stakeholders to inform the detailed assessment of key matters including all relevant agencies specifically:
  - Transport for NSW
  - Sydney Water
  - Fire and Rescue NSW
  - Endeavour Energy.

This engagement is consistent with the community participation objectives in the Undertaking Engagement Guidelines for State Significant Projects and complies with the community engagement requirements in the SEAR as summarised below:

- *Detail how issues raised and feedback provided have been considered and responded to in the project. In particular, applicants must consult with:*
  - *the relevant Department assessment team.*
  - *any relevant local councils.*

- *any relevant agencies.*
- *the community.*
- *if the development would have required an approval or authorisation under another Act but for the application of s 4.41 of the EP&A Act or requires an approval or authorisation under another Act to be applied consistently by s 4.42 of the EP&A Act, the agency relevant to that approval or authorisation.*

In accordance with the Regulations, the EIS will be placed on formal public exhibition once DPE has reviewed the EIS and deemed it 'adequate' for this purpose. Following this exhibition period, the applicant will respond to any matters raised by notified parties.

5.2. COMMUNITY VIEWS

The newsletter was distributed by letterbox drop to approximately 2,150 properties on 26 November 2021. The newsletter outlined key features of the proposal and invited feedback.

Members of the public were invited to contact Urbis through a dedicated phone number and email address. These contact details were managed by Urbis to enable stakeholders and the community to provide feedback on the project. At the time of writing this report, no community enquiries have been summitted through to the dedicated phone number and email address.

The key issues raised by key stakeholders are summarised in the table below. A detailed engagement table is provided as **Appendix E** which details the way in which these issues have been addressed in the EIS.

Table 11 Key Stakeholder Feedback

Key Issue	Respondent	Applicant Response
Strategic Context		
None relevant		
Project and Any Alternatives Considered		
▪ Design of elevations in relation to bulk and scale. ▪ Opportunities for public art on large expanses of façade. ▪ Potential residential amenity / visual impacts of any plant located on the roof. ▪ Opportunities for tree canopy coverage and deep soil planting. ▪ Access to the site by pedestrians and cyclists including preparation of Green Travel Plan. ▪ Interface with public domain including pedestrian safety in relation to heavy vehicle movements.	City of Sydney Council	▪ As set out in the Design Report (**Appendix F**). The design of the elevations has been carefully considered to mitigate any bulk and scale impacts of the proposed built form. ▪ Any plant located on the roof is proposed to be appropriately screened as required. ▪ As detailed in the Landscape Plans (**Appendix L**), opportunities for tree canopy coverage and deep soil planting have been maximised across the site. ▪ A Framework Green Travel Plan to encourage access to the site by sustainable

Key Issue	Respondent	Applicant Response
		modes has been prepared by Ason Group as part of the Transport Assessment (**Appendix K**). ▪ The relationship of the proposal to the public domain has been carefully considered to maximise activation and pedestrian safety. ▪ Bicycle parking and end of trip facilities are provided as shown on the Architectural Plans. ▪ ESD measures are integrated into the development as detailed in the ESD Report (**Appendix M**).
Proposed access strategy	Transport for NSW	Ason Group completed the required analysis, including preliminary SIDRA modelling, to confirm the benefit to travel times and performance of the overall network by maintaining the Gardeners Road access.
Network connection requires installation of two surface substations and decommissioning of existing substation	Ausgrid	Design of proposal developed on this basis.
Pressure and flow for Bourke Road Gardeners Road water mains	Sydney Water	Section 73 application to be made subject to development approval. Charter Hall to continue to engage with Sydney Water through SSDA process.
Proposed fire engineering strategy for the development	Fire and Rescue NSW	Fire engineering brief questionnaire to be developed and lodged with Fire and Rescue NSW
Relevant Statutory Issues		
None relevant		

Key Issue	Respondent	Applicant Response
Engagement		
Engagement to be undertaken with TfNSW in relation to site access.	DPE	Engagement has been undertaken with TfNSW as detailed in the Traffic Assessment prepared by Ason.
Economic, Environmental and Social Impacts		
Detail to be provided in relation to use, operation and known tenants of multi-level warehouse and distribution centre.	DPE	The EIS includes detail on the use, operation and known tenant needs including an assessment of relevant impacts and proposed mitigation measures.
Assessment of traffic and access impacts	Transport for NSW	Ason Group completed the required analysis, including preliminary SIDRA modelling, the results of which have been presented to TfNSW.
Justification and Evaluation of Project as a Whole		
None relevant		
Issues Beyond Scope or Not Relevant to Project		
None relevant		

5.3. ENGAGEMENT TO BE CARRIED OUT

Further consultation will be undertaken to respond to community feedback during the preparation of the EIS and community participation objectives in the *Undertaking Engagement* guide, including ongoing consultation with:

- Local community
- Relevant agencies
- Registered Aboriginal Parties.

Charter Hall will continue to keep stakeholders and the community informed of the project approval process through the exhibition and determination phases.

The following actions will be undertaken to inform, consult and engage with the community during the implementation of the project:

- Continuing to engage with the community about the project, its impacts, and the approval process.
- Providing information on how the community's views have been addressed in the EIS.
- Enabling the community to seek clarification about the project through the two-way communication channels.

Prior to construction activities commencing (subject to development approval), engagement will be undertaken including with the adjacent data centre operators to determine the locations of any vibration sensitive items and determine suitable vibration levels.

The proposed actions are consistent with the community participation objectives in the *Undertaking Engagement* guide as summarised below:

- Providing consistent, relevant, jargon-free and up to date information on the proposal, impacts, benefits, and the SSDA process through accessible, tailored open lines of communication
- Responding appropriately and in a timely manner to concerns or questions raised by the community and stakeholders
- Facilitating information flow to the project team by establishing working relationships to ensure stakeholder and community views and local knowledge are appropriately incorporated into the design of the project
- Managing expectations by closing the feedback loop through sharing how stakeholder and community views influenced the proposal.

The effectiveness of the engagement will be monitored, reviewed and adapted over time to encourage community participation in the project.

6. ASSESSMENT OF IMPACTS

This section describes the way in which the key issues identified in the SEARs have been assessed. It provides a comprehensive description of the specialist technical studies undertaken regarding the potential impacts of the proposed development and recommended mitigation, minimisation and management measures to avoid unacceptable impacts. Further detailed information is appended to the EIS, including:

- SEARs compliance table identifying where the SEARs have been addressed in the EIS (**Appendix A**).
- Statutory compliance table identifying where the relevant statutory requirements have been addressed (**Appendix C**).
- Community engagement table identifying where the issues raised by the community during engagement have been addressed (**Appendix E**).
- Proposed mitigation measures for the project which are additional to the measures built into the physical layout and design of the project (**Appendix D**).

The detailed technical reports and plans prepared by specialists and appended to the EIS are individually referenced within the following sections.

6.1. DETAILED ASSESSMENT IMPACTS

This section of the report provides a detailed assessment of the key issues which could have a significant impact on the site and locality. It provides a comprehensive assessment of the relevant issues and the mitigation measures required to avoid, mitigate and/or offset the impacts of the project.

6.1.1. Design Quality

A Design Report has been prepared by Nettleton Tribe and is attached at **Appendix F**. The Design Report articulates the design qualities of the proposal and demonstrates how the proposal responds to the objectives for good design in *Better Placed*.

6.1.1.1. Existing Environment

The site is located within the Southern Enterprise Area and comprises a vacant hardware and building supplies surrounded by hardstand. The local area is characterised by a mix of industrial, business and mixed-use properties.

6.1.1.2. Potential Impacts

In accordance with *Better Placed* and clause 6.21 of SLEP 2012, it has been demonstrated the proposal achieves design excellence as outlined below:

- The design will provide a high standard of architectural design. The materials and detailing of the building will make a positive contribution to the streetscape, neighbourhood and neighbouring sites. The design has also considered the future desired character of the area and its interfaces.
- The built form successfully responds to its setting and the future character and setting of the locality. The prominent location of the site on the Gardeners Road and Bourke Road intersection is recognised through the proposed built form, façade design and materiality. The form and scale of the built form responds to the functionality of the space, operation and integration with the surrounding use context to present a modern, considered approach to the continuation of employment in the neighbourhood.
- The design seeks to balance the needs of the user efficiently and effectively. Space and purpose have been designed to respond to well thought through relationships and ease of use. Spaces have been made as flexible and as adaptive as possible. Material selections, durability and their relationships have been considered as has the detailing and weather implications to ensure the quality of the finished form and its life cycle into the future.
- The built form has a clear identity as a warehouse and distribution centre and its uses and components have been clearly defined for ease of operations and use. The overall design has enabled this legibility to compliment the design outcome.

- The design responds to the local community context and the wider social context. The function itself will create employment opportunity for the diverse local community and encourage social interaction.
- The design of the warehouse and distribution centre has thoughtfully considered how to enhance the internal and external amenity for the users, through the provisioning of landscaped greenspaces and communal areas.
- The design recognises that landscape and building operate together and as an integrated and sustainable system.
- The design has considered a sustainable landscape in an urban setting and sought to improve and organise the existing urban realm and streetscape, responding to the desired future character.
- The built form and function have considered practical and effective sustainable measures, relating to shading, ventilation, power generation and water.
- Safety has been considered and evaluated in the design process to ensure risk and harm are minimised and safe behaviour and use are supported.
- The design has taken on board the design principles identified and produced a building that has resolved the challenges and embraced the opportunities to achieve an elegant coherent outcome.
- The arrangement of built form and space has been considered in its context. The design has addressed the varying scales and form of the building in the selection and association of materials and colour. This has enabled a skilled integrated and considered design response.

Overall, it is considered the proposed development provides for a high level of design quality and will have a positive impact on the site and the streetscape.

6.1.2. Built Form and Urban Design

A Design Report has been prepared by Nettleton Tribe and is attached at **Appendix F**. The Design Report describes the design response to the site and site context and the design principles that have guided the development of the proposal.

6.1.2.1. Existing Environment

The existing building is separated from Gardeners Road and Bourke Road by large areas of hardstand which accommodated ancillary car parking for the previous hardware use. The height of surrounding development ranges between two storeys and 16 storeys.

6.1.2.2. Potential Impacts

The layout and design have been carefully considered to provide a positive visual outcome and efficient use of the site. The building massing has been designed to reinforce the corner of Gardeners and Bourke Roads and address the street frontages. The breezeway is located at the centre of the facility, minimising its impact on Gardeners Road as the primary street frontage and the residential dwellings to the south.

A six metre landscaped setback is to proposed at the ground level of Bourke and Gardeners Roads, providing for comprehensive landscaping along the street frontages. Part of the southern elevation on the Bourke Road frontage has a reduced setback of four metres on level 1 and level 2, providing articulation and visual interest along the secondary frontage, without comprising the landscaping area on the ground plane. Side and rear setbacks include soft landscaping and tree planting addressing the boundaries of adjoining properties.

Detailed consideration has been given to the façades facing Gardeners Road and Bourke Road, including articulation and careful selection of materials and fenestration. The façade of the development has been thoughtfully designed, with modern architectural materials and finishes which complement the industrial character of the area. The design also references the incoming tenant operations, with the detailed treatment being representative of a historic lift design. The form of the building has been shaped to provide visual relief and the treatment of the facades and materiality provide articulation and visual interest.

The vehicle access ramps have been carefully considered to avoid adverse visual impacts, including their location away from the primary sightlines and choice of materials to improve their appearance. The public domain has also been considered in the location of building entries and ancillary offices to activate the Gardeners Road and Bourke Road frontages.

The building height has been designed to respond to the maximum provisions under SLEP 2012. This includes a maximum 25 metre height limit on the southern part facing Gardeners Road and an 18 metre height limit to the north. A minor (0.5 metre) variation is proposed on the northern portion of the site comprising the ancillary car park to achieve the required flood planning levels. Further point encroachments are proposed to accommodate the access stairwells and ventilation shafts. The proposed variations have been justified in detail within the Clause 4.6 Variation Request at **Appendix CC**.

Overall, the proposed variations are considered minor and acceptable based on their compatibility with the surrounding development and lack of amenity impacts. The proposed variations are located away from the residential dwellings and will not be visible due to the higher built form to the south (which complies with the maximum 25 metre height control). The proposal will not result in any unacceptable visual impacts as outlined in **Section 6.1.3** below.

Based on the above, the built form and urban design outcomes are considered acceptable and generally consistent with the development anticipated for the site in accordance with the relevant controls.

6.1.3. Visual Impact

A Visual Impact Assessment (**VIA**) has been prepared by Urbis and is provided at **Appendix J**. The VIA analyses the likely visual effects of the built form through a visual analysis of the development from key viewpoints within the public domain.

6.1.3.1. Existing Environment

The visual context to the east and south is predominantly characterised by industrial and mixed-use development, including residential flat buildings.

The built form to the east is three storey with large floor plates used for retail and commercial premises. The adjoining development to the north (200 Bourke Road) contains a two-storey data centre characterised by one long built form, approximately 70 metres in width and 140 metres in length. The south-west is predominantly characterised by residential flat buildings including 659-665 Gardeners Road and 675 Gardeners Road. These sites include two tower forms which sit in an east-west alignment. The northern podium and tower form is 16 storeys.

The visual catchment is predominantly restricted to close views from the south, west and north, including short sections of approach views from Gardeners Road, Bourke Road and the Campbell Road Bridge. Residential views to the site are mainly limited by built form and vegetation or comprise oblique views which are not orientated directly towards the subject site. There are also distant views of the site from Sydney Park.

6.1.3.2. Potential Impacts

Photomontages from five viewpoints were prepared as part of the VIA. These views represent a range of viewpoints from which the development may have a visual effect or impact (**Figure 15**).

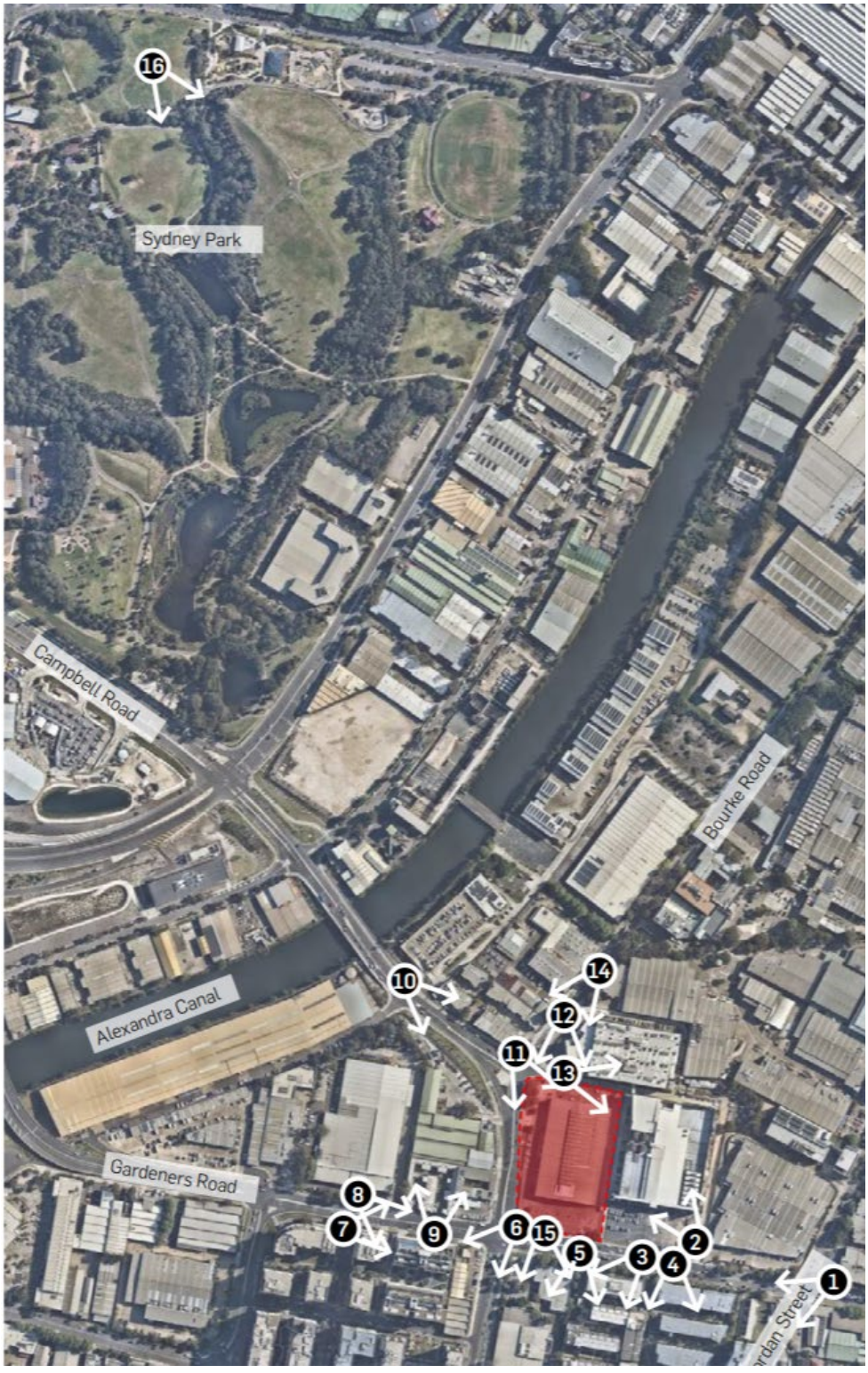
The VIA assesses views from a range of distance classes that have been used to determine visual impacts across the potential visual catchment (**Figure 16**). Of the five views analysed, four were rated as a low visual impact and one as a medium impact. Based on fieldwork observations, potential view loss in relation to private domain views is unlikely to be significant. It is noted approval was recently granted for the second stage of the data centre at 206 Gardeners Road. This includes a four storey data centre which when built, will largely obscure views of the proposal from the east on Gardeners Road (View 01).

The proposed solar panels are to be flush mounted and will not be visible in views from the public domain.

The assessment shows that notwithstanding a high level of visibility, the quantum of change does not directly relate to a high level of visual impact. The built form does not generate any significant visual impacts on the view compositions analysed.

Overall, the VIA considers the proposed to be acceptable in visual impact terms. No mitigation measures are recommended, however, it is acknowledged the proposed landscaping and tree planting along the setbacks will enhance the site appearance and the streetscape.

Figure 15 VIA view locations



Source: Urbis

Figure 16 VIA views

View 01 Existing and Proposed

View 02 Existing and Proposed

View 03 Exsiting and Proposed

Source: Urbis

6.1.4. Traffic Transport and Accessibility

A Transport Assessment (**TA**) including a draft Construction Traffic Management Plan and Green Travel Plan has been prepared by Ason Group and is provided at **Appendix K**. The TA assessed the anticipated transport implications of the proposal during the construction and operational stages.

6.1.4.1. Existing Environment

Access to the site is currently available at two locations, from Bourke Road (north of Gardeners Road) and Gardeners Road (east of Bourke Road). The Bourke Road access is a left-in/ left-out priority-controlled intersection. The Gardeners Road access is a signalised intersection that permits left and right inbound movements and left-out only outbound movements.

The surrounding road network includes a mix of state, regional and local roads. The site is well serviced by local public transport infrastructure including train services from Mascot Station and bus services along Gardeners Road. The site also benefits from an extensive pedestrian network and a well-connected mixture of recreational, sub-regional and local bicycle routes.

6.1.4.2. Potential Impacts

Site Access

The proposal involves modification of the existing access arrangements on Bourke Road to provide for two new access driveways and extinguishment of the existing driveway. One new access will be for left-in/left-out for vehicles up to 6.4 metre long (small rigid vehicles) located some 5 metres north of the existing Bourke Road access. The second driveway will be for left-out truck egress only, located around 40 metres south of the existing Bourke Road access.

The northern driveway will accommodate light vehicle movements, similar to the previous hardware and building supplies use which accommodated 91%-94% of inbound movements via Bourke Road. The proposal will generate less light vehicle movements, resulting in a net decrease of trips in the peak period compared to the previous use. The southern driveway on Bourke Road will accommodate all heavy vehicle exit movements.

The proposal also seeks to convert the existing Gardeners Road access from an entry/exit access to an entry-only access, including left-in and right-in movements for heavy vehicles. This will require widening of the existing driveway to accommodate heavy vehicle movements from the left lane and avoid vehicles from straddling both lanes to enter the site. Operating conditions are expected to improve, compared to the previous use, as there will be no longer be red phases from vehicles exiting the site via Gardeners Road.

The proposed Bourke Road and Gardeners Road access driveways have been designed to ensure any potential queuing will be contained within the site and not impact the external road network. The Bourke Road access gate is located approximately 38 metres from the site boundary to allow for an appropriate standing area within the site. The Gardeners Road access gate is proposed to be located approximately 27.7 metres from the site boundary to accommodate B-double truck access. Access gates are proposed to remain open during core business hours of the site to align with tenants' operational hours.

The internal roads and hardstand area on the ground level have been designed to accommodate access movements and circulation for heavy vehicles up to a 26 metre B-double vehicle. The vehicle ramp and hardstand area on level 1 have been designed to accommodate access and circulation requirements for vehicles up to a 20 metre Articulated Vehicle. Level 2 has been designed to accommodate access and circulation requirements for vehicles up to a 6.4 metre small rigid vehicle. A swept path assessment has been prepared and is included in Appendix A to the TA.

Construction Traffic

A Preliminary Construction Traffic Management and Pedestrian Management Plan has been prepared, outlining principles to be adopted as part of the pre-commencement Construction Management Plan. The overall principals of traffic management during construction activities include:

- Minimising the impact on pedestrian and cyclist safety and movements
- Maintaining appropriate emergency vehicle, public transport, school bus, service vehicle access
- Minimising the impact to existing traffic on adjacent roads and intersections

- Minimising the loss of on-street parking
- Maintaining access to / from adjacent properties
- Restricting construction vehicle movements to designated routes to / from the site
- Managing and controlling construction vehicle activity near the site
- Ensuring construction activity is carried out in accordance with Council's approved hours of work.

The construction work will vary depending on the phase of construction and associated activities. Works will generally be undertaken during standard construction hours and are likely to be as follows:

- Monday to Friday: 7.30AM to 5:30PM
- Saturday: 7.30AM to 3.30PM
- Sunday and Public holidays: No planned work.

Operational Traffic

The TA has assessed the traffic impacts of the development having regard to the *RMS Guide to Traffic Generating Developments Updated Traffic Surveys TDT 2013/04a 2013* (RMS Guide Update). As set out in the TA, traffic generation for the proposal is as follows:

Table 12 Traffic generation

Period	**Proposed Vehicle Trips**
AM Peak	157
PM Peak	131

The proposed traffic generation is substantially less than the trip generation presented by the previous use being 391 vehicle trips per hour in the weekday PM peak, and 651 vehicle trips per hour in the Saturday PM peak. As set out in **Table 13** below, the proposed development presents a net reduction in peak vehicle trips compared to the previous use on site and is considered suitable from a traffic generation perspective.

Table 13 Trip generation

	Former Hardware and building supplies use	**The Proposal**	**Net Difference**
Peak hour vehicle trips	391	157	-234

SIDRA modelling has been undertaken as part of the TA to assess potential operational traffic impacts. This has demonstrated all intersections (except Gardeners Road / O'Riordan Street) will continue to operate with acceptable degree of saturation and delays (LOS D or better) in both peaks.

For the Gardeners Road / O'Riordan Street intersection, the increase in demand is minimal. The delays are identical to the base case and the intersection will continue to operate at LOS F. The proposed access arrangements on Bourke Road and Gardeners Road perform well with LOS A during both peaks.

Green Travel Plan

A Framework Green Travel Plan (**FTP**) has been prepared for the proposal and is included as Appendix D to the TA. The FTP seeks to encourage and facilitate the use of alternative and sustainable modes of transport and to reduce single-occupancy car travel for journeys to and from the site.

The FTP includes a package of measures which can be adopted and designed to address the specific travel needs of the development. In this regard, the primary objectives of the Green Travel Plan will be to:

- Reduce the environmental footprint of the site.
- Set future staff travel mode share targets.
- Improve access, amenity, convenience, and safety of sustainable transport modes to/from the site.
- Promote the use of 'active transport' modes such as walking and cycling, particularly for short-medium distance journeys.
- Reduce reliance on the use of private vehicles for all journeys.
- Encourage a healthier, happier, and more active & public transport use culture.

The FTP includes an audit of the existing transport facilities and existing travel patterns, setting travel mode targets for the future development. The FTP sets out measures and action strategies that can be implemented by the future development to seek to achieve the mode targets.

Car Parking

SLEP 2012 provides a maximum car parking rate for the proposed development of 141 car parking spaces. The proposal provides 144 car parking spaces for staff and visitors (including seven accessible spaces) plus three car share parking spaces as required by the SLEP 2012 and SDCP 2012. The minor increase in the proposed parking spaces against the SLEP 2012 rate is not considered to have any material effect on the traffic impacts of the development and is therefore considered acceptable.

The proposed development could provide for up to 659 jobs. However, the number of staff on-site at any one time is expected to be significantly less, with varying shift patterns for each tenancy. If each of the tenancies operates three 8-hour shifts, this would equate to a maximum of 220 staff being on-site at any one time. The proposed on-site car parking is aligned with Council's controls, which seek to optimise public transport and active transport to achieve increased sustainability. As set out in the Green Travel Plan (**Appendix K**), a mode share target of 55% for private car journeys is proposed for the development.

Service vehicle storage is also provided on level 2, with 47 spaces dedicated for this purpose. Employees will arrive by private vehicle, public transport, cycling or driving, then utilise a service vehicle during a typical work shift. This requires on-site storage of service vehicles to enable convenient access by employees.

Service vehicle movements will occur throughout the workday, mostly outside of network traffic peak periods. Private vehicles will be prevented from parking in the service vehicle storage area by a boom gate, meeting the provisions of SDCP 2012.

Service Vehicle Loading

The design of the service area allows for a maximum of 24 loading bays based on the number of roller shutter door proposed which can adequately cater for 12.5m HRV trucks.

The service area has also been designed to accommodate side-loading requirements for larger sized trucks, such as 26m B-Doubles (for ground level warehouse tenancies) and 19m Articulated Vehicles for level 1 tenancies. Where side loading and forklift manoeuvres are required, the service area allows for sufficient operational space, whilst maintaining between 4 metres to 8 metres wide through traffic zone.

Bicycle & Motorcycle Parking

88 bicycle parking spaces are provided in a secure end of trip facility at the ground level and accessed from Bourke Road. The proposal exceeds the SDCP 2012 requirement for a minimum of 64 bicycle parking spaces, encouraging sustainable travel to and from the site.

12 motorcycle parking spaces are provided on level 2 which complies with the SDCP 2012 requirements.

6.1.4.3. Mitigation Measures

The Preliminary Construction Traffic Management and Pedestrian Management Plan recommend the following mitigation measures to minimise the impacts of the construction activities on the surrounding road network:

- A construction fence and suitably classed hoarding shall be provided along site boundaries/works area boundaries to provide safe pedestrian access. The fencing/hoardings should be maintained for the duration of the construction program associated with the stage of works being undertaken.

- Traffic control is required to manage and regulate traffic movements into and out of the site during construction, with pedestrian priority provided during peak hour periods and to maintain accessibility to public transport facilities.
- Disruption to road users should be kept to a minimum by scheduling intensive delivery activities outside of road network peak hours.
- Supervised traffic control will be required where two-way flow is restricted over any length of the roadway, depending on the number of truck movements required and would be managed outside of peak hour vehicle and pedestrian activity.

6.1.5. Trees and Landscaping

An Arboricultural Impact Assessment (**AIA**) has been prepared by Bradshaw Consulting Arborists (**Appendix AA**) which assesses the existing trees on site and makes recommendations for trees to be removed to facilitate the proposal.

A Landscape Design Report has been prepared by Urbis (**Appendix L**) which sets out the landscape design concept and key design principles, also including the proposed landscape plans.

6.1.5.1. Existing Environment

The site predominantly consists of built form and hardstand with two existing clusters of trees at the south-eastern and north-western corners. None of the 26 existing trees are listed on Council's significant tree register. The site is not mapped as having terrestrial biodiversity.

6.1.5.2. Potential Impacts

Trees

The design seeks to maximise the retention of existing trees where possible. The AIA recommends the removal of 16 trees, five of which are on the eastern edge of the north western cluster of trees and two within the cluster. Seven trees in this cluster will remain. Six of the trees to be removed are on the northern side of the existing south eastern cluster, with three trees remaining. The other three trees to be removed are in a planting bed within the existing hardstand.

Most of the trees to be removed are rated as of moderate to very low landscape significance and retention value. Five trees are assessed to have a high landscape value. The loss of these trees is to be mitigated through the planting of an additional 21 trees within the setbacks to Bourke and Gardeners Roads. **Figure 17** below identifies the trees proposed to be removed and retained on site.

Figure 17 Tree removal and retention

Picture 1: View from Bourke Road looking north at north-western cluster of trees (*trees noted in pink to be retained / trees noted in blue to be removed*)

Picture 2: View from Gardeners Road looking north showing tree within existing car park to be removed

Picture 3: View from Gardeners Road looking north-west at south-eastern cluster of trees (*trees noted in pink to be retained / trees noted in blue to be removed*)

Source: Nearmap / Project Strategy

Landscaping

The key principles of the proposed landscape design are to:

- provide multiple connections with the natural environment;
- respond to the architectural scheme by ensuring seamless transitions to external spaces;
- enrich the experience of uses through accessible landscapes; and
- maximise tree planting opportunities and the provision for deep soil.

The landscape design seeks to integrate the site and its context with a design response that recognises the industrial nature of the land use. The landscape design seeks to enhance pedestrian and cycle amenity, offer an improved streetscape condition, provide native species for increase biodiversity gain and landscape amenity for staff and visitors. The proposal includes:

- A balance of locally native trees and other Australian natives to optimise ecological values and heat island impact mitigation.
- A combination of large and small tree species, with larger species giving structure and smaller species reducing impacts around driveways where needed.

- Use of smaller tree species (of moderately fast growth and relatively dense canopies) on the roof-top and placed at relatively close centres to achieve early heat mitigation.
- By incorporating trees of different heights, the shadows cast during morning and afternoon are different lengths thereby spreading out the 'footprint' of shade.
- Gardens and courtyards will provide visual and habitable landscape amenity for better connection to nature and a place for rest and retreat.
- Integrated landscape, planting and Water Sensitive Urban Design (**WSUD**) principles will be incorporated to enhance amenity and landscape performance, including permeable paving.

The proposal achieves a 15% canopy coverage in accordance with the SDCP 2021. The landscape design also achieves a 15% deep soil area via a combination of landscape areas and permeable paving areas.

6.1.5.3. Mitigation Measures

The removal of 16 trees will be mitigated by planting of 18 large tree species and three medium tree species. These trees will be planted along the Bourke Road and Gardeners Road frontages to optimise their contribution to the public domain and streetscape. The planting selection for the large tree species proposed includes a mature tree height of up to 30 metres.

6.1.6. Ecologically Sustainable Development

An ESD Report has been prepared by Northrop and is provided at **Appendix M**. The Report provides an overview of the ESD principles and greenhouse gas and energy efficiency measures that will be implemented as part of the development.

6.1.6.1. Potential Impacts

Through the implementation of a range of ESD initiatives, the proposal seeks to mitigate against any negative environmental, social and economic impacts associated with the development. Sustainability strategies include energy efficiency through improved building fabric and glazing performance, integration of cool roofs, natural ventilation of spaces, the incorporation of High Volume Low Speed (**HVLS**) fans within the warehouse design, insulation of the warehouse spaces, seasonal HVAC system control, energy metering and monitoring, improved outdoor air provisions, high efficiency lighting and the provision of an electric-only building.

The proposed energy efficiency measures will significantly reduce the energy load of the development, allowing a large portion of the site's electrical energy demand to be met through on-site renewable energy generation. A PV array is proposed to be installed on the roof of the southern level 2 office space which will assist in both offsetting the development's energy use and minimise he development's daytime peak demand from the grid.

In addition, specific sustainability initiatives proposed for the facility include:

- Space efficient building layout
- Water sensitive urban design principles
- High efficiency electrical systems
- Large scale on-site renewable energy generation utilised within the buildings electrical and water systems.
- Increased use of daylighting to reduce power usage.
- Installation of a rainwater capture and reuse system for all buildings on-site
- Energy efficient heating, ventilation and air conditioning including natural ventilation to open spaces.
- Waste minimisation strategies.

The development is seeking to achieve a 5 star Green Star Design and As Built rating. The project has a clear commitment to implement the initiatives throughout the design, construction, and operation. The design has been developed to optimise energy performance, address key climate related risks posed to the site, and align to the NSW Government's commitment to carbon neutrality by 2050.

6.1.7. Biodiversity

A Biodiversity Development Assessment Report (**BDAR**) Waiver has been prepared by Biosis and is attached at **Appendix N**. The BDAR Waiver includes an ecological assessment of the site and biodiversity values associated with the construction of the proposal.

6.1.7.1. Existing Environment

The site is cleared of remnant vegetation and accommodates a large warehouse facility and associated infrastructure including two tanks, a small shed/office, concreted parking facilities and driveways and landscaped garden beds consisting of ornamental native and exotic trees.

The study area contains 0.04 hectares of urban native/exotic vegetation along the Bourke Road fence line in the north-east corner of the site, the gateway at Gardeners Road and in decorative pots and isolated garden beds within the car park.

No threatened fauna, threatened ecological communities or their habitats are considered likely to occur on site. The site is not located within the Biodiversity Values Map (DPE 2021) and vegetation within the study area is regulated under *State Environment Protection Policies (Vegetation in Non-Rural Areas) 2017*.

6.1.7.2. Potential Impacts

The proposed works seek to remove/modify up to 0.04 ha of urban native/exotic vegetation. The site contains limited features of ecological value, comprising native trees of low quality foraging habitat for Grey-headed Flying-fox. The design retains much of the potential foraging habitat at the fence line on Bourke Road and potential impacts to Grey-headed Flying-fox are considered negligible.

Existing site infrastructure was assessed for its potential to provide roosting habitat for threatened microbats. No signs of roosting activity were observed and no potential roost locations were identified. Accordingly, removal of existing infrastructure is unlikely to result in any impacts to threatened microbats.

Based on the small area of urban native and exotic vegetation to be removed and low likelihood of microbat roosting habitat, no threatened biota is likely to be impacted by the proposed development. Accordingly, the proposed development will not result in any significant impacts to biodiversity values and a BDAR waiver was sought in accordance with s.7.9(2) of the BC Act.

6.1.7.3. Mitigation Measures

The following measures are proposed to minimise any indirect impacts to biodiversity values:

- Any trees to be retained should be protected in accordance with Australian Standard AS4970 – 2009 Protection of trees on development sites.
- In the unlikely event that unexpected threatened species are identified during the project, works should cease and an ecologist should be contacted for advice.
- Appropriate erosion and sediment control measures should be installed to avoid impacts to nearby waterways via stormwater collection systems.
- Minimise disturbance to any vegetation to be retained.

6.1.8. Air Quality

An Air Quality Impact Assessment (**AQIA**) has been prepared by Northstar and is attached as **Appendix O**. The AQIA undertakes an assessment of the risks to local air quality associated with the construction and operation of the proposed development.

6.1.8.1. Existing Environment

The land use surrounding the site is zoned IN1 (General Industrial). The closest residential property to the site is approximately 37 metres to the southeast on Gardeners Road. The B4 Mixed Use land is to the south and south-east of the site.

6.1.8.2. Potential Impacts

The AQIA identifies 11 discrete receptor locations which represent locations that may be susceptible to changes in air quality. These include sensitive receptors such as residential properties. The AQIA considers

population density surrounding the site, topography and meteorological conditions, as well as background air quality conditions. The AQIA considers the potential for cumulative impacts from surrounding developments.

Construction Phase

Construction activities have the potential to generate short-term emissions of particulates. Generally, these are associated with uncontrolled (or 'fugitive') emissions and typically experienced by neighbours as amenity impacts, such as dust deposition and visible dust plumes, rather than associated with health-related impacts. The AQIA assesses the construction phase air quality impacts associated with the proposal using a risk-based assessment procedure. This determines the activities that pose the greatest risk, which allows the Construction Environmental Management Plan (**CEMP**) to focus controls to manage that risk appropriately and reduce the impact through proactive management.

The assessment finds there to be a high risk of health or nuisance impacts associated with earthworks, construction works, and construction traffic should no mitigation measures be applied. However, a range of standard mitigation measures are proposed so short-term impacts associated with construction activities are minimised to achieve an acceptable level of air quality. With the proposed construction phase mitigation measures, the air quality impacts are found to be negligible.

Operation Phase

The AQIA assesses the impacts of the operation of activities, characterising the likely day-to-day (and hour-to-hour) operation and approximate average operational characteristics to assess against longer term (annual average) and shorter term (24-hr and 1-hr) criteria. The height of emissions associated with the ramp from level 1 and level 2 has been considered in the AQIA modelling assessment.

In relation to particulate matter (TSP, PM_{10}, $PM_{2.5}$ and dust deposition), the AQIA finds the operation does not result in any exceedances of the annual average particulate matter impact assessment criteria at any of the receptors.

Annual average dust deposition is predicted to meet the criteria at all receptors surrounding the site. In relation to PM_{10} particulate matter, the development does not result in exceedances of the maximum 24-hour PM_{10} particulate matter criterion at any of the receptors. In relation to $PM_{2.5}$ concentrations, the assessment finds one minor exceedance of the maximum 24-hour $PM_{2.5}$ criterion is predicted at the adjacent datacentre at 506 Gardeners Road. The minor exceedance of the 24-hr $PM_{2.5}$ criterion is primarily driven by existing background noise conditions which already represent 98.8 % of the criterion on that particular day. A minor increment, representing 2% of the required criterion, is predicted to result in the identified exceedance. The AQIA adopts conservative assumptions to estimate noise emissions, ie. that four trucks would be idling at the site at all times over a 24-hour period.

It is considered unlikely a significant number of people would be at the data centre (506 Gardeners Road) for a period of 24-hours and accordingly, the risk of impact is subsequently reduced. The minor exceedance at the adjacent data centre is driven by the movement and idling of trucks at the proposal site and accordingly, the adoption of a no-idling policy is to be adopted where possible to reduce emissions of fine particulate.

The AQIA assesses the predicted maximum 1-hour and annual average nitrogen dioxide emissions (**NO_2**) concentrations and finds the proposal does not result in any exceedances of the criteria for combustion related NO_2 pollutants at any receptors.

Overall, it is considered the proposal would result in the achievement of all air quality criteria, even following the adoption of potential worst-case operating conditions. The minor exceedance in the maximum 24-hour average $PM_{2.5}$ concentrations predicted at the data centre at 506 Gardeners Road can be managed by good site management practices, including the observation of speed limits and avoiding engine idling.

6.1.8.3. Mitigation Measures

The following mitigation measures are proposed for the construction phase:

Communication

- Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.
- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager

- Display the head or regional office contact information.
- Develop and implement a Dust Management Plan (**DMP**), which may include measures to control other emissions, approved by the relevant regulatory bodies.

Site Management

- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.
- Make the complaints log available to the local authority when asked.
- Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the log book.
- Hold regular liaison meetings with other high-risk construction sites within 500 m of the site boundary, to ensure plans are coordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/ deliveries which might be using the same strategic road network routes.

Monitoring

- Undertake daily on-site and off-site inspections where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100m of site boundary.
- Carry out regular site inspections to monitor compliance with the dust management plan / CEMP, record inspection results, and make an inspection log available to the local authority when asked.
- Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- Agree dust deposition, dust flux, or real-time continuous monitoring locations with the relevant regulatory bodies. Where possible commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences.

Preparing and Maintaining the site

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.
- Erect solid screens or barriers around dusty activities or the site boundary that they are at least as high as any stockpiles on site.
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
- Avoid site runoff of water or mud.
- Keep site fencing, barriers and scaffolding clean using wet methods.
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.
- Cover, seed or fence stockpiles to prevent wind erosion.

Operating Vehicle/Machinery and Sustainable Travel

- Ensure all on-road vehicles comply with relevant vehicle emission standards, where applicable.
- Ensure all vehicles switch off engines when stationary - no idling vehicles.
- Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practical.
- Impose and signpost a maximum-speed-limit of 25 km/h on surfaced and 15 km/h on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable

additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate.

- Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials.
- Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).

Construction Operations

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/ mitigation, using non-potable water where possible and appropriate.
- Use enclosed chutes and conveyors and covered skips.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

Waste Management

- Avoid bonfires and burning of waste materials.

Construction Activities

- Avoid scabbling (roughening of concrete surfaces) if possible.
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.
- For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust.

Measures Specific to track-out

- Use water-assisted dust sweeper(s) on the access and local roads to remove, as necessary, any material tracked out of the site.
- Avoid dry sweeping of large areas.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
- Record all inspections of haul routes and any subsequent action in a site log book.
- Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.
- Access gates to be located at least 10m from receptors where possible.

Construction Traffic

- Ensure all on-road vehicles comply with relevant vehicle emission standards, where applicable.

- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
- Record all inspections of haul routes and any subsequent action in a site log book.

The following mitigation measures are proposed for the operation phase:

- Observation of speed limits on site.
- The minimisation vehicle engine idling where possible.

6.1.9. Noise and Vibration

A Noise & Vibration Impact Assessment (**NVIA**) has been prepared by Renzo Tonin and is included at **Appendix P**. The NVIA assesses the noise and vibration impacts during the construction and operational stages of the proposal.

6.1.9.1. Existing Environment

The land uses on the northern side of Gardeners Road comprise a mixture of commercial and industrial receivers, while the land uses to the south include multi-storey residential towers, with commercial tenancies on the ground level. The closest residential receivers are directly to the south (635 Gardeners Road, Mascot) and south-west (653 Gardeners Road, Mascot). There are also commercial and industrial receivers, including data centres to the south and immediately to the north and east.

The background noise monitoring undertaken in the preparation of the NVIA found that at each of the noise monitoring locations, the existing noise environment was dominated by road traffic noise levels.

6.1.9.2. Potential Impacts

The NVIA identifies the nearby noise sensitive receivers to the site as:

- Existing and future residential properties to the south and south-west, including 653 Gardeners Road which is currently a commercial receiver (car hire premises) but approved for redevelopment on 20 December 2016. The approved development comprises a 14 storey mixed use tower with residential apartments (LEC 2016/158972).
- Existing and future data centres to the north and east, including the Stage 2 Data Centre at 506-518 Gardeners Road which was approved by City of Sydney Council on 11 November 2021 (D/2021/45).
- Commercial and industrial receivers to the west of the site across Bourke Road.

A set of representative receiver locations have been selected to assess the potential acoustic impacts of the development, considering the multiple receivers within each multi-storey residential tower. The NVIA considers the existing noise environment, including noise monitoring at the nearest and potentially most affected locations and meteorological conditions.

Construction noise and vibration

The NVIA undertakes a quantitative assessment of construction noise levels likely to be experienced at the nearby affected receivers based on the activities and plant and equipment. The predicted noise levels are conservative, based on when the plant or equipment are closest to the receiver. Noise level calculation consider attenuation due to distance between the construction works and the receiver locations.

The NVIA finds that the predicted noise levels during the utility and services phases of work exceed the noise management levels (**NMLs**) at nearby surrounding residential, commercial and industrial receivers. Construction noise is predicted to reach 72 dB(A) LAeq,15min at residences on Gardeners Road, which is approaching the limit where residences are considered ‘highly noise affected’. However, for all other construction phases, construction noise at residential receivers is predicted to be well below the NMLs.

During the building construction and fit-out phases of works, construction noise is generally predicted to comply with the relevant NMLs, with minor exceedances of up to 2 dB(A) at 635 Gardeners Road. The NVIA recommends mitigation measures to reduce noise levels and mitigate the impact from construction noise.

There is potential for cumulative noise impacts from the proposal combined with other concurrent construction projects (WestConnex M8 St Peters Interchange and 506 Gardeners Road Data Centre Stage 2). Accordingly, mitigation and management measures are recommended to minimise cumulative impacts.

Overall, the construction noise impacts are considered acceptable, subject to the implementation of management and mitigation measures proposed. The anticipated volume of construction traffic is not expected to significantly alter existing traffic noise or be a significant noise impact.

In relation to construction vibration impacts, the NVIA finds there are no structures within the minimum working distance that have the potential to cause cosmetic damage. The adjoining data centres may contain vibration sensitive equipment that could be impacted by vibration intensive works in close proximity. Typical acceptable vibration limits are provided for sensitive equipment. It is recommended the data centre operators be consulted prior to construction commencement, to determine the locations of any vibration sensitive items and determine suitable vibration levels that could be generated at these items from construction activities.

The Sydney Trains T8 Airport & South line tunnel is adjacent to the site and may be affected by piling activities within two metres of the tunnel lining. Further assessment is required during the detailed design phase to identify areas of the site that are within the minimum working distance to the tunnel, review the potential vibration impacts to the tunnel and identify required mitigation and management measures.

The NVIA finds that exceedances of the human annoyance criteria are not predicted at nearby residential receivers but may occur within the offices of the adjacent data centres. Potential human annoyance impacts should be reviewed when vibration intensive works are proposed within the minimum working distances and in close proximity to the data centre office spaces.

Operational noise

The NVIA considers all operational noise sources, including road traffic, heavy and light vehicle movements, traffic volumes, car park activities, road traffic noise, site access, operational noise sources, noise generating activities, on-site vehicle movements, loading dock and hardstand activities, warehouse operations including internal noise within the building envelope, office and staff vehicle movements and parking, building services and mechanical plant, and emergency plant and equipment for the proposal. Potential noise breakout from internal warehouse operations has been assessed in the NIVA via both the facade ventilation louvres and the open warehouse roller doors into the covered hardstand areas and then to receivers. The internal warehouse source levels are based upon measurements of similar noise intensive warehouse operations, which included internal sources such as conveyors, internal radio, internal mechanical and forklift operations occurring, to ensure conversative input assumptions.

The assessment finds that that operational noise emissions may exceed the noise limits at the nearest noise sensitive receivers and accordingly, mitigation and management measures have been incorporated into the design of the development (as set out further below). The NVIA noise prediction model considers:

- Location of noise sources and sensitive receiver locations (including multi-storey buildings).
- Heights of sources and receivers referenced to digital ground contours (1 metre contour intervals) or relative to the proposal building structure.
- Each noise-sensitive building in the project has been assessed separately, considering all facades and floors. All nearby and potentially impacted noise sensitive receivers have been evaluated.
- Noise source levels of individual plant and equipment.
- Internal noise levels within the facility, and the breakout of these noise levels through the façade building elements.
- Separation distances between sources and receivers.
- Ground type and reflections between sources and receivers (ground absorption value of 0 for the site, warehouse areas and roads, and 0.1 outside of this area (ie. urban land uses).
- Attenuation from barriers, buildings and structures (natural terrain and purpose built).
- Atmospheric losses and meteorological conditions.

- Proposed noise mitigation/treatments and management measures for the proposal.

The assessment includes adjustments for annoying noise characteristics, for example where the character of the industrial noise is assessed as particularly annoying at a receiver location. The NVIA also includes as assessment of the potential for sleep disturbance, for example by loud instantaneous noise events on site.

The mitigation measures will substantially mitigate maximum noise level events associated with on-site truck activities, loading dock and hardstand activities. The noise levels associated with sleep disturbance events are predicted to generally be below sleep disturbance assessment trigger levels, except for two residential receivers which front Gardeners Road, close to the intersection with Bourke Street.

The NVIA notes existing high noise events at these locations mean it is unlikely there would be a noticeable change. Further, these impacts can be mitigated and managed by minimising requirements for trucks to stop or jolt when entering the site and minimising maximum noise level events when trucks enter and exit the facility and move around within it.

Operational noise impacts from the proposed warehouse facility have been assessed and a range of feasible and reasonable mitigation measures recommended to minimise noise emissions and potential impacts on sensitive receivers. It is considered the predicted noise emissions from the facility can comply with the requirements of the *NSW Noise Policy for Industry* (EPA 2017) at all potentially impacted receivers that surround the site.

The site is located within the 20 to 25 ANEF contour for Sydney Airport. The proposal has been assessed in accordance with AS2021:2015 and considered to be acceptable, with no further assessment required.

6.1.9.3. Mitigation Measures

In relation to construction noise, the following mitigation measures are proposed:

General engineering noise controls

- Implementation of noise control measures, such as those suggested in Australian Standard 2436-2010 ‘Guide to Noise Control on Construction, Demolition and Maintenance Sites’ including distance, screening, acoustic enclosures, engine silencing and substitution by alternative process.

General noise management measures

- Use less noisy plant and equipment, where feasible and reasonable.
- Plant and equipment must be properly maintained.
- Provide special attention to the use and maintenance of ‘noise control’ or ‘silencing’ kits fitted to machines to ensure they perform as intended.
- Strategically position plant on site to reduce the emission of noise to the surrounding neighbourhood and to site personnel.
- Avoid any unnecessary noise when carrying out manual operations and when operating plant.
- Any equipment not in use for extended periods during construction work must be switched off.
- Simultaneous operation of noisy plant within discernible range of a sensitive receiver is to be limited/avoided where possible.
- The offset distance between noisy plant and adjacent sensitive receivers is to be maximised where practicable.
- Plant used intermittently to be throttled down or shut down when not in use where practicable.
- Noise-emitting plant to be directed away from sensitive receivers where possible.
- Staging of construction works so as to erect solid external walls first and utilising them to provide noise shielding to the noise sensitive receivers.
- In addition to the noise mitigation measures outlined above, a management procedure will need to be put in place to deal with noise complaints that may arise from construction activities. Each complaint will need to be investigated and appropriate noise amelioration measures put in place to mitigate future occurrences, where the noise in question is in excess of allowable limits.

- Good relations with people living and working in the vicinity of a construction site should be established at the beginning of a project and be maintained throughout the project, as this is of paramount importance. Keeping people informed of progress and taking complaints seriously and dealing with them expeditiously is critical. The person selected to liaise with the community must be adequately trained and experienced in such matters.
- Use of broadband “quacker” type of reverse/movement alarms instead of the tonal ‘beeping” type.
- All employees, contractors and subcontractors are to receive site induction and toolbox talks and ongoing training so that the above noise management measures are implemented accordingly. Content within toolbox talks will include, location of nearest sensitive receivers; relevant project specific and standard noise and vibration mitigation measures; permissible hours of work, truck route and truck loading restrictions and construction employee parking areas.

Highly noise affected receivers

- High noise impact activities should be carried out in continuous blocks of up to three hours. Respite from high noise impact activities would be provided between each block for at least one hour. No high noise impact activities should be carried out during this one hour respite period.

Noise monitoring

- Where potential noise impacts are predicted to be up to 10 dB(A) above the noise criteria, all feasible and reasonable noise reduction measures must be investigated, where necessary.
- Where potential noise impacts are predicted to be more than 10 dB(A) above the noise criteria, the potential construction noise nuisance is considered to be moderate. In the event of a compliant, noise monitoring may be carried out to confirm predicted noise impacts. Reasonable and feasible noise reduction measures must be investigated, where necessary.

Cumulative noise impacts and potential construction fatigue

- Coordinating work between construction sites to minimise cumulative noise impacts, where feasible and reasonable (ie. to ensure that multiple sites are not undertaking noise intensive works concurrently with direct line-of-sight to receivers).
- Community consultation to gauge key noise impacts and issues and identify any unknown impacts from concurrent or consecutive sets of constructions works.
- Consideration of cumulative construction noise impacts during the development of noise mitigation and management measures for the worksites, including coordination between construction projects, where reasonable and feasible.

Complaints management

- Owners and occupants of nearby affected properties are to be informed by direct mail of a direct telephone line and contact person where any noise and/or vibration complaints related to the construction activities are to be reported.

In relation to construction vibration, the following mitigation measure is proposed:

- Neighbouring data centre operators be consulted prior to construction commencement, to determine the locations of any vibration sensitive equipment and determine suitable vibration levels that could be generated at these items from construction activities.
- An assessment is to be undertaken during the detailed design phase to identify areas of the site that are within the minimum working distance to the Sydney trains T8 Airport & South line tunnel, further review of the potential vibration impacts to the tunnel, and any required mitigation and management measures.
- Potential human annoyance impacts should be reviewed when vibration intensive works are proposed to take place within the minimum working distances, in close proximity to the data centre office spaces.

In relation to operational noise, the following mitigation measures are proposed. Design measures are incorporated into the proposal.

Overall and operational management

- Broadband reversing alarms “quackers” shall be adopted across the tenant truck fleet that operates through warehouse facility centre. This should be adopted for all permanent and tenant owned/controlled vehicles. This is of particular note for vehicles that would operate in non-enclosed areas (ie. service vehicles parked on roof level). Where tenants do not have control over vehicles that operate through the facility, management of potential impacts should be reviewed further as part of the tenant operational management plan.
- Any PA systems required as part of normal operation that emit sound within the facility, are to be designed so that they would result in a negligible increase in overall noise emissions from the facility. PA announcements as part of normal operations would be restricted to within the enclosed areas of the facility during the night period.
- Ensure that for all non-enclosed areas of the facility, and entry and exit areas (ie. Gardeners Road and Bourke Road access points):
  - All pavement is smooth (ie. no speed bumps).
  - Transitions from the external public road to the site are smooth, as to not result in jolting, or unnecessary accelerating of the truck the truck is required.
  - Drainage grates are designed to not result in noise events.
  - Ensure that trucks do not have to stop/brake and then accelerate (ie. pedestrian crossing points, security gates).
- Design elements should also ensure that trucks do not have to stop/brake and then accelerate (ie. pedestrian crossing points) outside of dock areas with line of sight to nearby residential receivers, in particular where they are required to operate during the night period.
- Alternate methods and practices to the use of horns as a safety warning for onsite moving forklifts should be reviewed and incorporated into site operations and safety practices.
- Building services, mechanical plant and plantroom spaces are to be designed to not increase total site noise emissions. This will likely include selection of quiet plant/equipment, acoustic absorption, noise barriers, and the use of acoustic louvres and attenuators as part of the design.
- Materials of the warehouse facility facade would be selected during detailed design, so that any noise break-out from internal activities would result in a negligible increase in overall noise emissions from the facility.

Ground level

- Eastern facade of the entrance corridor is closed from ground to the slab above. This extends from the Gardeners Road entrance and extend substantially past the ground floor hardstand area opening.
- Acoustic absorption lining to be installed on the underside of the enclosure roof entrance corridor, and along the internal walls, to minimise truck movement and hardstand activity noise build up and breakout via the southern Gardeners Road entrance.
- Acoustic absorption lining to be installed on the underside of the ceiling/slab above internally.
- Incorporate acoustic absorptive material along the eastern building façade and the soffit of the slab above along the ground level truck exit route to minimise reflections from dock activities back to residence.
- Maintain the solid and non-perforated façade elements extending down from the level 1 slab, which result in acoustic shielding to elevated residential receivers to the southern west, from ground level hardstand activities, trucks exiting the hardstand, and truck movements exiting from level 1.

Level 1

- Level 1 eastern truck route prior to the level 1 hardstand area is enclosed. This extends from the hardstand until the northern most point along the eastern level 1 internal access road. Acoustic absorption lining to be installed on the underside of the enclosure roof.
- Acoustic absorption lining to be installed on the underside of the ceiling/slab above internally.

- The western opening to the level 1 hardstand area is enclosed. This enclosure extends north along the exit road substantially past the level 1 floor hardstand area opening. Acoustic absorption lining to be installed on the underside of the enclosure roof.
- The concrete perimeter barrier along the internal truck road between the level 1 hardstand and the ramp to ground level is to a minimum 2.5m high above the local ground level.

Level 2

- Incorporate acoustic absorptive material along the internal walls of the void from the level 1 hardstand to the external breakout locations on the roof (level 2). The configuration of the solid roof coverings over the top of the ventilation voids to the hardstand below (with sufficient open area for required ventilation) are to incorporate measures that break line-of-sight through these voids to the hardstand from the nearby elevated receiver locations.
- Perimeter barriers are to be installed along the western boundary of the western roof plant area, and the eastern boundary of the eastern roof plant area. They should be a minimum 2m above the top of the tallest noise generating plant item (ie. condenser unit) within the plant area and extend a minimum of 2m north of the northern most plant item. This is to be installed for both the eastern and western plant areas. Acoustic absorption installed on all internal surface of the condenser plantroom area, along the northern façade of the office building and along the above recommended perimeter wall.

Ramps

- Maintain the solid and non-perforated façade elements shielding the northern truck and car ramps from the adjacent commercial receiver, to minimise noise impacts from ramp activities.

Noise barriers and enclosures

- All noise barriers should give regard to the following to maintain acoustic integrity and to perform effectively as noise barriers:
  - any penetrations through the fabric of the fence should be sealed airtight
  - all joints and gaps between fence panels and adjacent structures should be sealed airtight
  - any gaps between the fence and the ground / retaining walls should be filled to ensure that the fence provides appropriate noise attenuation.

Building services and mechanical plant and equipment

The following in-principle noise management measures should be considered during detailed design:

- Acoustic assessment of mechanical services equipment should be undertaken during the detailed design phase of the development to ensure that the cumulative noise of all equipment does not exceed the applicable noise criteria. This includes the detailed specification and location of mechanical plant on site.
- Noise control treatment can affect the operation of the mechanical services system. An acoustic engineer should be consulted during the initial design phase of mechanical services system to reduce potential redesign of the mechanical system.
- Mechanical plant noise emission can be controlled by appropriate mechanical system design and implementation of common engineering methods, which may include:
  - procurement of 'quiet' plant
  - strategic positioning of plant away from sensitive neighbouring premises to maximise intervening acoustic shielding between the plant and sensitive neighbouring premises
  - commercially available acoustic attenuators for air discharge and air intakes of plant
  - acoustically lined and lagged ductwork
  - acoustic barriers between plant and sensitive neighbouring premises
  - partial or complete acoustic enclosures over plant.
- Fans shall be mounted on vibration isolators and balanced in accordance with Australian Standard 2625 'Rotating and Reciprocating Machinery – Mechanical Vibration'.

Best practice management

- Reducing peak 15-minute heavy vehicles movements across the site by staggering delivery / arrival / departure times during sensitive time periods (ie. night).
- Minimising concurrent use of mobile plant near hardstand openings (ie. ground floor exit) and/or limiting their use to the less sensitive daytime and evening periods.
- Minimising use of reversing alarms by providing forward manoeuvring where practicable.
- Switching vehicles and plant off when not in use.
- Keeping equipment well-maintained and operating it in a proper and efficient manner.
- Training staff and drivers on the effects of noise and the use of quiet work practices (eg. informing drivers of the noise impacts from sudden braking or accelerating, bangs and clangs, etc).

Best available technology

- The use of quieter mobile plant, such as electric forklifts instead of gas-powered forklifts.
- Using equipment with efficient muffler design.
- Fitting and maintaining noise reduction packages on plant and equipment.

Operational Noise Management Plan

- Regular reviews of on-site noise mitigation and management practices to incorporate and capture opportunities for reductions of site noise emissions, with considerations of the following:
  - Review of noise reduction opportunities during changes or refinements of site noise generating activities.
  - Reviewing noise levels of plant, equipment and activities, during both ongoing compliance checks and in response to complaints.
  - Improvements in Best Management Practice.
  - Improvements in Best Available Technology Economically Achievable.

6.1.10. Ground and Water Conditions

A Geotechnical Investigation been undertaken by PSM and is included in **Appendix Q** of this report. An Acid Sulfate Soil Management Plan (**ASSMP**) has been undertaken by JBS&G and is attached at **Appendix S**.

6.1.10.1. Existing Environment

The 1:100,000 Sydney Geological Map indicates that the site is underlain by medium to fine-grained 'marine' sand with podsols. A review of the Acid Sulfate Soil Risk Map indicates that the site exists on disturbed terrain which may include filled areas.

6.1.10.2. Potential Impacts

PSM undertook a geotechnical investigation including three cone penetrometer tests (**CPT**) to depths of up to 27.2m and two boreholes up to depths of 31m. Groundwater was detected between 2m and 2.5m below the surface during drilling.

In relation to the potential impacts of the proposal on soil resources, PSM found the proposed development has close to no impact on the soil resource at the site, noting the following considerations:

- The site has been industrial development for many decades.
- The proposed development:
  - Does not change the site use.
  - Does not disturb the existing ground. Earthworks essentially comprise minor filling across the site.
  - Includes importation of VENM fill to change design levels.

- The proposed stormwater system, surface gradients and landscaping have been designed to control surface flows and minimise soil erosion and the effects of soil erosion on adjacent waterways. Most of the site will be sealed by the proposed development and appropriate surface runoff collection and disposal systems have been included in the design. Appropriate erosion control will also be included during construction.

In relation to the potential impacts of the proposal on groundwater resource, PSM found the proposed development has close to no impact on the groundwater resource at the site, noting the following considerations:

- The groundwater table at the site is located more than 2m below the surface.
- The proposed development does not include basements or bulk excavations.
- Minor detailed excavations for footings or services will be mostly above the water table and be temporary in nature.

Acid Sulfate Soil

Site investigations have identified the presence of potential acid sulfate soils (**PASS**) and an ASSMP is required to document procedures to be implemented to manage potential environmental risk. The aim of the ASSMP is to outline management techniques that may be employed to mitigate potential impacts associated with the risk of disturbance of Acid Sulfate Soils (**ASS**)/Potential Acid Sulfate Soils (during the proposed site construction works. The objectives of the ASSMP are to document:

- Known and anticipated site sub-surface characteristics expected to be encountered during future excavation works for consideration in development of future investigative and management activities;
- A monitoring and sampling strategy to be implemented prior to and during the proposed ground disturbance activities such that ASS/PASS may be appropriately identified and managed during the excavation works;
- Evaluation of potential ASS/PASS management opportunities and constraints resulting in the identification of a preferred management strategy(ies); and
- Procedures for management and validation of ASS during future site excavation works to minimise the potential for adverse environmental impacts as a result of the ASS/PASS disturbance activities.

The ASSMP sets out management procedures and mitigation measures to appropriately manage the potential environmental impacts associated with disturbance of ASS/PASS during the proposed site construction works. The objectives of the management procedures are to provide:

- A methodology for the identification of materials requiring management;
- Protocols for the on-site treatment and management of ASS/PASS materials and associated leachate water (as required) during the proposed works;
- Excavation inspection and validation assessment protocols to be implemented during the proposed works such that the extent of ASS/PASS material may be delineated from non-ASS material (overlying non-ASS material, residual soils, etc) to provide for off-site disposal of the balance of excavated material without the need for lime stabilisation);
- Water and soil quality targets for the excavation, treatment and removal of ASS material encountered during the proposed works; and
- A contingency framework in the event that: additional ASS conditions are encountered during the site works; monitoring indicates disturbance of off-site ASS materials; or the proposed treatment strategy fails.

Based on the proposed mitigation measures set out below, the proposal is considered acceptable in relation to acid sulfate soil risk.

6.1.10.3. Mitigation Measures

In relation to the construction of the project, the ASSMP sets out management and mitigation measures in relation to the following:

- Investigation of occurrence of ASS and/or PASS material
- Evaluation of potential management strategies
- Avoidance strategies
- Management by neutralisation
- Full oxidation and leachate collection
- Reburial of ASS material
- Separation techniques
- Selection of preferred management strategies
- General site management strategy
- Pre-disturbance works
- Neutralisation chemicals
- Treatment area design
- General site management
- Excavation works
- Treatment of excavated PASS material
- Water management during treatment
- Validation of treated PASS material
- Site condition monitoring
- Removal of neutralised ASS material from the site

6.1.11. Stormwater and Wastewater

A Civil Engineering Report (**CER**) including Water Cycle Management Strategy, Surface and Ground Water Impact Assessment and Integrated Water Management Plan has been prepared by Costin Roe and is attached as **Appendix R**.

The CER includes a civil engineering assessment of the site and provides an assessment of the civil engineering characteristics and technical considerations in relation to earthworks and geotechnical considerations and a Water Cycle Management Strategy (**WCMS**).

6.1.11.1. Existing Environment

An inground drain carries stormwater runoff from the existing warehouse and surrounds to public drainage infrastructure. An existing inter-allotment drain enters the site from the Gardeners Road boundary, traversing along the western part of the site to the adjoining data centre driveway. This pipe is 825mm in diameter and carries runoff from Gardeners Road through the site to Campbell Road (north of the site) and the Alexandra Canal. The pipe also collects runoff from the site and included several pipe connections from the existing development. Levels on the site vary between RL 6.3m AHD and RL 6.6m AHD.

6.1.11.2. Potential Impacts

A WCMS has been developed which seeks to address the competing demands placed on a region's water resources, while optimising the social and economic benefits of development and enhancing and protecting the environmental values of receiving waters. The key WCM targets which have been adopted in the design are summarised in **Table 14** below.

Table 14 WCM summary

Element	Target
Water Quantity	Minimise flooding from increased stormwater runoff due to the development.
Water Quality	Load-based pollution reduction targets based on an untreated urbanised catchment: ▪ Gross Pollutants 90% ▪ Total Suspended Solids 85% ▪ Total Phosphorus 65% ▪ Total Nitrogen 45% ▪ Total Hydrocarbon 90%
Flooding	Buildings set above the 1% AEP flood level
Water Supply	Reduce demand on non-potable water uses. Provide 50-70% reduction of non-potable uses.
Construction Stormwater Management & Erosion and Sediment Control	A construction stormwater management plan and appropriate associated erosion and sedimentation control measures must be described in the environmental assessment for all stages of construction to mitigate potential impacts to surrounding properties.

A summary of the how each of the WCM objectives will be achieved are described below.

- Stormwater Quantity Management: it is proposed to reduce the impact of urban development on the existing drainage system by limiting post-development discharge within the receiving waters to the pre-development peak and avoid impacts on upstream, downstream or adjacent properties. Attenuation of stormwater runoff from the development is not required as the site is currently fully developed and existing trunk drainage systems are available for discharge based on the fully developed site.
- Stormwater Quality Management: the required pollutant reductions are set out in the CER and MUSIC modelling. A series of stormwater quality improvement devices (**SQIDs**) have been incorporated in the design of the development. The proposed management strategy will include the following measures:
  - Primary treatment of external areas will be made via pit inserts.
  - Tertiary treatment of the development will be made via proprietary filtration treatment systems.
  - Some treatment will also be present by provision of rainwater reuse tanks on the site through reuse and settlement within the tanks.
- Water Demand Reduction / Rainwater Reuse: rainwater reuse measures are provided as part of the development design. Rainwater reuse is proposed to reduce demand on non-potable uses by 50-70%. The reduction in demand will target non-potable uses such as toilet flushing and irrigation.
- Stormwater Management During Construction: a construction stormwater management plan and associated erosion and sediment control measures are based on *Landcom Blue Book* and Council requirements. The management measures take a staged approach from initial site establishment, construction stages and the completion of the development on site.

The proposed stormwater drainage system will comprise a minor and major system to safely and efficiently convey stormwater to the legal point of discharge, being the via the existing inter-allotment drainage pipe. The existing inter-allotment drainage pipe will be re-routed within the site to accommodate the proposed development. The CER confirms the capacity of the existing system and existing conveyance performance will be maintained as a result of the proposed re-routing.

The minor system is to consist of a piped drainage system which has been designed to accommodate the 1 in 20-year ARI storm event (**Q20**). This results in the piped system being able to convey all stormwater runoff up to and including the Q20 event. The major system will be designed to cater for storms up to and including the 1 in 100-year ARI storm event (**Q100**). The major system will employ the use of defined overland flow paths, such as roads and open channels, to safely convey excess run-off from the site.

Construction Soil and Water Management

A Soil and Water Management Plan (**SWMP**) and Erosion and Sediment Control Plan (**ESCP**) are to be implemented to mitigate any sediment impacts in relation to site runoff. The ESCP and draft SWMP are included in the CER. During construction, the ESCP will be in place to ensure the downstream drainage system and receiving waters are protected from sediment laden runoff, particularly in relation to the following key construction activities:

- Erosion and sediment control installation;
- Grading of existing earthworks to suit building layout, drainage layout and pavements;
- Stormwater and drainage works;
- Service installation works; and
- Building construction works.

The proposed controls for management of erosion and sedimentation during construction of the proposal are identified below. The proposal is considered acceptable in relation to stormwater and wastewater management, subject to the implementation of these measures.

6.1.11.3. Mitigation Measures

Proposed measures for the management of erosion and sediment control during construction include:

Sediment Basins

Sediment basins have been sized and located to ensure sediment concentrations in site runoff are within acceptable limits. Preliminary basin sizes have been calculated in accordance with the Blue Book and are based on 'Type F' soils. These soils are fine grained and require a relatively long residence time to allow settling. Sediment basins for 'Type F' soils are typically wet basins which are pumped out following a rainfall event when suspended solids concentrations of less than 50 mg/L have been achieved.

Sediment Fences

Sediment fences are to be located around the perimeter of the site to ensure no untreated runoff leaves the site. They will also be located around the existing drainage channels to minimise sediment migration into waterways and sediment basins.

Stabilised Site Access

Stabilised site access is proposed at the entry to the works area. This will limit the risk of sediment being transported onto Raymond Avenue and other public roads.

Other Management Measures

Other management measures that will be employed include:

- Minimising the extent of disturbed areas across the site at any one time.
- Progressive stabilisation of disturbed areas or previously completed earthworks to suit the proposal once trimming works are complete.
- Regular monitoring and implementation of remedial works to maintain the efficiency of all controls.

6.1.12. Flooding Risk

A Civil Engineering Report (**CER**) including Flood Risk Assessment (**FRA**) has been prepared by Costin Roe and is attached as **Appendix R**. The FRA has been prepared having regard to the relevant CoS flood planning documentation.

6.1.12.1. Existing Environment

The CER finds the site is clear of any significant flow paths and is not affected by mainstream flooding associated with the Alexandra Canal. The site is clear of flooding and flood hazard areas for the 1% AEP and PMF events.

6.1.12.2. Potential Impacts

The FFL of the proposed building will be a minimum of 0.5m above the gutter level to ensure the development is not affected by nuisance runoff and gutter flows in Gardeners Road and Bourke Road when operational. The modelled 1% AEP flood extent does not encroach the subject property and accordingly, adverse impact to existing flood conditions or surrounding developments are associated with the proposal.

As the site is not subject to flooding or overland flow, no detailed modelling or flood impact assessments are necessary for the development. Flood risk for and from the development is considered low to negligible, and the development meets current council flood policy.

6.1.13. Contamination and Remediation

A (Stage 2) Detailed Site Investigation (**DSI**) has been prepared by JBS&G and is provided at **Appendix T.**

6.1.13.1. Existing Environment

JBS&G completed a preliminary site investigation (**PSI**) (2020) which confirmed the site had been used for a variety of industrial purposes since at least 1943. A limited intrusive site investigation identified the presence of fill materials at depths ranging from 0.5-1.8m below ground surface (**bgs**). The fill materials were found to contain building and demolition wastes with potentially isolated impacts of identified contaminants of potential concern in soil. The PSI recommended that a DSI be undertaken including environmental sampling to support the redevelopment of the site for the proposal.

6.1.13.2. Potential Impacts

The DSI includes collection and analysis of soil samples from twenty-one borehole locations, with concrete pavement approximately 150-200 mm thick present in all boreholes. Fill was encountered at each location, at depths ranging from 1-2m bgs. The fill is comprised of gravelly sandy clay with varying levels of inclusions that comprised crushed sandstone, plastic and tile. The fill was underlain by natural sands to the maximum depth of the investigation (5m bgs). No ACM was observed within the materials assessed. No odours or staining as potentially associated with contamination was observed throughout the materials. However, sulphidic odours were noted within natural sand materials at depth.

Based on the results of the DSI, including results of targeted soil and groundwater assessment, concentrations of contaminants of potential concern (**COPC**) in fill and soils at the site do not pose a potential risk to future site receptors. The DSI concludes the site is suitable for commercial/industrial use.

6.1.13.3. Mitigation Measures

It is recommended that a Construction Environmental Management Plan (**CEMP**) be prepared for the future site redevelopment works to identify typical site management controls and makes provisions for unexpected finds.

6.1.14. Waste Management

A Waste Management Plan (**WMP**) has been prepared by LG Consult and is provided at **Appendix U**.

The WMP identifies all potential waste likely to be generated in the demolition, construction and operational phases. The WMP identifies procedures to manage waste, including waste storage, handling and disposal, and identifies measures to be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021*.

6.1.14.1. Construction Waste

The estimated monthly construction waste quantities are summarised in **Table 15** below.

Table 15 Estimated Weekly Construction Waste

Type of Waste	Recycling	Disposal
Excavated materials	$0m^3$	$0m^3$
Green waste	$0m^3$	$0m^3$
Bricks/pavers	$0m^3$	$<10m^3$ (offcuts)
Tiles	$0m^3$	$<5m^3$ (offcuts)
Concrete	$0m^3$	$<15m^3$
Plasterboard	$0m^3$	$<10m^3$
Asbestos	$0m^3$	$0m^3$
Metal	$<15m^3$ (steel buds)	$0m^3$
Timber	$0m^3$	$0m^3$
Other waste	$0m^3$	$<10m^3$ (offcuts)
Packaging	$<15m^3$	$0m^3$
Containers	$<5m^3$	$0m^3$
Papers/Cardboard	$<10m^3$	$0m^3$
Total	$<45m^3$	$<50m^3$

Effective management of construction materials and construction waste, including options for reuse and recycling where applicable and practical, will be conducted. Only waste that cannot be cost effectively reused or recycled are to be sent to landfill or appropriate disposal facilities.

Waste materials produced from construction activities are to be separated at the source and stored separately on-site before transport to waste facility. Waste storage areas will be accessible and allow sufficient space for storage and servicing requirements. The storage areas will also be flexible to cater for change of use throughout the project. Where space is restricted, dedicated stockpile areas will be delineated on the site, with regular transfers to dedicated skip bins for sorting.

All staff, including sub-contractors and labourers, employed during the site preparation and construction phases of the development will undergo induction training regarding waste management.

The WMP recommends that a Construction Environmental Management Plan be prepared for the proposed redevelopment works to identify typical site management controls and make provisions for any unexpected finds. An Acid Sulfate Soil Management Plan will also be required to identify the management requirements for construction works that result in the disturbance of any identified Potential Acid Sulfate Soil.

6.1.14.2. Operational Waste

The estimated weekly operational waste quantities are summarised below in **Table 16**.

Table 16 Estimated Weekly Operational Waste

Type of Waste	Recycling	Disposal
Metal	$0m^3$	$0m^3$

Type of Waste	Recycling	Disposal
Timber	<2m^3	0m^3
Other waste	0m^3	<3m^3 (GSW)
Packaging	<2m^3	0m^3
Containers	<0.5m^3	0m^3
Paper/cardboard	<1m^3	0m^3
Total	**<5.5m^3**	**<3m^3**

The proposed waste bin storage area is outside the eastern roller shutter door to the ground level breezeway where the recycling bins and garbage skips will be stored prior to collection. Sufficient clearance enables collection vehicles to access the locations of bin storage. Waste/recycling storage locations will be constructed of an adequate size to accommodate all waste and recycling bins and bales. Recycling bins will be accessible to all employees and clearly sign-posted to facilitate segregation of waste and recycling.

As part of the Operational Waste Reduction Plan, waste reduction measures will be employed during operation of the proposal including:

- Provision of take back services to clients to reduce waste further along the supply chain;
- Re-work/re-packaging of products prior to local distribution to reduce waste arising;
- Review of packaging design to reduce waste but maintain 'fit for purpose';
- Investigating leased office equipment and machinery rather than purchase and disposal;
- Establish systems with in-house and with supply chain stakeholders to transport products in re-useable packaging where possible;
- Development of 'buy recycled' purchasing policy;
- Flatten or bale cardboard to reduce number of bin lifts required; and
- Providing recycling collections within each of the offices and tearooms (e.g. plastics, cans and glass).

6.1.15. Aboriginal Cultural Heritage

An Aboriginal Cultural Heritage Assessment (**ACHA**) has been undertaken by Urbis and a draft Aboriginal Cultural Heritage Assessment Report (**ACHAR**) is attached as **Appendix V**.

At the time of writing, consultation with the Aboriginal community has been undertaken up to and including Stage 3 (gathering information). It is anticipated that the draft ACHAR will be issued to Registered Aboriginal Parties (**RAPs**) mid-March 2022 and the ACHAR will be finalised by mid-April 2022.

The ACHA has been undertaken to investigate whether development of the site will harm Aboriginal objects or places that may exist within the site area and determine whether the subject area presents any Aboriginal archaeological and heritage constraints. The current draft ACHA report presents the results of the ACHA.

The ACHA was undertaken in accordance with Part 6 of the *National Parks and Wildlife Act 1974* and Part 5 of the *National Parks and Wildlife Regulation 2019*. The ACHA was further conducted in accordance with the following guidelines:

- *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water.
- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011).

- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b).
- *The Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter, 2013*.

6.1.15.1. Existing Environment

The ACHAR assesses the existing site context including search results from the Aboriginal Heritage Information Management System (**AHIMS**) and considers previous archaeological investigations relevant to the site.

The AHIMS search identified no Aboriginal sites and no Aboriginal places within the site. The nearest registered Aboriginal object is the Shea's Creek Dugong site located approximately 750m to the west of the site. In the broader search area, a total of 40 Aboriginal objects and no Aboriginal places are registered.

The following conclusions are drawn from the archaeological background information, including AHIMS results and pertinent regional archaeological investigations:

- No Aboriginal objects or Aboriginal places are registered within the site.
- No previous Aboriginal archaeological investigations have been identified that directly address the site area.
- Previous archaeological investigations from similar contexts near to the site identified the potential for archaeological resources dating to the Pleistocene within intact natural soils below modern fill layers.

The draft ACHAR also undertakes an assessment of the archaeological and environmental contexts of site and finds that:

- The site is located in the Tuggerah soil landscape and within 200m of a former low order, ephemeral waterway, which are considered archaeologically sensitive landscape features.
- Historical activities, including land clearance, construction and demolition of buildings and utilisation of the site for industrial purposes, are determined to have caused a high level of ground disturbance across the site area.
- Geotechnical findings confirm the impact of historical activities on the soil profile, with a disturbance being encountered to a minimum depth of 2m below the existing ground surface.
- There is nil to low potential for Aboriginal sites within the disturbed soil layers to depths of approximately 2m below the existing ground surface.

6.1.15.2. Potential Impacts

The ACHA utilises a predictive model to estimate the nature and distribution of evidence of Aboriginal land use at the site. The predictive model considers the variables that may influence the location, distribution and density of sites, features or artefacts within the area. Variables relate to the environment and topography, such as soils, landscape features, slope, landform and cultural resources.

The likelihood of the occurrence of Aboriginal site types at the site as identified by the draft ACHAR is shown in **Table 17** below. It is concluded that the site has moderate archaeological potential for artefact scatters / campsites, burials, isolated finds, middens and potential archaeological deposits (**PADS**) dating to the Pleistocene within intact natural soil at depths exceeding approximately 2m below the existing ground surface.

Table 17 Predictive model for assessment of archaeological potential

Site Type	Assessment	Potential
Art	The site does not include any visible sandstone outcrops or rock overhangs that would be indicative of the potential for rock art. The likelihood of any concealed rock overhangs or sandstone outcrops being present within the subject area is considered negligible.	Nil

Site Type	Assessment	Potential
Artefact Scatters / Campsites	The site is located within the soft, sandy Tuggerah soil landscape and in proximity to a former low-order natural waterway, both of which are indicative of likely past Aboriginal land use and the potential for artefact scatters / campsites. A high level of historical ground disturbance across the entire subject significantly reduces the potential for artefact scatters / campsites from the Holocene. However, there is moderate potential for the presence of artefact scatters / campsites from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m.	Moderate
Bora / Ceremonial	The site is located within the soft, sandy Tuggerah soil landscape in proximity to a former low-order natural waterway, both of which are indicative of likely past Aboriginal land use and the potential for bora / ceremonial sites. However, due to the high level of historical ground disturbance across the entire subject area and susceptibility of bora / ceremonial sites to disturbance, the likelihood of such sites being retained is considered low.	Low
Burial	The site is located within the soft, sandy Tuggerah soil landscape and in proximity to a former low-order natural waterway. A high level of historical ground disturbance across the site significantly reduces the potential for burials from the Holocene. However, there is moderate potential for burials from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m.	Moderate
Contact site	The location of the site within an area of early European settlement is indicative of the potential for contact sites. However, a high level of historical ground disturbance across the entire site significantly reduces the potential for contact sites to be retained.	Low
Grinding Grooves	The site does not include any visible sandstone outcrops that would be indicative of the potential for grinding grooves. The likelihood of any concealed sandstone outcrops being present within the subject area is considered negligible.	Nil
Isolated Finds	The site is located within the soft, sandy Tuggerah soil landscape and in proximity to a former low-order natural waterway, both of which are indicative of likely past Aboriginal land use and the potential for isolated finds. A high level of historical ground disturbance across the site significantly reduces the potential for isolated finds from the Holocene. However, there is moderate potential for the presence of isolated finds from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m.	Moderate
Midden	The site is located within the soft, sandy Tuggerah soil landscape and in proximity to a former low-order natural waterway. A high level of historical ground disturbance across the site significantly reduces the potential for middens from the Holocene. However, there is moderate potential for the presence of middens from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m.	Moderate

Site Type	Assessment	Potential
Modified Trees	Historical development of the site has resulted in clearance of all vegetation, removing any potential for the presence of modified trees.	Nil
PAD	The site is located within the soft, sandy Tuggerah soil landscape and in proximity to a former low-order natural waterway, both of which are indicative of likely past Aboriginal land use and the potential for archaeological deposits. A high level of historical ground disturbance across the entire subject significantly reduces the potential for archaeological deposits from the Holocene. However, there is moderate potential for the presence of archaeological deposits from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m.	Moderate
Shelters	The site does not include any rock overhangs that would be indicative of the potential for shelters. The likelihood of any concealed rock overhangs being present within the subject area is considered negligible.	Nil

The ACHA seeks to assess and discuss the cultural significance of the site in consultation with the RAPs. The assessment takes into consideration the social, cultural, historic, scientific (archaeological) and aesthetic values of the site area. As the cultural significance assessment is undertaken in consultation with the RAPs, this will be detailed in the final ACHAR once consultation with the RAPs has been completed.

The ACHA also undertakes an assessment of the potential impact on any Aboriginal objects and/or Aboriginal places within the site area and identifies possible strategies for avoiding or minimising harm to those Aboriginal objects and/or Aboriginal places. The potential harm to Aboriginal cultural heritage arising from the proposed works is identified as relating to the sinking of piles to a depth of approximately 18m below the existing ground surface.

The desktop assessment undertaken as part of the draft ACHAR has determined there are no known Aboriginal objects or Aboriginal places within the site. The archaeological potential has been assessed to be moderate for artefact scatters / campsites, burials, isolated finds, middens and PADS within intact natural soil at depths exceeding 2m below the existing ground surface. As such, the ACHA finds that there is moderate potential for harm to Aboriginal objects due to the proposed works.

The draft ACHAR notes that re-assessment of the potential for harm to significant Aboriginal objects will be undertaken based on information received from RAPs during consultation and the visual inspection of the site. An updated assessment will be detailed in the final ACHAR with recommendations for any measures required to avoid and minimise harm and conserve any significant Aboriginal objects and/or Aboriginal places, along with their cultural heritage values.

The draft ACHAR indicates no further archaeological assessment of the site is required in view of the findings of the ACHA. The development may proceed with caution, subject to the archaeological chance finds and human remains procedure being implemented.

6.1.15.3. Mitigation Measures

Archaeological Finds Procedure

Should any archaeological deposits be uncovered during any site works, the following steps must be followed:

- All works within the vicinity of the find must immediately stop. The find must not be moved ‘out of the way’ without assessment.
- The site supervisor or another nominated site representative must contact either the project archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist.
- The nominated archaeologist must examine the find, provide a preliminary assessment of significance, record the item and decide on appropriate management measures. Such management may require

further consultation with Heritage NSW, preparation of a research design and archaeological investigation/salvage methodology and registration of the find with the Aboriginal Heritage Information Management System.

- Depending on the significance of the find, reassessment of the archaeological potential of the subject area may be required and further archaeological investigation undertaken.
- Reporting may need to be prepared regarding the find and approved management strategies.
- Works in the vicinity of the find can only recommence upon receipt of approval from Heritage NSW.

Human Remains Procedure

In the unlikely event that human remains are uncovered during the proposed works, the following steps must be followed:

- All works within the vicinity of the find must immediately stop. The find must be cordoned-off and signage installed to avoid accidental impact.
- The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).
- The find must be assessed by the NSW Police, which may include the assistance of a qualified forensic anthropologist.
- Management recommendations are to be formulated by the NSW Police, Heritage NSW and site representatives.
- Works are not to recommence until the find has been appropriately managed.

6.1.16. Environmental Heritage

A Heritage Impact Statement (**HIS**) has been prepared by Urbis and is attached as **Appendix W**.

6.1.16.1. Existing Environment

The site is not identified as a heritage item, nor is it located within a heritage conservation area. The site is in the vicinity of the Alexandra Canal heritage item, which is located approximately 200 metres north-west of the site. Alexandra Canal is identified as having State heritage significance (SHR No. 01621) and is also listed in SLEP 2021 (Item No. I3) and Bayside LEP 2021 (Item No. I260).

6.1.16.2. Potential Impacts

Built heritage

The HIS assesses the potential impacts of the proposal on heritage items on the vicinity. The HIS identifies that the Alexandra Canal is separated both physically and visually by the existing arterial road network that surrounds the site and large-scale industrial development that is located between the site and the heritage item. Views to and from the Alexandra Canal and the site are obscured by the existing arterial road network that surrounds the site and the existing large-scale industrial development located between the heritage item and the site. Significant views towards the heritage item are from Campbell Road Bridge and will not be altered by the proposal. The proposed development will occur only within the site's legal allotment boundary and will in no way physically encroach on the allotments or established curtilage of the heritage item. As such, there will be no physical impacts associated with the proposal on the vicinity of the heritage item.

The location and context of the site is removed both physically and visually from the vicinity of the Alexandra Canal and its defined heritage curtilage. The proposed building will generally be in keeping with contemporary industrial style buildings within the area. Accordingly, the HIS finds the proposal will respond appropriately to comparable contemporary commercial and industrial development in the immediate vicinity. Extant development on the site comprises a warehouse building constructed c.1996, which does not contribute to the setting of the heritage item. The proposal therefore has no further impact of the setting of the Alexandra Canal.

Archaeological heritage

The HIS undertakes an assessment of the historical archaeological potential of the site. The HIS identifies that by 1943, the site area had been cleared of vegetation and developed for industrial purposes. The site

has been exposed to activities likely to have caused ground disturbance since at least the mid-20th century. The remains of the early buildings, infrastructure and casual finds associated with the site's early use are likely to have been destroyed by the development of the c.1996 warehouse structure.

The geotechnical investigation of the site by PSM (**Appendix Q**) confirms a high level of ground disturbance, with a disturbed fill layer to a minimum depth of 2 to 2.35m below the existing ground surface, at which depth ground water was encountered. The depth of ground disturbance within the site significantly reduces the likelihood of historical archaeological remains being retained.

Based on the high level of ground disturbance and the site being subject to minimal historical occupation, the site is assessed as having low historical archaeological potential. No further historical archaeological investigation is required prior to works commencing. Development may proceed with caution, subject to the proposed archaeological chance finds and human remains procedures being implemented.

6.1.16.3. Mitigation Measures

Archaeological Finds Procedure

Should any archaeological deposits be uncovered during any site works, the following steps must be followed:

- All works within the vicinity of the find must immediately stop. The find must not be moved 'out of the way' without assessment.
- The site supervisor or another nominated site representative must contact either the project archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist.
- The nominated archaeologist must examine the find, provide a preliminary assessment of significance, record the item and decide on appropriate management measures. Such management may require further consultation with Heritage NSW and preparation of a research design and archaeological investigation/salvage methodology.
- Depending on the significance of the find, reassessment of the archaeological potential of the subject area may be required and further archaeological investigation undertaken.
- Reporting may need to be prepared regarding the find and approved management strategies.
- Works in the vicinity of the find can only recommence upon receipt of approval from Heritage NSW.

Human Remains Procedure

In the unlikely event that human remains are uncovered during the proposed works, the following steps must be followed:

- All works within the vicinity of the find must immediately stop. The find must be cordoned-off and signage installed to avoid accidental impact.
- The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).
- The find must be assessed by the NSW Police, which may include the assistance of a qualified forensic anthropologist.
- Management recommendations are to be formulated by the NSW Police, Heritage NSW and site representatives.
- Works are not to recommence until the find has been appropriately managed.

6.1.17. Social Impact

A Social Impact Assessment (**SIA**) has been prepared by Urbis as it attached at **Appendix X**. The SIA identifies and analyses the potential positive and negative social impacts associated with the proposal and has been prepared in consultation with CoS Council.

6.1.17.1. Existing Environment

The SIA identifies a social baseline of the study area including the site locality, social context, demographic characteristics, engagement outcomes and areas of social influence. The SIA includes a community profile identifying the demographic and social characteristics of the proposal's likely area of social influence. The SIA finds the key characteristics of the Alexandria and Mascot community as:

- A young adult population
- Small households and high density living
- An active workforce
- High public transport use
- An educated population
- High household income
- Higher rates of crime (theft, damage to property and trespass).

6.1.17.2. Potential Impacts

The SIA assesses the direct and indirect social impacts of the proposal on the existing community and identified stakeholder groups. The SIA assesses impacts and identifies neutral to low impacts as well as moderate to high impacts.

The SIA identifies the following neutral to low impacts:

- Noise impacts from construction and operation: based on the analysis in the NVIA (**Appendix P**) and the implementation of the proposed mitigation and management measures, the construction and operation noise is likely to have a neutral impact on surrounding residents and businesses.
- Impacts on Aboriginal cultural heritage: based on the analysis of the draft ACHAR (**Appendix V**), the proposal is likely to have a neutral impact on Aboriginal cultural heritage for the local indigenous community.
- Provision of facilities and services to meet employee needs: the proposal will have a low positive impact on the provision of facilities and services to meet future worker and visitor needs on site.
- Safe and convenient access to and from the site: based on the analysis of the TA (**Appendix K**), the proposal will have a neutral impact on safe and convenient access for future workers and visitors.
- Mitigating the urban heat island effect: the proposal will have a low positive impact on mitigating the urban heat island effect on local residents and workers.
- Restriction of views for residents and visitors of surrounding areas: based on the analysis of the VIA (**Appendix J**), the proposal will have neutral impact on the restriction of views for residents and visitors of surrounding areas.

In relation to moderate to high impacts, **Table 18** below assesses these impacts having regard to proposed mitigation measures to determine the residual impact level.

Table 18 Assessment of significant social impacts

Social Impact			**Residual Impact Summary**		
	Description of impact	Impact of the proposal	Likelihood	Magnitude	Resultant impact
	Increase in industrial	The proposal will have a positive impact by creating	Almost certain	Medium	High

Social Impact			Residual Impact Summary		
	Description of impact	Impact of the proposal	Likelihood	Magnitude	Resultant impact
Industrial employment opportunities	employment opportunities	more opportunities for industrial employment opportunities to support Sydney's economy. It will deliver diverse job opportunities to support different skillsets in the Greater Sydney workforce.	The proposal is likely to have high long term positive impacts on industrial employment opportunities for Greater Sydney workers.		
Improved landscape character	Enhanced landscaping provided on site to improve the streetscape character	The proposal will improve the landscape character of the site by introducing various green elements including more trees, raised planters, courtyards and green roofs. This will provide future workers, visitors and local residents with a better streetscape experience, such as shade and cooling. The landscape elements throughout the site will provide future workers and visitors with comfortable spaces with high landscape amenity for work breaks.	Likely	Moderate	High
			The proposal will have a positive impact on improved landscape character for future workers and visitors to the site and residents.		

Overall, the SIA finds that the proposal is likely to have a low positive impact on the local community, future tenants and workers on site.

6.1.18. Infrastructure Requirements and Utilities

A Service Infrastructure Assessment has been prepared by Landpartners and is attached as **Appendix Y**.

6.1.18.1. Existing Environment

The Service Infrastructure Assessment identifies the service authorities providing site infrastructure are:

- Potable Water & Waste Water Infrastructure – Sydney Water
- Electrical Infrastructure – Ausgrid
- Telecommunications Infrastructure – NBN Co
- Gas Infrastructure - Jemena

6.1.18.2. Potential Impacts

The Service Infrastructure Assessment finds that those service assets adjacent to the development site provide adequate capacity to support the proposed development, as summarised below. All required

services will be delivered through the service utility organisation asset creation pathways and funded by the proponent. The required infrastructure will be coordinated with the project team to ensure the assets are constructed and commissioned prior to Occupation Certificate approval.

Potable Water

A substantial potable water mains is adjacent to the site in Bourke Road and Gardeners Road. A 250mm reticulation potable water main exists in Bourke Road (available for connection), together with a 750mm trunk water main (not available for connection). A 150mm reticulation water main provides frontage in Gardeners Road which is available for connection.

Waste Water

The site is served by a 225mm sewer main adjacent to the south-east corner of the site. Adequate waste water capacity exists to serve the proposed development.

Electricity

Substantial electrical services exist within Gardeners Road and Bourke Road. These services consist of conduit banks with 11kv high voltage feeder cables installed within the conduits. A 132kv electrical feeder cable is laid within easement within the site. This asset is not available for connection. Significant capacity exists within the electrical system to service the proposed development. A supply application has been lodged with Ausgrid who have advised that two chamber substations are likely to be installed to service the development.

Telco

NBN is the network provider for the area and has established underground fibre optic cables within Bourke Road and Gardeners Road.

Gas

Jemena have a 1,050kPa high pressure gas reticulation main in Bourke Road and Gardeners Road immediately along the frontage of the site, together with a 210kPa main also in Bourke Road and Gardeners Road. The 210kPa main is available for connection.

7. JUSTIFICATION OF THE PROJECT

This section of the report provides a comprehensive evaluation of the project having regard to its economic, environmental and social impacts, including the principles of ecologically sustainable development.

It assesses the potential benefits and impacts of the proposed development, considering the interaction between the findings in the detailed assessments and the compliance of the proposal within the relevant controls and policies.

7.1. PROJECT DESIGN

The design of the proposal has been carefully considered to minimise its potential impacts. The proposal seeks to meet the objectives of the project through enabling industrial uses and employment opportunities on the site. The proposal will deliver a state-of-the-art employment-generating development on a vacant industrial site.

The layout and design of the proposal has been developed to minimise impacts on local residents and the public domain and maximise the relationship of the building to the streetscape, providing enhancements to the local context. The proposal seeks to make efficient use of the site to deliver employment opportunities in both the short and long-term.

The proposal includes significant uplift to the site in relation to landscaping and planting. Where mitigation measures are proposed, these will enable the proposal to be constructed and operated without any unacceptable economic, social or environmental impacts.

7.2. STRATEGIC CONTEXT

The proposal is consistent with State and local strategic planning policies. The site is highly suitable for the proposed development being located within an established industrial precinct. The proposal will deliver additional industrial floorspace in an appropriate land use zone, intended to meet growth and demand.

The generation of additional employment for the Eastern City Region will contribute to the 30-minute city vision set in the Region Plan. The proposal will provide a range of employment opportunities of benefit to the local community and broader Sydney region.

7.3. STATUTORY CONTEXT

The relevant State and local environmental planning instruments are listed in **Section 4** and assessed in **Appendix C**. The assessment concludes that the proposal complies with the relevant provisions within the relevant instruments as summarised below:

- The proposed development has been assessed and designed in respect to the relevant objects of the EP&A Act as defined in Section 1.3 the Act and addressed in **Appendix C**.
- This EIS has been prepared in accordance with the SEARs as required by Schedule 2 of the EP&A Regulations.
- Consideration is given to the relevant matters for consideration as required under the BC Act and the SSD is supported by a BDAR waiver accordingly.
- This SSDA pathway has been undertaken in accordance with the SRD SEPP as the proposed development is classified as SSD.
- Concurrence from TfNSW will be required as per the ISEPP for ‘traffic generating development’.
- The proposal satisfactorily responds to the relevant provisions under the SLEP 2012 as detailed in **Appendix C**. The proposed development is consistent with the objectives of the IN1 zone and permitted with consent. A Clause 4.6 exception to development standard has been prepared to address the minor variation to the maximum height standard on the northern part of the site.
- The proposed development has been assessed in accordance with SEPP 33 and SEPP 55 and complies with the relevant clauses of these SEPPs.
- The proposal generally accords with the relevant provisions of the SDCP 2012 as outlined in **Appendix C**.

7.4. COMMUNITY VIEWS

As set out in **Section 5**, feedback received during the stakeholder engagement has informed the development of the design of the proposal as well as the preparation of the EIS.

Consultation feedback received during the finalisation and assessment of the application will continue to be considered.

7.5. LIKELY IMPACTS OF THE PROPOSAL

The proposed development has been assessed considering the potential environmental, economic and social impacts as outlined below:

- **Natural Environment**: the proposal addresses the principles of ecologically sustainable development (ESD) in accordance with the requirements of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) and as outlined below:
  - Precautionary principle: the precautionary principle relates to uncertainty around potential environmental impacts and where a threat of serious or irreversible environmental damage exists, lack of scientific certainty should not be a reason for preventing measures to prevent environmental degradation. The development as modified will not result in any threat of serious environmental damage or degradation.
  - Intergenerational equity: the needs of future generations are considered in decision making and that environmental values are maintained or improved for the benefit of future generations. The development represents sustainable development, making best use of a brownfield site in an accessible location. The development will not have any unacceptable impacts on the environment.
  - Conservation of biological diversity and ecological integrity: the proposal will not have any unacceptable impacts on the conservation of biological diversity and ecological integrity. The proposal includes landscaped setbacks and roof-top planting including native species planting.
  - Improved valuation, pricing and incentive mechanisms: this requires the holistic consideration of environmental resources that may be affected as a result of the development including air, water and the biological realm. It places a high importance on the economic cost to environmental impacts and places a value on waste generation and environmental degradation. The development will not have any unacceptable environmental impacts in relation to air quality, water quality or waste management. The effects of the development will be acceptable and managed accordingly by the proposed mitigation measures as required.

  Overall, the proposal will not have any unacceptable impacts on the natural environment. The ESD Report (**Appendix M**) identifies a number of different ecological sustainability initiatives including energy savings, energy efficiency and waste minimisation.
- **Built Environment**: the proposal has been assessed in relation to the following built environment impacts:
  - Visual Impacts: As set out in **Section 6** and the VIA, the proposed development is does not generate any significant visual impacts and the proposal is considered acceptable in visual impact terms.
  - Traffic Impacts: As set out in **Section 6** and the TA, the proposal will result in a net reduction in peak vehicle trips compared to the previous use on site and is considered suitable from a traffic generation perspective. Surrounding intersections will continue to operate at an acceptable level.
  - Trees and Landscaping: As set out in **Section 6**, the AIA and Landscape Plans, the proposal includes a high level of indigenous species planting and large canopy landscaping across the site. The removal of trees proposed is mitigated by the proposed landscaping design including canopy tree planting to the Bourke and Gardeners Road landscape setbacks.
  - Air Quality: As set out in **Section 6** and the AQIA, the operation of the proposal would result in the achievement of all air quality criteria. Accounting for the background air quality conditions, and adopting worst-case assumptions in relation to truck idling, the proposal will not have any unacceptable air quality impacts including in relation to nearby residential receivers.

  - Noise and Vibration: As set out in **Section 6** and the NIA, the operation of the proposal is anticipated to comply with the required noise levels at surrounding receivers including nearby residential receivers. The proposal is found to have acceptable impacts in relation to noise and vibration, including during operations at night.

- **Social**: The proposal will have positive social impacts by enabling employment generating uses to be delivered on site in the short-term, providing local employment opportunities both in the construction and operational phases.
- **Economic**: The proposal will have positive economic impacts through enabling the delivery of operational industrial uses on site which will result in investment and economic benefit for Sydney as well as the wider region.

The potential impacts can be mitigated, minimised or managed through the measures discussed in detail within **Section 6** and as summarised in **Appendix D** to this EIS.

7.6. SUITABILITY OF THE SITE

The site is considered highly suitable for the proposed development for the following reasons:

- The warehouse and distribution centre use in permitted in the IN1 zone and is consistent with the relevant zone objectives, providing a wide range of industrial and warehouse land uses and delivering employment opportunities, while minimising adverse effects on other land uses.
- The development satisfactorily addresses the relevant provisions in SLEP 2012 and SDCP 2012, including acoustic amenity, built form and setbacks, car parking and landscaping. The minor variation to the 18 metre height control has been justified by way of a Clause 4.6 exception.
- The site is located within an existing industrial area and the character and scale of the development is compatible and consistent with its context, avoiding unacceptable impacts on residential amenity.
- The site is highly accessible to both the transport and regional freight network and the rail network and makes use of a brownfield site to deliver sustainable development.

7.7. PUBLIC INTEREST

The proposed development is considered in the public interest for the following reasons:

- The proposal is consistent with relevant State and local strategic plans and satisfactorily addresses the relevant State and local planning controls.
- No adverse environmental, social or economic impacts will result from the proposal.
- The proposal will provide 274 jobs during the construction phase and 659 jobs once fully operational.
- The proposal will stimulate local investment and contribute significant economic output and value add to the economy each year.
- The project is fully funded and ‘shovel ready’ for commencement of construction as soon as possible next year.
- The issues identified during the stakeholder engagement have been addressed through the development of the design of the proposal and the assessment of the impacts of the project.

Having considered all relevant matters, we conclude that the proposed development is appropriate for the site and approval is recommended, subject to appropriate conditions of consent.

8. DISCLAIMER

This report is dated 23 March 2022 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Charter Hall **(Instructing Party)** for the purpose of Environmental Impact Statement **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

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