Environmental Impact Statement

State Significant Development Application (SSD 10399)

Elevation at Greystanes Estate
Clunies Ross Street, Pemulwuy

Prepared for ISPT Pty Ltd C/- Aliro Management Pty Ltd
Submitted to the Department of Planning, Industry and Environment

18 August 2020

Certification of Environmental Impact Statement

Authors

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Proposed development

Applicant	ISPT Pty Ltd C/- Aliro Management Pty Ltd
Applicant's address	Level 53, Governor Phillip Tower 1 Farrer Place Sydney NSW 2000
Land to be developed	Clunies Ross Street, Pemulwuy
Legal description	Lot 10 DP 1022044, Lot 107 DP1028208, Lot 63 DP 752051, Lot 216 DP1030744 & Lot 601 DP1047403
Project description	Prospect Logistics Estate

Declaration

We certify that the contents of the Environmental Impact Statement, to the best of our knowledge, has been prepared in accordance with the requirements of clauses 6 and 7 of Schedule 2 of *Environmental Planning and Assessment Regulation 2000*; contains all available information that is relevant to the assessment of the development and that to the best of our knowledge the information contained in this report is neither false nor misleading.

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18 August 2020

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Cover image: Aerial image of the site (blue outline) viewed from the North (Source: Aliro Management Pty Ltd)

Revision	Date Issued	Prepared by	Approved by	Date approved	Revision Type
1	4/6/2020	KW	MW	4/6/2020	Draft v1
2	24/7/2020	KW	MW	24/7/2020	Draft v2
3	18/8/2020	KW	MW	18/8/2020	FINAL

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List of Abbreviations

ACHAR	Aboriginal Cultural Heritage Assessment Report
AEP	Annual Exceedance Probability
Applicant	ISPT Pty Ltd C/- Aliro Management Pty Ltd
AQIA	Air Quality Impact Assessment
AQMS	Air Quality Monitoring Station
BLEP	Blacktown Local Environment Plan 2015
BDAR	Biodiversity Development Assessment Report
CBD	Central Business District
CER	Civil Engineering Report
CIV	Capital Investment Value
CLM Act	*Contaminated Land Management Act 1997*
CTMP	Construction Traffic Management Plan
CWMP	Construction Waste Management Plan
DGI	Data Gap Investigation
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A 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
ESDR	Ecologically Sustainable Design Report
FIA	Flood Impact Assessment
GTP	Green Travel Plan
HIPAP	Hazardous Industry Planning Advisory Paper No 10 – Land Use Safety Planning
HLEP	Holroyd Local Environmental Plan 2013
HRA	Hazards and Risk Assessment
ICNG	Interim Construction Noise Guideline
LGA	Local Government Area
LoS	Level of Service
NPfI	Noise Policy for Industry
NVIA	Noise and Vibration Impact Assessment
OWMP	Operational Waste Management Plan
PMF	Probable Maximum Flood
QRA	Quantitative Risk Assessment
RAP	Remedial Action Plan
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SoHI	Statement of Heritage Impact
SSD	State significant development
TAG	Travel Access Guide
TIA	Traffic Impact Assessment
WTP	Workplace Travel Plan

Executive Summary

This Environmental Impact Statement (EIS) has been prepared by Keylan Consulting Pty Ltd (Keylan) on behalf of ISPT Pty Ltd C/- Aliro Management Pty Ltd (the Applicant) to support a State significant development (SSD) application for the Elevation at Greystanes Estate development at Clunies Ross Street, in the suburbs of Pemulwuy in the Cumberland local government area (LGA) and Prospect in the Blacktown LGA.

The site is approximately 18.6 hectares (ha) and forms part of the 90 ha Greystanes Northern Employment Lands (NEL) in the Western Sydney Employment Area, under the *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP).

The development meets the criteria of SSD under Schedule 1, clause 12(1) of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP) as it involves development that has a capital investment value (CIV) of more than $50 million for the purpose of a warehouse or distribution centre (including container storage facilities) at one location and related to the same operation.

The EIS has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Industry and Environment (DPIE) on 17 December 2019 (Appendix A) and in accordance with Schedule 2, Part 3 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). The EIS should be read in conjunction with the appended supporting information and plans.

The Minister for Planning and Public Spaces is the consent authority for the application.

The site and locality

The site is located on the western side of Clunies Ross Street in the Blacktown and Cumberland LGAs and is legally described as Lot 4 in DP 1192514, Lot 10 in DP 1022044, Lot 107 in DP 1028208, Lot 63 in DP 752051, Lot 216 in DP 1030744 and Lot 601 in DP 1047403.

The site comprises an area of approximately 18.6 ha and is located approximately 29.4 kilometres (km) west of the Sydney central business district and approximately 8.7 km west of Parramatta.

The site is irregularly shaped, sloping moderately from the south near Prospect Hill to the north towards Girraween Creek, with an approximate 45 metre fall over 600 metres. Historical land use includes agricultural, material storage and processing associated with nearby quarrying and manufacturing operations. More recently, the northern portion of the site has been used for brick and pavers manufacturing and storage, with the southern portion of the site used as commercial office premises.

The site is located within an established industrial area that includes a variety of warehousing and distribution developments and is positioned in close proximity to major transport corridors including the M4 Motorway and Great Western Highway to the north and the M7 to the west.

The proposal

The proposed development comprises the construction of seven industrial warehousing buildings, associated offices and hardstand/car parking areas on a terraced landform, as well as a small cafe. Key components of the development include:

- site preparation works including the demolition of existing structures, removal of hardstand and ancillary infrastructure and vegetation clearing
- remediation, bulk earthworks and supporting structures
- land stabilisation and rehabilitation
- 7 warehouse buildings with a combined gross floor area (GFA) of 87,501 m^2
- ancillary offices with a combined GFA of 7,992 m^2
- a 146 m^2 cafe
- a combined 564 car parking spaces
- landscaping works

The development will be delivered on a progressive basis, based on securing pre-lease agreements with prospective tenants.

The warehouse buildings are envisaged to be used as warehouse and distribution centres, with two of the warehouses identified for potential cold storage of food, beverage and therapeutic goods. Vehicle access to the site will be provided via Clunies Ross Street to the East and Foundation Place to the West.

Permissibility

The site is located on land zoned IN1 General Industrial under *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP).

'Warehouse or distribution centres', 'office premises' and 'food and drink premises' are permissible with consent in the IN1 General Industrial zone.

Strategic context

The development demonstrates strategic merit as it is consistent with the aims and objectives of the following strategic plans:

- Greater Sydney Region Plan
- Central City District Plan
- Future Transport Strategy 2056
- Cumberland Employment and Innovation Lands Strategy
- Draft Blacktown Local Strategic Planning Statement 2019

Strategic justification for the proposal is further outlined in Section 6 of this EIS.

Statutory context

The relevant statutory requirements that relate to the development, including environmental planning instruments (EPIs) and other planning and environmental policies are as follows:

- *Environmental Planning and Assessment Act 1979*
- *Environmental Planning and Assessment Regulation 2000*
- *Biodiversity Conservation Act 2016*
- *Contaminated Land Management Act 1997*
- *Roads Act 1993.*
- *Food Act 2003*

The following EPIs that relate to the development include:

- *State Environmental Planning Policy (Western Sydney Employment Area) 2009*
- *State Environmental Planning Policy (State and Regional Development) 2011*
- *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*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *Draft State Environmental Planning Policy (Remediation)*
- *Draft State Environmental Planning Policy (Environment).*

The above EPIs are addressed in Section 7.7 of the EIS.

Environmental assessment

A detailed assessment of the potential environmental impacts of the proposal is contained in Section 8 of the EIS. A summary of the conclusions made regarding potential environmental impacts is provided below.

Built form, visual character and landscaping

The proposed bulk, height and scale of the development is consistent with the prevailing built form character of the surrounding IN1 General Industrial zone in the Greystanes NEL which includes similar bulky goods and warehouse facilities.

Architectural plans for the development are included at Appendix C. Landscape Plans are provided in Appendix F and a Landscape and Visual Assessment is provided in Appendix G.

Warehouse buildings will be constructed to a maximum height of 11.7 m and 42 m above the amended ground level. The warehouse buildings will be constructed of colorbond steel wall cladding with matching trims.

The development has been designed to accommodate the neighbouring Prospect Hill heritage reserve by reducing the impact of the development at the south east portion. The design ensures view corridors from Prospect Hill are preserved and not disrupted by siting the maximum ridge heights of proposed warehouses below the level of the existing office building.

Landscaping is proposed along each boundary of the site and is to incorporate a variety of native trees, shrubs and grasses to soften the appearance of the facility. The site is located approximately 1 km from the nearest residential area and will not result in significant visual impacts or obstruction of scenic views.

Heritage

Aboriginal Cultural Heritage Assessment Report (ACHAR) and Statement of Heritage Impact (SoHI) reports have been prepared by Artefact Heritage. The site is located adjacent to Prospect Hill, which holds substantial Aboriginal cultural heritage values associated with both pre and post contact use. Following European settlement, the area was used for grazing and agriculture before the development of extractive industry and associated commercial enterprise.

The site has been extensively cleared of any native vegetation. The existing vegetation on the site currently comprises regrowth vegetation, garden plantings, weeds and grasses. Further, the site has undergone extensive historical disturbance and land modification, which is likely to have removed any in-situ archaeological deposits. No items of Aboriginal or European heritage significance were identified on the site.

The development will avoid direct disturbance of Prospect Hill and the development of warehouses on the site are predicted to have a minor visual impact subject to the implementation of design measures sympathetic to the landscape.

The ACHAR finds that the proposal is unlikely to impact Aboriginal heritage values within the site and finds that no further Aboriginal heritage assessment is required as part of the development. On the basis of the recommended mitigation measures, the SoHI concluded that the impacts of the project on heritage significance will be limited to potentially minor visual impacts on the Prospect Hill listed site.

Traffic and transport

A Traffic Impact Assessment (TIA) and Green Travel Plan (GTP) has been prepared by Ason Group. The site will utilise two roads – Clunies Ross Street and Foundation Place – for access to the regional road network of Prospect Highway, the Great Western Highway and M4 Western Motorway.

The estate has been designed to provide separate access for light and heavy vehicles, providing safer access and avoiding conflicts, with an internal two-lane road connecting Foundation Place and Clunies Ross Street and servicing warehouses 1, 2, 3 and 7.

The TIA found that with the exception of one intersection between Foundation Place and the Prospect Highway, the project will have minimal impacts to intersection performance, representing approximately 9% of total net growths. The TIA concludes that the impacts of traffic associated with the development are moderate and contribute to relatively minimal increases to intersection delays in the network.

Notwithstanding, Foundation Place has been identified to form a bottle neck for network performance. The TIA has recommended consideration of capacity upgrades to the roundabout be facilitated.

The overall parking provisions of the project are generally consistent with the Blacktown DCP, Holroyd DCP and RMS Guide parking requirements, and the parking rates have been adopted for the Project under the site specific DCP.

The TIA concludes that the ultimate developed site will not have any unacceptable traffic implications on the local road network and can operate satisfactorily.

Water, infrastructure and services

The site is currently serviced by an existing regional detention basin to the north-west of the site which is owned and managed by Blacktown City Council and services a 167 ha catchment, including the Greystanes NEL precinct.

The proposed stormwater drainage system for the estate development will be designed and constructed to safely and efficiently convey collected stormwater run-off from the development to the legal points of discharge. The development will include modifications to the existing detention systems involve filling of the site on the northern boundary of the property. Compensatory storage will be provided in an area on the northern side of the existing detention system to maintain the capacity of the regional basin.

The stormwater system for the estate is designed to ensure flood flows remain below the 0.5m freeboard requirements for the warehouse building pads and to ensure the regional detention basin maintains capacity to adequately service the employment lands catchment.

Stormwater modelling using the MUSIC model has been undertaken as part of the EIS. The MUSIC model indicates that the stormwater treatment train will result in pollutant load reductions that will meet the requirements of the relevant Council requirements.

The EIS has considered the provision of services to the site including potable water, waste water, electricity and communications. A Civil Engineering Report (CER) is included at Appendix D which confirms the site capable of being serviced by existing and future infrastructure.

Soil and Erosion

The site has been subject to significant disturbance by quarrying related activities and cut and fill earthworks create a sloping site from the southeast to the north west. The development will involve substantial earthworks to create a terraced landform suitable for the development of the warehouse buildings on the estate.

A concept Erosion and Sediment Control Plan has been prepared for the development which demonstrates that adequate controls can be established to avoid the pollution of receiving waters during construction.

Noise and vibration

A Noise and Vibration Impact Assessment (NVIA) has been prepared by White Noise which addresses the potential construction and operational noise and vibration impacts associated with the development.

The NVIA predicts that construction noise will comply with the noise management levels at all surrounding residential and industrial receivers. Construction vibration is not likely to exceed the criteria applicable for human comfort and therefore the nearest residential receivers are not likely to experience adverse vibration impacts.

As end users for the warehouse development has not been identified at this stage of the project, the exact uses that will be carried out within the warehousing structures is yet to be determined. All future operational plant and equipment are to be selected and acoustically treated to ensure the noise levels at all surrounding receivers comply with noise emission criteria detailed within the NVIA.

On this basis, the NVIA finds that the operational noise levels are expected to comply with the project noise trigger levels and the sleep disturbance criteria under the Noise Policy for Industry (NPfI) (EPA, 2017).

Overall, the NVIA finds that the development will result in negligible noise impacts during operation and will comply with the relevant criteria outlined in the NPfI, subject to the adoption of appropriate noise mitigation measures.

Air quality

An Air Quality Impact Assessment (AQIA) has been prepared by Northstar Air Quality Pty Ltd and is included at Appendix V. The AQIA concluded that with the implementation of the mitigation measures, the construction and operation of the development will pose a negligible risk to the air quality of the surrounding sensitive receptors.

A range of mitigation measures will be used to ensure short term health and nuisance impacts during the demolition and construction phase. The staging of construction activities will further ensure any potential health risks or nuisance impacts as a result of air emissions being minimised.

The proposed operation of the Elevation at Greystanes Estate is capable of complying with air quality criteria outlined in the Approved Methods.

Hazards and risk

A Hazards and Risk Assessment (HRA) has been prepared by SLR in accordance with the requirements of the guidelines published by the Department's *Hazardous Industry Planning Advisory Paper No 6 – Guidelines for Hazard Analysis.*

The only dangerous good to be used on the site will be anhydrous ammonia which is required for the refrigeration of the cold storage warehouses. Given the quantities of ammonia to be stored will be below the threshold quantity in SEPP 33, the HRA determined the development does not constitute 'potentially hazardous' or 'offensive' development with respect to the storage and handling of dangerous goods. Therefore, the proposal does not require the preparation of a *Preliminary Hazard Analysis*.

Contamination

A Phase 1 and Phase 2 Environmental Site Assessment (ESA) has been prepared by JBS&G which found that the site has been subject to a number of previous investigations which identified several areas of environmental concern (AEC) and isolated soil/sediment and surface/groundwater contamination associated with historic land use activities.

One lot within the site is currently subject to remediation by Cumberland Council to be suitable for commercial/industrial land use, to address identified soil contamination associated with fibrous asbestos and asbestos containing material (ACM). Adjacent areas potentially contain asbestos contaminated soil that may require remediation.

Other COPC including heavy metals (Cu, Zn, Cr) and Benzo(a)Pyrene were identified but considered to not exceed the relevant land use criteria for the proposed use of the site and do not present an unacceptable risk to the downstream environment.

The ESA recommends that a data gap investigation (DGI) be conducted to address identified potential contamination data gaps and further define the extent of contamination at the site.

Following the completion of the DGI, a Remedial Action Plan (RAP) be prepared to describe the required remediation and validation works to ensure the site is suitable for the proposed commercial industrial land use without ongoing management.

Waste

A Waste Management Plan (WMP) has been prepared by Sustainable Development Consultants and is included at Appendix W.

The WMP details the quantities and classification of waste streams to generated during construction and operation of the development and includes measures to ensure it is consistent with the aims and objectives of the *NSW Waste Avoidance and Resource Recovery Strategy 2014- 2021* (EPA, 2014).

Bushfire and incident management

A Bushfire Protection Assessment Report (BPAR) has been prepared by Eco Logical Australia in accordance with the SEARs and *Planning for Bush Fire Protection* (RFS 2019). The BPAR describes measures to manage bushfire risk to the site including:

- asset protection zones to be established around the site and managed in perpetuity
- landscaping to be established and managed in accordance with RFS 2019
- design and construction measures in accordance with AS 3959 or the National Association of Steel-framed Housing standard as modified by Section 7.5 of RFS 2019
- detailed design to ensure access and services (water, gas, electricity) meet the requirements of RFS 2019
- emergency and evacuation planning

The BPAR concludes that with the implementation of the above measures, the proposed development complies with the aim and objectives of *Planning for Bush Fire Protection 2019* in accordance with Section 4.14 of the EP&A Act.

Biodiversity

A Biodiversity Development Assessment Report (BDAR) has been prepared by Eco Logical Australia in accordance with the SEARs and NSW Biodiversity Assessment Method (BAM) 2017 established under the BC Act. Given the historical disturbance of the site, the BDAR estimates approximately 3.48 ha of the site contains native vegetation.

Three vegetation communities were identified including 1.77 hectares of vegetation mapped as part of the threatened ecological community (TEC), *River-flat Eucalypt Forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions* which is listed as an endangered ecological community under the NSW *Biodiversity Conservation Act 2016* (BC Act).

Ecologically sustainable development

An Ecological Sustainable Design Report (ESDR) has been prepared in accordance with the SEARs, Australian Greenhouse Office (AGO) Factors and Methods Workbook, Guidelines for energy Savings Action Plans, the National Construction Code (NCC) and relevant Australian Standards (AS). The ESDR was prepared by Sustainable Development Consultants.

The proposed development is capable of meeting best practice ESD outcomes through a number of initiatives employed throughout the whole project. The recommendations discussed above and further detailed in the ESDR will ensure proposal will benefit the surrounding environment with an ecologically sustainable development.

Conclusion

The EIS concludes that the development is justified on the basis that will result in the efficient and effective use of an existing industrial space to provide much needed industrial uses including warehousing and logistics located within an established industrial zone close to existing transport corridors.

The EIS concludes that the proposal is in accordance with the objectives and relevant provisions of the *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP).

The development has been designed to ensure that it will operate without impacting on the adjoining regional flood storage and retention capability and has been designed to ensure habitable floor levels are above the Probable Maximum Flood level for the site.

The conclusions and recommendations provided in the accompanying technical reports confirm the proposal will not have a detrimental impact on the surrounding environment and will not result in serious or irreversible impacts on any endangered or threatened species, ecological communities of their habitats.

Further, the EIS demonstrates the development has strategic merit as it is consistent with the aims and objectives of the relevant strategic plans that apply to the site including the Greater Sydney Region Plan and Central City District Plan.

1 Introduction

1.1 Purpose of this Environmental Impact Statement

This Environmental Impact Statement (EIS) supports a State significant development (SSD) application for the construction of the Elevation at Greystanes Estate development at Clunies Ross Street, in the suburbs of Pemulwuy and Prospect. The application is lodged by ISPT Pty Ltd C/- Aliro Management Pty Ltd (the Applicant) under section 4.38 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The development involves the construction of seven industrial warehousing buildings, associated offices and hardstand/car parking areas, and a small cafe on a terraced platform. The warehouse buildings will be used for storage and distribution, with two of the warehouses potentially being used for cold storage of food, beverage and therapeutic goods.

The proposal is classified as SSD in accordance with *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). Under Schedule 1, clause 12(1) of the SRD SEPP, development that has a capital investment value (CIV) of more than $50 million for the purpose of warehouses or distribution centres (including container storage facilities) at one location and related to the same operation, is considered to be SSD.

The CIV for the project is estimated at $182,425,582 (excluding GST). A quantity surveyors report is included in Appendix B.

1.2 Structure of this Environmental Impact Statement

This EIS should be read in conjunction with the supporting information and plans appended to this report. The structure of this EIS is summarised below:

Section	Section Heading	Description
	Executive Summary	A summary of this report and its key findings.
1	**Introduction**	Overview of the EIS, the proposed development and project objectives.
2	**Site Analysis**	Description of the site and surrounding development.
3	**Development Description**	Description of the project and consultation undertaken with key stakeholders.
4	**Strategic Justification**	Need for the proposal and strategic framework.
5	**Consultation**	Identifies consultation activities that has been carried out during preparation of the EIS with the community and government agencies.
6	**Strategic Planning Context**	Identifies the key strategic plans that relate to the site and the development.
7	**Statutory Planning Context**	Identifies the key legislation that relate to the site and the development.
8	**Environmental Assessment**	Identifies key activities, provides an assessment of potential impacts on the environment and includes recommended mitigation measures.

Section	Section Heading	Description
9	**Summary of Mitigation Measures**	Summarises the measures proposed to mitigate potential impacts due to the proposal.
10	**Conclusion**	A summary of the key findings.

Table 1: Structure of the EIS

1.3 Secretary's Environmental Assessment Requirements

This EIS has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs) issued by the NSW Department of Planning, Industry and Environment (DPIE) on 17 December 2019 (SSD 10399).

The SEARs and where they are addressed in this EIS are set out in Table 2 below.

Environmental Assessment Requirement	EIS Reference	Supporting Documentation
General Requirements		
The environmental impact statement (EIS) must be prepared in accordance with, and meet the minimum requirements of, clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation).	Section 7.2	
In addition, the EIS must include: • *a detailed description of the development, including:* ○ *the need for the proposed development* ○ *justification for the proposed development* ○ *likely staging of the development* ○ *likely interactions between the development and existing, approved and proposed operations in the vicinity of the site* ○ *plans of any proposed building works*	Section 3 Section 3.7	Appendix C Appendix D
• *consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments*	Section 7.7	N/A
• *a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment*	Section 8	N/A
• *a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes:* ○ *a description of the existing environment, using sufficient baseline data* ○ *an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes* ○ *a description of the measures that will be implemented to avoid, minimise, mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/ or contingency plans to manage significant risks to the environment*	Section 8	Relevant technical reports

Environmental Assessment Requirement	EIS Reference	Supporting Documentation
• *a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS*	Section 9	N/A
The EIS must also be accompanied by a report from a qualified quantity surveyor providing: • *a detailed calculation of the capital investment value (CIV).* • *The report shall be prepared on company letterhead and indicate applicable GST component of the CIV* • *an estimate of jobs that will be created during the construction and operational phases of the proposed development* • *certification that the information provided is accurate at the date of preparation*	N/A	Appendix B
Key Issues		
***Community Stakeholder Engagement** – including:* • *detailed community and stakeholder participation strategy which identifies who in the community has been consulted and a justification for their selection, other stakeholders consulted and the form(s) of consultation, including a justification for this approach* • *a report on the results of the implementation of the strategy including issues raised by the community and surrounding land owners and occupiers that may be impacted by the proposal* • *details of how issues raised during community and stakeholder consultation have been addressed and whether they have resulted in changes to the proposal* • *details of the proposed approach to future community and stakeholder engagement based on the results of consultation.*	Section 5	Appendix H
***Strategic Context** – including:* • *details of any proposed consolidation or subdivision of land* • *a demonstration that the proposal is generally consistent with all relevant planning strategies, environmental planning instruments and development control plans (DCPs) and district plans. Outline and justify any inconsistencies with any of these documents*	Section 6	N/A
***Suitability of the Site** – including:* • *an analysis of site constraints* • *details of all development consents and approved plans for the existing industrial estate* • *a detailed justification that the site is suitable for the scale of the proposal, having regard to the site's surrounds and the potential visual impact of the development.*	Section 8	N/A
***Urban Design and Visual** – including:* • *a detailed design analysis of the proposed development with reference to the building form, height, setbacks, bulk and scale in the context of the immediate locality, the wider area and the desired future character of the*	Section 8.1	Appendix C, E & F

Environmental Assessment Requirement	EIS Reference	Supporting Documentation
area, including views, vistas, open space and the public domain • *a detailed assessment (including photomontages and perspectives) of the facility (buildings and storage areas) including height, colour, scale, building materials and finishes, signage and lighting, particularly from nearby public receivers and significant or important vantage points of the broader public domain* • *consideration of the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks* • *an options analysis for the proposed building materials, architectural treatments, finishes and colour of the buildings, prepared in consultation with nearby sensitive receivers with evidence of consultation provided* • *a design report that establishes design guidelines and development parameters, and includes diagrams, illustrations and drawings to clarify the design intent of the proposal and which clearly demonstrates how design quality will be achieved in accordance with Clause 31 Design Principles of the State Environmental Planning Policy (Western Sydney Employment Area) 2009* • *suitable landscaping incorporating endemic species.*		
***Heritage** – including:* • *identification and description of the relevant non-Aboriginal heritage items, including built heritage, landscapes and archaeology, that exist across the development and document in a Statement of Heritage Impact (SOHI)* • *a description and assessment of potential impacts on non-Aboriginal heritage item(s) such as on Prospect Hill and Mar-Rong Reserve* • *measures to avoid and/or mitigate the impact on the heritage significance or cultural heritage values of the site and the surrounding heritage item(s)*	Section 8.2	Appendix Q & R
***Traffic and Transport** – including:* • *a Traffic Impact Assessment detailing all daily and peak traffic and transport movements likely to be generated (vehicle, public transport, pedestrian and cycle trips) during construction and operation of the development, including a description of vehicle access routes and the impacts on nearby intersections* • *details of access to the site from the road network including intersection location, design and sight distance* • *an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the development* • *detailed plans of the proposed site access and parking provision on site in accordance with the relevant Australian Standards*	Section 8.3	Appendix S

Environmental Assessment Requirement	EIS Reference	Supporting Documentation
• *identification of any dangerous goods likely to be transported on arterial and local roads to/ from the site and, if necessary, the preparation of an incident management strategy* • *details of impact mitigation, management and monitoring measures.*		
***Soils and Water** – including:* • *a description of the water demands and a breakdown of water supplies, including a detailed site water balance* • *a description of the measures to minimise water use* • *a description of all wastewater generated on site* • *characterisation of the nature and extent of any contamination of the site and a description of proposed measures* • *a detailed description of any cut and fill works and/ or additional retaining walls required to facilitate the development* • *a description of the proposed erosion and sediment controls during construction and operational phases of the development* • *a description of the surface and stormwater management system, including on site detention, and measures to treat or re-use water* • *an assessment of potential surface and groundwater impacts associated with the development including impacts on bulk water supply infrastructure within the vicinity of the site* • *a description of the surface and stormwater management including drainage design, on site detention, and measures to treat or re-use water* • *a flooding assessment* • *a description of erosion and sediment controls* • *details of impact mitigation, management and monitoring measures.*	Section 8.5	Appendix D
***Noise and Vibration** – including:* • *a description of all potential noise and vibration sources during the construction and operational phases of the development, including on and off-site traffic noise* • *a cumulative noise impact assessment of all potential noise sources in accordance with relevant Environment Protection Authority guidelines* • *details of noise mitigation, management and monitoring measures.*	Section 8.6	Appendix U
***Air Quality** – including:* • ***a**n assessment of the air quality impacts at private properties during construction and operation of the development, in accordance with the relevant Environment Protection Authority guidelines* • *details of any mitigation, management and monitoring measures required to prevent and/ or minimise emissions.*	Section 8.7	Appendix V
***Hazards and Risk –** including:*	Section 8.8	Appendix M

Environmental Assessment Requirement	EIS Reference	Supporting Documentation
• *if the storage of dangerous goods is proposed on site, the Environmental Impact Statement must include a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is "potentially hazardous" a preliminary hazard analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011).*		
***Waste** – including:* • *details of the quantities and classification of all waste streams to be generated on site during construction and operation* • *details of waste storage, handling and disposal during construction and operation* • *details of the measures that will 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.*	Section 8.10	Appendix W
***Bushfire and Incident Management** – including:* • *assess the level of hazard posed to future development on adjacent land and how the hazards may change as a result of development* • *address the requirements of Planning for Bush Fire Protection 2006 (RFS), in particular the provision of access (including perimeter roads) and water supply for firefighting purposes.*	Section 8.11	Appendix L
***Biodiversity** – including:* • *an assessment of the proposal's biodiversity impacts in accordance with the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under the Act, except where a waiver for preparation of a BDAR has been granted.*	Section 8.12	Appendix J
***Greenhouse Gas and Energy Efficiency** – including:* • *an assessment of the energy use on-site, and demonstrate the measures proposed to ensure the development is energy efficient.*	Section 8.13.1	Appendix X
***Socio-economic** – including:* • *an analysis of the economic and social impacts of the development, particularly any benefits to the community*	Section 4 and Section 8	
***Ecologically Sustainable Development** – including:* • *an assessment of how the development will incorporate ecologically sustainable development principles in all phases of the development – the use of green walls, green roof and/or cool roof into the design and –*	Section 8.13	Appendix X

Environmental Assessment Requirement	EIS Reference	Supporting Documentation
climate change projections developed for the Sydney Metropolitan area and how they are used.		
***Infrastructure Requirements** – including:* • *details of infrastructure required on the site and identification of any upgrades required to facilitate the development* • *details of any impacts on existing easements* • *an assessment of the impacts of the development (construction and operation) on existing infrastructure surrounding the site.*	Section 3.7 Section 8.4	Appendix D
Plans and Documents		
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. *You should provide these as part of the EIS rather than as separate documents*	Section 3	Appendix C
Consultation		
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners *In particular you must consult with:* • *Cumberland Council* • *Blacktown City Council* • *Transport for NSW (including former Roads and Maritime Services)* • *Environment, Energy and Science Division (formerly Office of Environment and Heritage)* • *Fire and Rescue NSW* • *Heritage NSW* • *Water NSW* • *Sydney Water* • *Surrounding local residents and stakeholders* *The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided*	Section 5	Appendix H

Table 2: Secretary's Environmental Assessment Requirements

1.4 Project Team

The project team is outlined in Table 3.

Expertise	Consultant
Project Management	Aliro Management Pty Ltd
Environmental Planning	Keylan Consulting
Architect	SBA Architects
Landscape Design and Visual	Habit8
Engineering, Stormwater and Flooding	Costin Roe
Hazards and Risk	SLR Consulting
Environmental Site Assessment	JBS&G
Traffic and transport	Ason Group
Biodiversity and Bushfire	Eco Logical Australia
Heritage	Artefact Heritage
Noise and vibration	White Noise Acoustics
Air Quality	Northstar Air Quality Pty Ltd
Waste and Ecologically Sustainable Design	Sustainable Development Consultants
Geotechnical	PSM Consult Pty limited
Quantity Surveyor	mbmpl Pty Ltd
BCA and Access	BCA Logic

Table 3: Project team

2 Site analysis

2.1 Site location

The site is located on the western side of Clunies Ross Street in the Blacktown and Cumberland LGAs and.

The site comprises an area of approximately 18.6 ha and is located approximately 29.4 kilometres (km) west of the Sydney central business district and approximately 8.7 km west of Parramatta. The site location is shown in Figure 1.

The site forms part of the 90 ha Greystanes Northern Employment Lands (NEL) in the Western Sydney Employment Area, under the *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP).

Access to the site is available via Clunies Ross Street and from the Prospect Highway via Foundation Place. The site is strategically located close to major transport corridors including the Prospect Highway, M4 Motorway and Great Western Highway (Figure 2), all of which are state classified roads.

The site is located in the Blacktown and Cumberland local government areas (LGA) and is zoned IN1 General Industrial under the WSEA SEPP, shown in Figure 3 and Figure 4.

The site is legally described as Lot 10 in DP 1022044, Lot 107 in DP 1028208, Lot 63 in DP 752051, Lot 216 in DP 1030744 and Lot 601 in DP 1047403 (Figure 5). Details of each lot are provided in Table 4. An additional area within Lot 4 in DP 1192514, owned by Blacktown Council, will be utilised for modifications to the regional stormwater retention basin.

Property Address	Legal Description	Area (as per DP)
44 Clunies Ross Street, Prospect NSW 2145	Lot 10 in DP 1022044	123,700m²
	Lot 216 in DP 1030744	2,751m²
	Lot 601 in DP 1047403	310.5m²
	Total	*126,761.5 m²*
Great Western Highway, Prospect NSW 2145	Lot 4 in DP 1192514	79,530m²
615A Great Western Highway, Pemulwuy NSW 2145	Lot 63 in DP 752051	8,094m²
Boral House, Clunies Ross Street, Pemulwuy NSW 2145	Lot 107 in DP 1028208	50,800m²
	Total	***185,655.5m²***

Table 4: Site address, Lot and DP and land area

2.2 Site description

The warehouse development site is irregularly shaped, comprising an area of approximately 18.6 ha and is currently occupied by commercial and industrial uses. The area around the site has been subject to quarrying activities for nearly a century with the subject site used for quarrying related industries for approximately 50 years. The site has previously been cleared for the construction and operation of the existing facilities and therefore has minimal vegetation, with patches of vegetation limited to the northern boundary and southern portions of the site.

Figure 1: Site location (Base Source: Google)

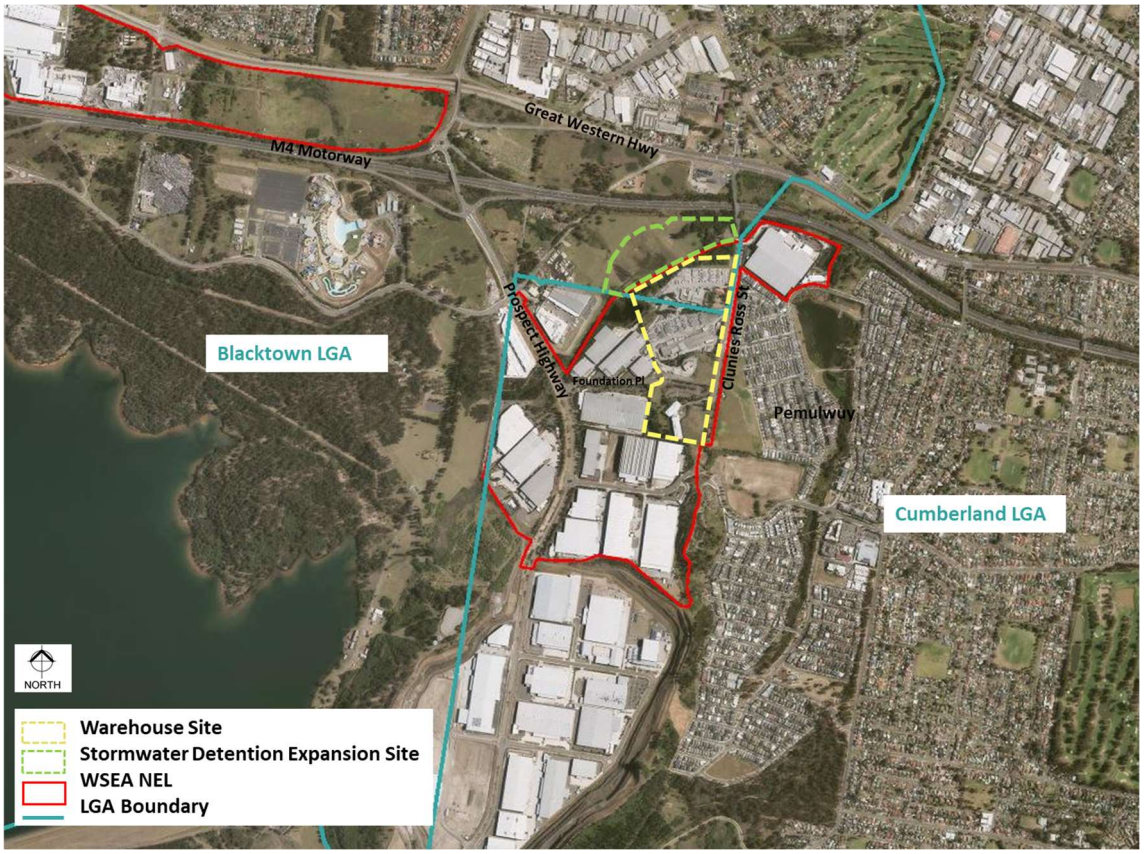

Figure 2: Site location and surrounding features (Base Source: Google)

Figure 3: Aerial Image (Source, ISPT)

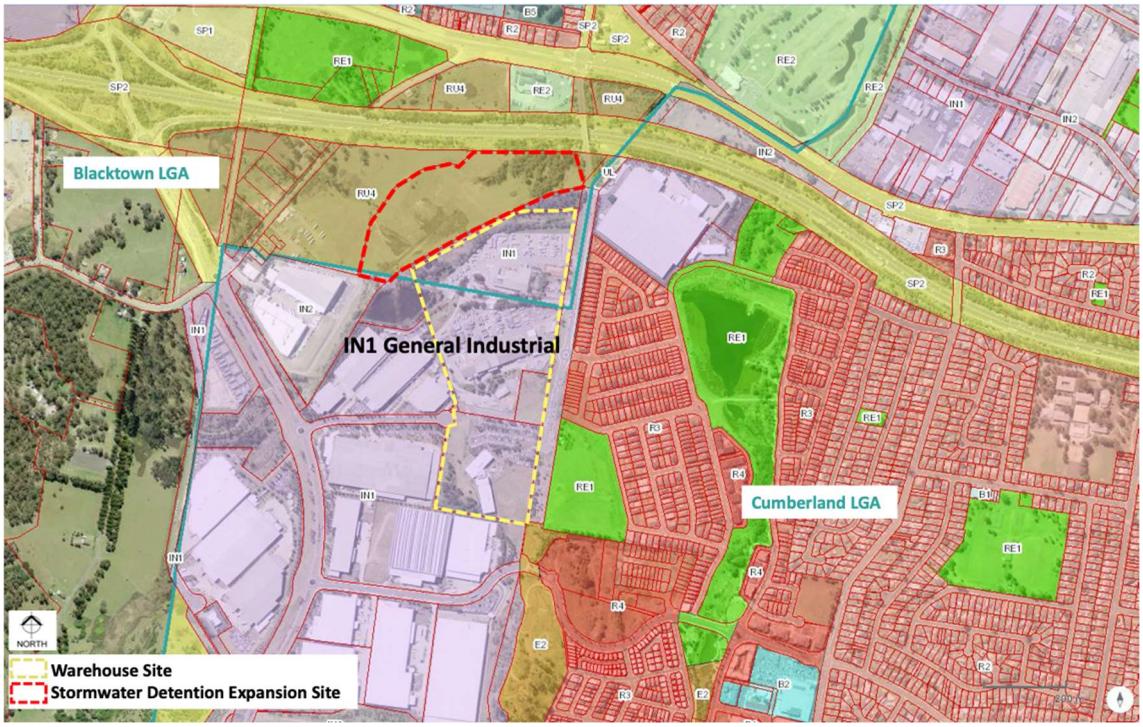

Figure 4: Land Use Zones and LGA boundaries (Base Source: NSW Planning Portal)

Figure 5: Lot description – warehouse development site (Source: Habit8, 2020)

The site slopes moderately from the south near Prospect Hill to the north towards Girraween Creek, with an approximate 56 metre fall over 600 metres (5% slope on average). Parts of the existing site have been levelled with retaining walls to provide level surfaces.

The northern portion of the site (Lot 10 in DP 1022044) currently operates as the Austral masonry and building products facility. The southern portion of the site (Lot 107 in DP1028208) is currently unoccupied and is comprised of the former corporate headquarters of Boral Brickworks, which includes a large multi-storey office building and carparking areas which have been terraced into the existing landscape.

The site includes an easement for a water supply pipeline managed by Sydney Water, remnant vegetation along the northern boundary, between buildings and hardstand areas and a flood retention basin in the north west corner of the site. The site is subject to Positive Covenants under section 88B of the *Conveyancing Act 1919* which requires the landowner to establish and maintain the flood detention basin at the north west of the site.

2.3 Surrounding development

The site is located within an established industrial area comprising of a variety of large scale warehousing and distribution developments and associated office facilities within the Greystanes NEL. The site and surrounding freight and logistics warehouses have direct access to the M4 and Great Western Highway via the Prospect Highway.

The site is within the vicinity of industrial land to the north east and the Greystanes Southern Employment lands to the south. Warehouses for Shelta Australia and Laminex Prospect are located to the west of the site. To the south of the site are logistics and warehousing developments for companies including 3M, Asahi and Opentec Solutions Pty Ltd.

The site context and the surrounding locality is shown in Figure 6.

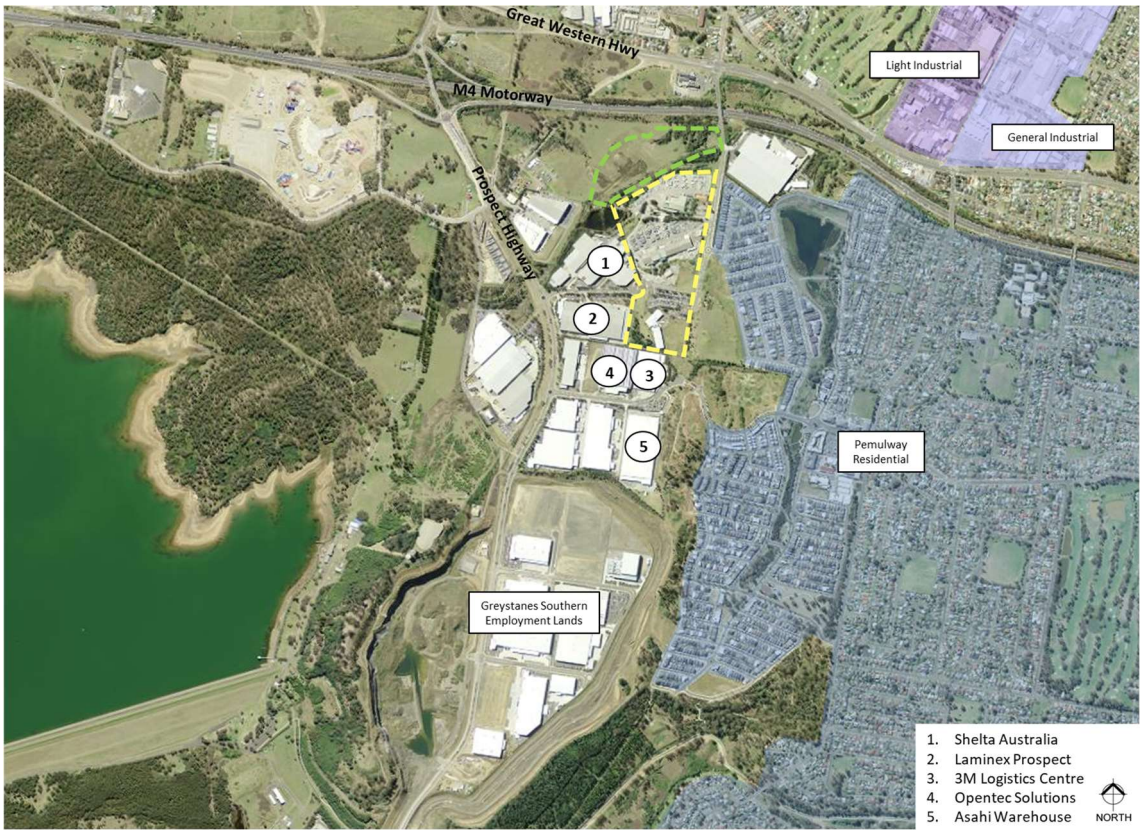

Figure 6: Locality and surrounding development (Base Source: Google)

Land directly to the east of the site in Pemulwuy is zoned R3 Medium Density Residential and R4 High Density Residential (see Figure 4). An acoustic wall between Wombat Street and the former CSIRO site separates the western boundary of the residential area from Clunies Ross Street and the site.

To the north of the site is vacant land subject to a Gateway Determination (PP_2018_BLACK_008_00 issued 22 November 2018) to rezone the land under the Blacktown LEP 2015, in order to establish industrial land in the western portion and maintain the current operation of the eastern portion as a stormwater detention basin.

2.4 Site history

The site and surrounding area have previously comprised of agricultural land uses, quarrying/manufacturing and material storage. More recently, the northern portion of the site has been used for brick and pavers manufacturing and storage, with the southern portion of the site used as commercial office premises.

On 8 February 2019, DA2019/33/1 was lodged with Cumberland City Council for the construction of 143 industrial units to be used for warehouse and distribution purposes with ancillary offices on the southern portion of the site. On 23 July 2019, this application was withdrawn by the applicant following the acquisition of the site by ISPT Pty Ltd to facilitate the development.

3 Development description

3.1 Development overview

The proposed development comprises the construction of seven industrial warehousing buildings on a terraced landform with associated office space, car parking, truck circulation areas, truck loading/unloading areas and landscaping, as well as a small cafe (see Figure 7). Access is proposed from Foundation Place and Clunies Ross Street.

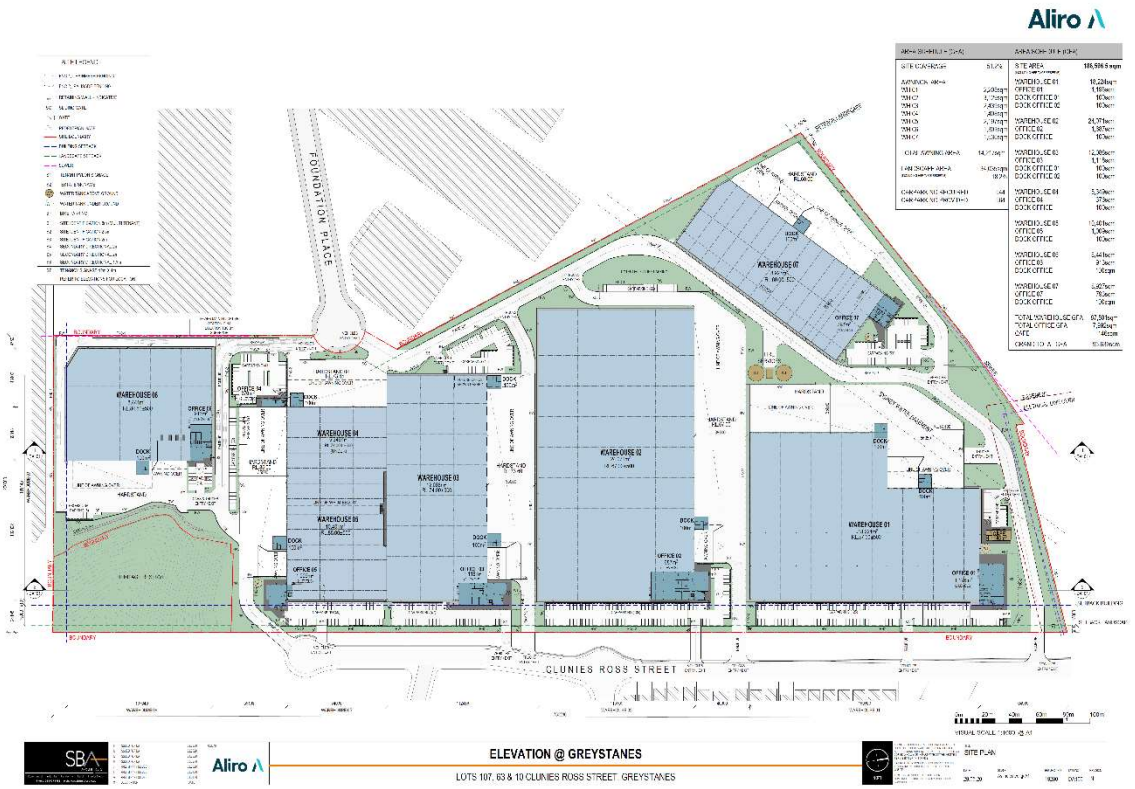

Figure 7: Proposed layout of the warehouse development (Source: SBA)

The proposed development will facilitate a range of potential industrial uses consistent with the applicable land use zone under the WSEA SEPP, including, (but not limited to) warehouse or distribution centres, depots, food and drink premises, freight transport facilities, hardware and building supplies, industrial retail outlets, industrial training facilities, industries, transport depots and truck depots. The proposed development will exclude the use of warehouses for bulky goods retail. The proposed warehouses will operate 24 hours per day, 7 days per week.

The construction of the development is to be staged as follows:

- **Stage 1** – site preparation including demolition, bulk earthworks, infrastructure and servicing
- **Stage 2** – Construction of the warehouse/industrial buildings and associated activities

Warehouse 1 has an estimated CIV of $63,292,572 and will comprise a high bay cold storage receipt, storage, depalletizing, palletising and dispatch facility with freezer and temperature controlled areas and associated office and car parking.

Warehouse 2 has an estimated CIV of $42,574,434 and will be a temperature-controlled food and beverage and therapeutic goods storage and dispatch warehouse with associated office and car parking.

Other warehouses will lend themselves to a range of other users such as food and beverage, third party logistics, general warehousing and distribution centres, pharmaceutical groups, automotive industries, e-commerce groups, corporate occupiers with integrated supply chain operations and hardware/trade counter distribution occupiers. The warehouses will be delivered in a progressive approach, with the timing of the works based on the uptake of warehouse tenants and identification of the preferred uses of each warehouse.

The development is described in Table 5. A conceptual plan of the proposed development and warehouse building elevations is provided in Figure 8.

Proposed Works	
Stage 1	
Site Preparation	• Demolition of existing buildings and structures within the site • Vegetation clearing • Remediation, bulk earthworks and supporting structures, including partial reclamation of the flood retention basin, with the need to import approximately 7,800 m^3 of clean fill • Installation of services and drainage infrastructure • Land stabilisation and rehabilitation
Stage 2	
Warehouse and offices	• The warehouses will comprise a combined gross floor area (GFA) of approximately 87, 501 m^2. Warehouse buildings will range in size from 5,349m^2 – 24,071 m^2 GFA (see Table 7) • Building heights vary from 11.7 m to 42 m above the modified ground level • Approximately 7,992 m^2 total GFA of office space to support the operation of the warehouses, with individual office spaces sized between 376 – 1,196 m^2 GFA (see Table 7) • Café area of approximately 146 m^2 GFA • Approximate site coverage 51.2%

Access and Car Parking	• Site access from Clunies Ross Street and Foundation Place
	• Vehicles accessing the site will include B-doubles (up to 26 m) and medium rigid trucks
	• To provide access to the warehouses, multiple site access points will be constructed with sufficient space within the site to avoid queuing of delivery/dispatch vehicles
	• Parking provisions of a total 564 spaces including 8 mobility impaired spaces, addressing the requirements of the relevant DCPs and TfNSW (previously RMS) Guidelines to support each of the warehouse buildings
	• The estimated truck movements (inbound and outbound) are as follows:
	  ○ AM Peak: 71 vehicles/hr
	  ○ PM Peak: 41 vehicles/hr
	  ○ Daily: 525 vehicles/hr

Proposed Works	
Landscaping	• Detailed landscaping along street frontages and throughout the estate comprising approximately 18.2% of the total site area
Employment	• Approximately 774 construction jobs • Approximately 780 operational jobs
Capital Investment Value	• Approximately $182,425,582 (excl. GST)

Table 5: Development summary

Figure 8: Typical warehouse elevation (Source: SBA)

3.2 Demolition, Earthworks and Site Preparation

To facilitate the earthworks, the proposal seeks to clear existing vegetation and demolish the existing structures on the site, including Boral House, industrial sheds, buildings and ancillary structures (Appendix C1). Additionally, it seeks to remove all the redundant infrastructure across the site and remove existing hardstand and paving areas.

The demolition works for each building will include the following activities:

- decommissioning of any existing building services
- internal strip-out prior to the structural demolition of the building
- removal of any external canopies and awnings connected to the building
- demolition of the building to existing slab/ground level and
- removal of surface hardstand and paving.

It is estimated that approximately 300 m^2 of land surrounding Lot 63 DP 752051 potentially contains asbestos that will require remediation and/or management. Further investigations are proposed to further define the extent of any contamination at the site and if required, a Remedial Action Plan (RAP) will be prepared prior to commencing earthworks associated with the development. The RAP will detail the works required to ensure the site is suitable for commercial/industrial land uses.

Bulk earthworks will be required to facilitate the development of the estate for industrial use. The earthworks will be undertaken to provide large flat building pads, facilitate site access, to drain the site stormwater via gravity, to minimise off-site export and retaining walls, and to keep building levels above the 1 in 100-year Average Recurrence Interval (ARI) flood level with a minimum freeboard of 500mm.

High level earthworks and volume estimates have been completed and are shown on drawing Co13251.06-DA30 of Appendix D. The earthworks volume estimates are based on a lot layout with flat building pads. The earthworks analysis has been completed to a level of detail to enable general pad levels to be set and to obtain an order of magnitude cut and fill volume estimate. The earthworks volume estimates are as follows:

Activity	Volume
Topsoil cut	- 36,400 m^3
Cut	- 139,100 m^3
Fill	+ 263,000 m^3
Detailed Excavation (1,500 m^3/Ha)	- 26,400 m^3
Balance	**+ 7,800 m^3 (import required.)**

Table 6: Cut and fill balance

3.3 Built Form

A Design Statement (DS) has been prepared by SBA for the development and is included in Appendix E. The DS briefly outlines the proposed design, materials, master plan and how the development will integrate with its environment.

The site layout has been designed in a way that provides maximum flexibility and convenient access to the seven warehouses. Warehouses 1-5 run north-south, warehouse 6 runs east-west and warehouse 7 runs parallel with the Sydney Water easement. This design works with the existing contours of the site and presents a varied architectural typology that reduces bulk and provides articulation to reduce visual impact. The development also incorporates landscaped setbacks as a buffer to neighbouring residential properties (Figure 7).

The development has been designed to accommodate the neighbouring Prospect Hill heritage reserve by reducing the impact of the development at the south east portion. The design ensures view corridors from Prospect Hill are preserved and not disrupted by siting the maximum ridge heights of proposed warehouses below the level of the existing office building.

The concept and proposed materials have been developed to reflect the site's history as an area of Aboriginal importance and as a quarry. The design uses deep recesses and dark shaded colours to represent the carved rocks found in the quarry. The development also presents as stacked quarried blocks along the natural slope of Clunies Ross Street. Further, the diagonal chevrons pattern and colours of the industrial materials reflect the colours and patterns of indigenous art. The resulting concept reflects the site's heritage and the proposed industrial use in line with the surrounding industrial area (see Figure 8).

The frontage to Clunies Ross Street includes a heavily landscaped setback designed to provide a visual buffer that screens the bulk of the buildings from the Street. The sloping topography of the site and visual buffer will integrate the development with surrounding development and landscapes.

3.4 Access and Car Parking

Access to the site will be provided via Foundation Place to the west of the site and Clunies Ross Street to the East of the site.

Access to and from the site will be via two routes:

- Eight access points (separating light and heaving vehicle movements) along Clunies Ross Street which connects to the Great Western Highway to the north and
- Two access points in the cul-de-sac of Foundation Place, which connects to Prospect Highway then to the M4 Motorway and Great Western Highway

The proposed supply of parking for each warehouse and the café is provided in Table 6.

Lot No.	Warehouse GFA (m²)	Office/Café GFA (m²)	On-site Parking Provided
1	18,224	1,396	125
2	24,071	1,787	127
3	12,088	1,318	95
4	5,349	476	101
5	10,401	1,109	
6	8,441	1,013	51
7	8,927	893	50
Café		146	15
Total	**87,501**	**8,138**	**564**

Table 7: Proposed parking provisions

3.5 Landscaping

Landscaping will be undertaken in accordance with the Landscape Plan prepared by Habit8 (Appendix F) (see Figure 9).

Figure 9: Landscape concept design (Source: Habit8)

Key aspects of the landscape plan include:

- perimeter plantings with native trees along the boundary of the site, internal roadside and car park areas
- screening vegetation along the site boundary with Clunies Ross Street
- a large number of native tall canopy trees will be planted in the north, south, western and eastern setbacks and
- almost all planting within the development is proposed to be native with a large proportion of endemic species.

3.6 Stormwater Infrastructure

The site is currently serviced by an existing regional detention basin to the north-west of the site which provides flood storage for the Greystanes NEL up to a 1 in 100 year Average Recurrence Interval (ARI) flood event.

The proposed modifications to the existing detention systems involve filling of the site on the northern boundary of the property and providing compensatory storage to an area on the northern side of the detention system in Lot 4 in DP 1192514.

Further detail is provided in Section 8.4 and Appendix D.

3.7 Services

The following services will be required for the development:

- potable water (drinking water)
- waste water
- electricity
- natural gas
- communications.

Sydney Water is the servicing authority for potable water on the site. An existing 150 millimetre (mm) water main is located in Foundation Place which terminates in the cul-de-sac of Foundation Place. A 150mm main is located on the eastern side of Clunies Ross Street, north of the intersection with Burraga Way. There are also extensive water mains servicing the residential areas east of Clunies Ross Street, although unlikely to have the capacity to service the development.

Sydney Water has a critical 1200 mm trunk watermain (Prospect WP159 Main) with associated elements located within the northern portion of the site. This pipeline will not be utilised to service the development, however the development will be designed and constructed to ensure the main can continue operating throughout construction and to maintain structural integrity of the watermain following construction.

The development will connect to the water mains via either an extended 150 mm water main along Clunies Ross Street and potentially connecting to a larger 250 mm main on Reconciliation Rise or the 150 mm main in Foundation Place. This will be addressed during detailed design in consultation with Sydney Water.

Sydney Water is the servicing authority for sewage disposal in Greystanes and Pemulwuy. Three gravity mains are located near the site, along the western boundary of Lot 107 to Foundation Place, the northern boundary within Lot 216 and on the north-east boundary of Lot 44 adjacent to Clunies Ross Street. Confirmation of the required flows and exact sizing details of the connection will be determined during the detailed design of the development. Subject to further investigations and applications with Sydney Water, the CER considers that wastewater reticulation will be able to be provided to the development site through connection to the existing infrastructure.

Endeavour Energy is the serving authority for electricity to the site. Existing low voltage supply run overhead along Clunies Ross Street past the subject site and servicing the current Austral Masonry operations on the land. Dial Before You Dig enquiries indicate the presence of inground conduits and cable on the eastern side of Clunies Ross Street.

Consultation with Endeavour Energy has confirmed that connection is available and additional infrastructure within the site will need to be constructed, to service the site. A Level 3 Service Provider will be engaged to further assess the capacity of the existing system and the requirements for the infrastructure to service the proposed development.

Jemena is the servicing authority for gas supply adjacent to the site. An existing underground natural gas reticulation exists on Clunies Ross Street and low pressure gas mains (110mm) service residential areas east of the development area. 100mm ST 1050kPa mains are also present on Clunies Ross Street with site connection which is understood to service the existing Austral Masonry operations.

It is expected that demand for gas will only be necessary for a user/ tenant with specific uses for gas, and that generally gas will not be required for the development.

Notwithstanding the further investigations and applications required with Jemena, it is considered that gas supply will be able to be provided to the development site if required for a future specific user, on an as needs basis for individual lots.

Existing local telecommunications services are present on site which service the previous Boral House, and current Austral Masonry operations. NBN conduits are shown to be located in Foundation Place and Clunies Ross Street. The CER considers that new underground cabling will be required to suit the project requirements, to be completed on a project by project basis. The requirements for telecommunications will need to be formalised via a Telstra Smart Community (or similar) registration.

Notwithstanding the further investigations and applications required with Telstra, the CER considers that telecommunication infrastructure will be able to be provided to the estate.

4 Project Justification

4.1 Need for the proposal

The Applicant's vision for the site is to create a high quality logistics estate with diversity of warehouse sizes and a convenient location with increased accessibility. The estate will attract a wide variety of users such as:

- Coolroom/fridge/freezers
- High bay/dark storage (both temperature controlled and ambient)
- E-commerce groups
- Storage and distribution
- Freight and logistics
- Data centres
- Pharmaceutical groups
- Automotive industries
- Ancillary trade uses

The central western Sydney industrial market has strong tenant demand, low supply and limited developable land remaining. The proposal represents an opportunity to provide purpose built, state of the art facilities which can utilise emerging technological advancements, such as automation, and significantly increase the jobs that the estate currently supports.

Further, the development demonstrates strategic merit as it is consistent with the aims and objectives of the relevant strategic plans that apply to the site. Strategic justification for the proposal is further outlined in Section 6 of this EIS.

The height of the proposed high bay cold storage warehouse (Warehouse 1), is dictated by the ASRS (automated storage and retrieval system) used in these facilities to improve site efficiencies and the viability of fridge/freezer operations. This height provides for a more efficient building footprint that enables increased landscaping, parking and loading/unloading capacity.

The development layout has been designed to locate the highest building on the lowest part of the site, with the landform lowered from existing levels. The positioning of the building is constrained by the Sydney Water easement traversing the site, which prevents the building from being located further to the west (Figure 10).

A setback of 24m from the Clunies Ross Street property boundary is provided to the high-bay component of the warehouse, with a 20m setback to the office component. This is in addition to the landscape verge along Clunies Ross Street which provides a further 20m+ buffer to the kerb.

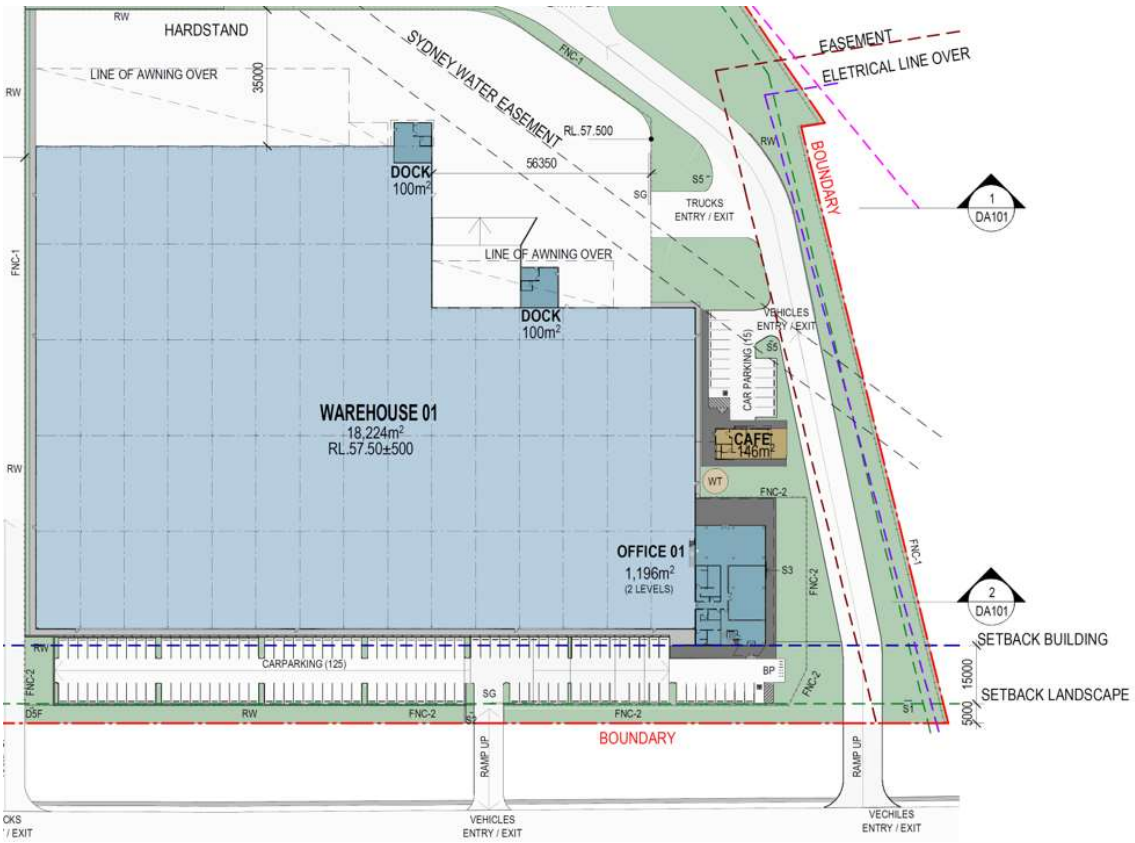

Figure 10: Detail of land use constraints at Warehouse 1 (Source: SBA)

4.2 Proposal alternatives

Schedule 2, Part 3 of the *Environmental Planning & Assessment Regulation 2000* (EP&A Regulation) requires an analysis of any feasible alternatives to the carrying out of the development, including any feasible alternatives.

The alternatives to the proposal include (1) not providing the warehouse and distribution facility and retaining existing operations at the site, or (2) developing the site for alternative uses.

1. Not providing the warehouse and distribution facility

This alternative will result in the site continuing to be used for its current commercial uses or building materials supply. This alternative is considered a suboptimal outcome for the site as it will:

- result in the continued underutilisation of a site that is appropriately zoned for industrial development and is strategically located close to the Central Sydney CBD and major road infrastructure
- forgo a range of positive economic benefits that the development will provide including a capital investment of approximately $179 million and employment opportunities during construction and operation.

2. Develop the site for alternative uses

Alternative configurations for the estate were considered, including reduced reliance on earthworks (cut and fill), clearing and smaller warehouse lots. The proposed layout of the warehouses in the estate was selected to provide the optimum employment and available warehouse storage space on the site.

The site is located on land zoned IN1 General Industrial under WSEA SEPP. Permissible uses in the IN1 General Industrial zone include:

Depots; Food and drink premises; Freight transport facilities; Garden centres; Hardware and building supplies; Industrial retail outlets; Industrial training facilities; Industries (other than offensive or hazardous industries); Neighbourhood shops; Places of public worship; Roads; Service stations; Transport depots; Truck depots; Warehouse or distribution centres.

The development objectives for the site and proposed warehouse uses are consistent with the zoning within the IN1 General Industrial Zone in under WSEA SEPP. Other alternatives will not be permissible with consent in this zone.

5 Consultation

The Applicant has undertaken consultation with Council and State Government authorities as part of the preparation of the EIS and in accordance with the requirements of the SEARs. Consultation has been carried out in the following methods:

- Consultation with Blacktown Council and Cumberland Council
- Consultation with relevant agencies and stakeholders
- Notification of surrounding residents and businesses.

Members of the public were invited to make contact through a dedicated 1800 phone number and/or an email address between 12 March – 5 April 2020. At the time of writing this report, there have been no enquires made for further information or to provide feedback on the proposal. On this basis, further community consultation was not warranted prior to the exhibition of the EIS.

Additional targeted consultation with the nearby residences will be considered following the completion of the EIS exhibition period and review of submissions received. The nature of consultation methods will be evaluated pending the restrictions imposed as a consequence of COVID-19.

A summary of the consultation that has been carried out during preparation of the EIS is summarised in Table 8 below.

Stakeholder	Date	Key Issues
Cumberland Council	10/03/20	• Provided an overview of the project • Discussed Councils submission on the SEARs and the Holroyd DCP requirements • Heritage interface and views • Interface with residential development on the eastern side of Clunies Ross Street • Management of internal traffic and truck movements • Streetscape impacts, landscaping and earthworks • Reshaping of existing wetlands basin, which is currently owned by Boral • Car parking
Blacktown City Council	17/09/19	Discussion about the stormwater retention basin, water quality management and design parameters
	24/04/20	Teleconference to brief Council's Planning and Environment and Traffic sections on the development • DCP provisions • Traffic and parking • Stormwater management
Environment, Energy and Science division (formerly Office of Environment and Heritage)	26/11/2019	EES provided input into the SEARs dated 26/11/19 and advised that it did not feel the need to meet to discuss the proposal
Environment Protection Authority	25/11/19	EPA input into the SEARs dated 25/11/19 advised that it has no further interest in the proposal and no further consultation is required

Stakeholder	Date	Key Issues
Transport for NSW (including former Roads and Maritime Services)	3/03/20	• Primary access points to the site and likely vehicles • Internal traffic movements and parking requirements to be consistent with the Holroyd DCP • Current status of regional road upgrades including Prospect Hwy and Reservoir Road intersection • Traffic generation modelling and impact assessment on the road network • Traffic demand management and travel plans, connection with public transport and cycling infrastructure
Heritage NSW	9/12/19	Heritage NSW provided input into the SEARs dated 9/12/2019
	20/03/20	Heritage NSW advised that they did not feel a meeting was required during the preparation phase of the application and that it was understood that the EIS will be referred to the Heritage Council for comment
Sydney Water	11/03/20	To discuss operational and engineering requirements of the Project and to protect the easement during construction
Water NSW	16/12/19	Water NSW input into the SEARs dated 16/12/19 advised that it has no specific requirements for the SEARs
Fire and Rescue NSW	10/01/2020	Phone discussion was held to provide summary of the project followed by email confirmation that Fire and Rescue NSW offer no comment or recommendations for consideration in the preparation of the EIS
Surrounding Local Residents and Stakeholders	12/03/20 - 5/04/20	A fact sheet was distributed to the mailboxes of approximately 372 households in Pemulwuy. No contact from surrounding residences was received during the nominated period

Table 8: Stakeholder consultation

6 Strategic Planning Context

6.1 Greater Sydney Region Plan

The *Greater Sydney Region Plan – A Metropolis of Three Cities* (GSR Plan) provides a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for the Greater Sydney Region in the context of social, economic and environmental matters. The GSR Plan integrates land use, transport and infrastructure planning across three connected cities:

- the established Eastern Harbour City
- the developing Central River City
- the emerging Western Parkland City

By integrating land use, transport links and infrastructure across the three cities, people will have better access to jobs, schools, hospitals and services within a 30-minute radius. The GSR Plan sets out four overarching objectives to improve the planning and provision of infrastructure across Greater Sydney. These objectives relate to:

- Infrastructure and collaboration
- Liveability
- Productivity
- Sustainability

The following objectives outlined in the GSR Plan are of particular relevance to the development:

Objective	Response
Objective 16 aims to ensure Greater Sydney's freight and logistics network is competitive and efficient.	The proposal will provide warehouse facilities for distribution and storage in an established freight and logistics hub that is strategically located within close proximity to the M4 and M7 Motorway.
Objective 23 aims to ensure industrial and urban services land is planned, retained and managed.	The development falls under the activity of 'major freight, industry and heavy manufacturing' and is located close to critical infrastructure including the M4 and M7 Motorway and is separated from residential uses by vegetation and a noise barrier.

Table 9: Greater Sydney Region Plan Objectives

6.2 Central City District Plan

The *Central City District Plan* (District Plan) manages growth in the context of economic, social and environmental matters in the Eastern City. It provides the district level framework to implement the goals and directions outlined in the *Greater Sydney Region Plan* for the Central City District.

The following planning priorities outlined in the Central City District Plan are of relevance to the development:

Priority	Response
Planning Priority C7 aims to reinforce Greater Parramatta as one of Greater Sydney's metropolitan city cities by delivering capacity for job growth and opportunities for investment.	The proposal will provide warehouse facilities for distribution and storage that will increase employment opportunities within the existing Greystanes NEL.
Planning Priority C11 aims to ensure industrial and urban services land is planned, retained and managed in order to maximise business and employment outcomes.	Given the close proximity to Greater Parramatta and access to transport and freight routes the site is strategically positioned to aid the growth of the Central City District.

Table 10: Central City District Plan Priorities

The proposed development is consistent with the District Plan as it will:

- protect employment land through the provision of additional employment uses
- continue the operation of industrial uses in the WSEA
- attract investment from innovative industries
- continue to develop, innovate and grow the existing cluster of transport and logistics, storage, warehousing and distribution
- support growth of the Central City District through its strategic location in Greater Parramatta and critical infrastructure
- reinforce the role of the industrial land around Pemulwuy and Prospect and promote a freight gateway through the provision of additional employment opportunities associated with industrial facilities.

6.3 Future Transport Strategy 2056

The *Future Transport Strategy 2056* acknowledges the vital role transport plays with regards to land use, tourism and economic development. The Strategy is support by a suite of plans to achieve a 40-year vision for transport in New South Wales to cater for the estimated increase in population to 12 million by 2056.

An integral component of the Strategy is to provide an integrated network of transport corridors to support the movement of people and goods throughout Greater Sydney. The site is strategically located within proximity to infrastructure connections including the M4 and M7 Motorways. The proposed development is also located in proximity to Prospect Highway that provides direct connections to the broader arterial road network to facilitate the movement of goods and services across Greater Sydney.

6.4 Cumberland Employment and Innovation Lands Strategy 2019

The *Cumberland Employment and Innovation Lands Strategy 2019* has been developed to align the land use approach for employment and innovation land precincts across the Cumberland LGA with the objectives and planning priorities of the Greater Sydney Commission and the *Central District Plan*. The strategy aims to maintain existing employment and innovation lands and provide a framework to support additional growth and opportunities.

The site is strategically located within the *Enterprise Park Precinct* with a strategic focus on established and emerging business parkins building on industry specialisations and increasing digitalisation of production. The redevelopment of the site will support key industries of employment including freight and logistics and warehousing and employment.

Emerging trends applicable to Cumberland include the evolution of the fitout and configuration of warehousing to respond to demand and emphasis on supply chain efficiencies. The proposal presents an opportunity to increase employment and operational capacity within existing strategic precincts in order to provide purpose built, state of the art facilities which can utilise emerging technological advancements.

6.5 Cumberland 2030: Our Local Strategic Planning Statement

The *Cumberland 2030: Our Local Strategic Planning Statement* (Cumberland LSPS) has been developed to plan for Cumberland's economic, social and environmental land use needs for the next 10 years. The LSPS will guide future land use planning to meet the increasing demand for jobs, homes, services and parks within the Cumberland LGA.

Redevelopment of the site to provide for purpose built state of the art facilities will align with the growing transition away from traditional heavy industries and towards modern technological advancements. The proposal will expand employment and economic growth opportunities within the Greystanes NEL.

Further, the following local planning priorities and actions outlined in the Cumberland LSPS are of relevance to the development:

Priority	Response
Local Planning Priority 10 Support a strong and diverse local economy across town centres and employment hubs.	The proposal will provide for a high quality logistics estate with a diversity of warehouse sizes to benefit the community and local economy. within a strategic location to support local employment.
Local Planning Priority 11 Promote access to local jobs, education opportunities and care services.	The proposal will provide for additional local employment opportunities than what the existing estate provides for residents within the Cumberland LGA.
Local Planning Priority 12 Facilitating the evolution of employment and innovation lands to meet future needs.	The implementation of the Cumberland Employment and Innovation Lands Strategy provides for a framework to manage employment and innovation land aligned with the LSPS. As outlined above, the proposal presents an opportunity to increase employment and operational capacity within existing strategic precincts in order to build on existing industry specialisations and digitization of production.

Table 11: Cumberland LSPS Planning Priorities

The proposal is consistent with the Cumberland LSPS as it will:

- retain existing industrial zoned land to meet employment demands
- promote access to local employment opportunities and
- align with the transition away from heavy industrial to purpose built state of the art facilities utilising emerging technological advancements.

6.6 Blacktown Local Strategic Planning Statement 2020

The *Blacktown Local Strategic Planning Statement 2020* (Blacktown LSPS) has been developed to provide a land use vision for the Blacktown LGA to guide future development.

The statement is consistent with the Greater Sydney Region Plan and the Central City District Plan and aims to provide direction to address equity issues within the community, including access to housing, employment, transport and health services, arts, culture and recreational opportunities.

The proposal will continue to provide for industrial land use and will promote growth in industrial activity to provide for additional employment opportunities. The prospect logistics estate will comprise of purpose built state of the art facilities to utilise emerging technological advancements.

Further, the following local planning priority and actions outlined in the Blacktown LSPS are of relevance to the development:

Priority	Response
Local Planning Priority 9 Maximising opportunities to attract advanced manufacturing and innovation in industrial and urban services land.	The proposal comprises of the redevelopment of existing industrial land to meet the central western Sydney industrial market demand.

Table 12: Blacktown LSPS Priorities

The proposal is consistent with the Blacktown LSPS as it will:

- retain existing industrial zoned land to meet employment demands
- maximise the opportunities to attract advanced manufacturing and innovation in industrial and urban services land
- provide industrial land to support economic prosperity

7 Statutory Planning Context

7.1 Environmental Planning and Assessment Act 1979

The EP&A Act provides the statutory framework for land use planning in NSW. Under section 4.36 of the Act, certain development types are declared SSD by means of a State Environmental Planning Policy (SEPP) or by order of the Minister for Planning.

The development meets the criteria of SSD which is defined under the SRD SEPP. Schedule 1, clause 12(1) of the SRD SEPP states that development with a CIV of more than $50 million for the purpose of warehouses or distribution centres (including container storage facilities) at one location and related to the same operation, meets the criteria for SSD.

The development is for a warehouse and distribution facility with a CIV of $182,425,582 (excluding GST). A cost estimate summary for the proposal is included at Appendix B.

This report responds to the requirements of section 4.12(8) of the EP&A Act which requires a development application for SSD to be accompanied by an EIS.

7.1.1 Objects of the EP&A Act

Development under the EP&A Act must have regard to the objects of the Act set out under Section 1.3 of the Act. The proposed development is considered consistent with the objects of the Act, as outlined in Table 13 below.

The Objects of the Act	Consideration
(a) To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The development promotes the social and economic welfare of the community providing employment opportunities during construction and operation of the development. The development will not have a detrimental impact on the State's natural resources.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	This EIS provides information on the relevant economic, environmental and social impacts of the proposed development to enable the consent authority to undertake a thorough environmental assessment and assist in its decision-making on the application.
(c) to promote the orderly and economic use and development of land,	The development promotes the orderly and economic use of the land by proposing a permissible use (being for a warehouse, logistics and distribution facility with ancillary office space and a cafe) in the IN1 General Industrial zone as zoned under the *State Environmental Planning Policy (Western Sydney Employment Area) 2009*.
(d) to promote the delivery and maintenance of affordable housing,	Affordable housing does not form part of the application.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The BDAR included as part of the EIS has determined that the development will not impact on any endangered species or their habitats. An area of threatened ecological community will be impacted in the northwest of

The Objects of the Act	Consideration
	the site and is assessed further in the BDAR and Section 8.12.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	Previous heritage assessments carried out at the site have determined there to be no significant European or Aboriginal cultural heritage features at the site. The proposal has been designed to present a sympathetic built form and not obstruct important views from the State Listed Heritage Item, Prospect Hill.
(g) to promote good design and amenity of the built environment,	The development will be located in the Greystanes NEL within the WSEA, an established industrial area that includes numerous warehouse and distribution developments of similar height, bulk and scale. The built form of the development is considered to promote good design and amenity.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The development will be constructed in accordance with any conditions of approval issued by the consent authority and the relevant requirements that relate to health and safety, construction and maintenance.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	This EIS is submitted to DPIE to enable an environmental assessment of the application. It is expected that the EIS will be referred by DPIE to other State agencies for further assessment and comment.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	Further to the community engagement undertaken to date (Appendix H) as part of DPIE's assessment of the application, the EIS will made publicly available with the community, Council and State agencies invited to provide a submission on the proposal. Any submissions received will be addressed by the Applicant as part of a Response to Submissions Report.

Table 13: Objects of the EP&A Act

7.1.2 Section 4.15 Matters for Consideration

The consent authority is required to take into consideration the matters listed under section 4.15 of the EP&A Act when determining a development application. An evaluation of the proposed development against the provisions of Section 4.15(1) of the EP&A Act is provided in Table 14 below.

Provision	Consideration
(a) the provisions of:	
(i) any environmental planning instrument, and	The environmental planning instruments relevant to the site are addressed at Section 7.7.
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the	Draft environmental planning instruments relevant to the site are addressed at Section 7.7.7 and Section 7.7.9.

Provision	Consideration
Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	
(iii) any development control plan, and	Under clause 11 of the SRD SEPP, development control plans do not apply to SSD. Additionally, a draft site specific DCP has been prepared and included in Appendix I. However, requirements specified under the Holroyd DCP 2013 and the Blacktown DCP 2015 have been addressed in Section 7.8.
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	No planning agreement or draft planning agreement has been entered into as part of this application.
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),	The EP&A Regulation is addressed at Section 7.2.
(iv) (Repealed)	N/A
that apply to the land to which the development application relates,	
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts I the locality,	The likely impacts of the development, including environmental impacts on the natural and built environments, social and economic impacts are addressed at Section 8.
(c) the suitability of the site for the development,	The suitability of the site for the development is considered at Section 3.7.
(d) any submissions made in accordance with this Act or the regulations,	Any submissions received on the application will be considered and addressed as part of a Response to Submission report.
(e) the public interest.	The development is in the public interest as it will result in the efficient and effective use of industrial land, will create a significant number of direct and indirect jobs and economic benefits, is strategically located in an established industrial precinct and in proximity to transport corridors, incorporated the principles of ESD and will not result in significant or irreversible environmental impacts.

Table 14: Section 4.15 Assessment

7.2 Environmental Planning and Assessment Regulation 2000

This EIS has been prepared in accordance with form and content requirements of Schedule 2 of the EP&A Regulation. An overview of how the requirements of the EP&A Regulation have been satisfied is included in Table 15 below.

Environmental Planning and Assessment Regulations 2000	EIS Reference
(1) An environmental impact statement must also include each of the following:	
(a) a summary of the environmental impact statement,	Executive Summary
(b) a statement of the objectives of the development, activity or infrastructure,	Section 4.1
(c) an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure,	Section 4.2
(d) an analysis of the development, activity or infrastructure, including: *(i) a full description of the development, activity or infrastructure, and* *(ii) a general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected, and* *(iii) the likely impact on the environment of the development, activity or infrastructure, and* *(iv) a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and* *(v) a list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out,*	Section 3 and Section 8
(e) a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d) (iv),	Section 9
(f) the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (4). *Note. A cost benefit analysis may be submitted or referred to in the reasons justifying the carrying out of the development, activity or infrastructure.*	Section 3.7 and Section 8
(2) Subclause (1) is subject to the environmental assessment requirements that relate to the environmental impact statement	Section 1.3
(3) Subclause (1) does not apply if:	
(a) the Secretary has waived (under clause 3(9)) the need for an application for environmental assessment requirements in relation to an environmental impact statement in respect of State significant development, and	N/A
(b) the conditions of that waiver specify that the environmental impact statement must instead comply with requirements set out or referred to in those conditions.	N/A

Table 15: Requirements of the EP&A Regulation

7.3 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) aims to maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations.

Under the BC Act, SSD proposals require an accredited ecologist to prepare a Biodiversity Development Assessment Report (BDAR). A BDAR has therefore been prepared by Eco Logical Australia and is included at Appendix J. The BDAR provides the following:

- assesses the biodiversity values of the land in accordance with the BAM
- assesses the impact of the proposed development on the biodiversity values of the land and
- sets out the measures the proponent proposes to take to avoid or minimise biodiversity impacts.

The consent authority must consider if the proposed development is likely to have serious and irreversible biodiversity impact and determine any additional and appropriate measures that will minimise such impacts should approval be granted. The BDAR concluded that the development does not contain any candidate species for Serious and Irreversible Impacts (SAII).

Biodiversity is further discussed in Section 8.12 of the EIS.

7.4 Contaminated Land Management Act 1997

The *Contaminated Land Management Act 1997* (CLM Act) establishes a process for investigating and (where appropriate) remediating land where contamination poses a significant risk of harm to human health or the environment.

An Environmental Site Assessment for the site has been prepared by JBS&G Australia and is included at Appendix K. The assessment found the presence of asbestos contaminated fill in a 300 m^2 area within the site, adjacent to a parcel of land currently undergoing remediation.

The contamination assessment recommends that a data gap investigation (DGI) be conducted to address identified potential contamination data gaps and further define the extent of contamination at the site.

Following the completion of the DGI, a Remedial Action Plan (RAP) will be prepared in accordance with Part 4 of the CLM Act to describe the required remediation and validation works to ensure the site is suitable for the proposed commercial industrial land use without ongoing management. The RAP will be prepared in accordance with the requirements of the EPA's statutory guidelines.

Contamination is further discussed at Section 8.9.

7.5 Rural Fires Act 1997

A Bushfire Protection Assessment Report (BPAR) has been prepared by Eco Logical Australia in accordance with the SEARs and *Planning for Bush Fire Protection* (RFS 2019) and is provide in Appendix L.

The requirements of *Planning for Bushfire Protection 2006 (RFS)* have been addressed in the BPAR and Section 8.11.

The BPAR concludes that with the implementation of the above measures, the proposed development complies with the aim and objectives of *Planning for Bush Fire Protection 2019* in accordance with Section 4.14 of the EP&A Act

7.6 Roads Act 1993

The proposal includes carrying out of works that affect public roads, being the construction of access driveways from Foundation Place and Clunies Ross Street.

Consent from Blacktown City Council and Cumberland Council is required under Section 138 of the *Road Act 1993* for these works. According to Section 4.42 of the EP&A Act, the Section 138 Roads Act approval must be consistent with the development consent that is issued.

7.7 Environmental planning instruments

7.7.1 State Environmental Planning Policy (State and Regional Development) 2011

The SRD SEPP aims to identify development that is SSD, State significant infrastructure, critical State significant infrastructure and regionally significant development.

The development meets the criteria of Schedule 1, clause 12(1) of the SRD SEPP as it is development that has a capital investment value (CIV) of more than $50 million for the purpose of warehouses or distribution centres (including container storage facilities) at one location and related to the same operation.

As the development meets the criteria of the SRD SEPP, the application will be assessed as SSD and determined by the Minister for Planning (or nominated delegate).

7.7.2 State Environmental Planning Policy (Western Sydney Employment Area) 2009

The *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP) establishes the Western Sydney Employment Area (WSEA) and identifies eleven precincts within its boundary, as shown in Figure 11

The site is located within Precinct 10 - Greystanes NEL. Consideration of the proposed development against the detailed provisions of the WSEA SEPP is provided in Table 16.

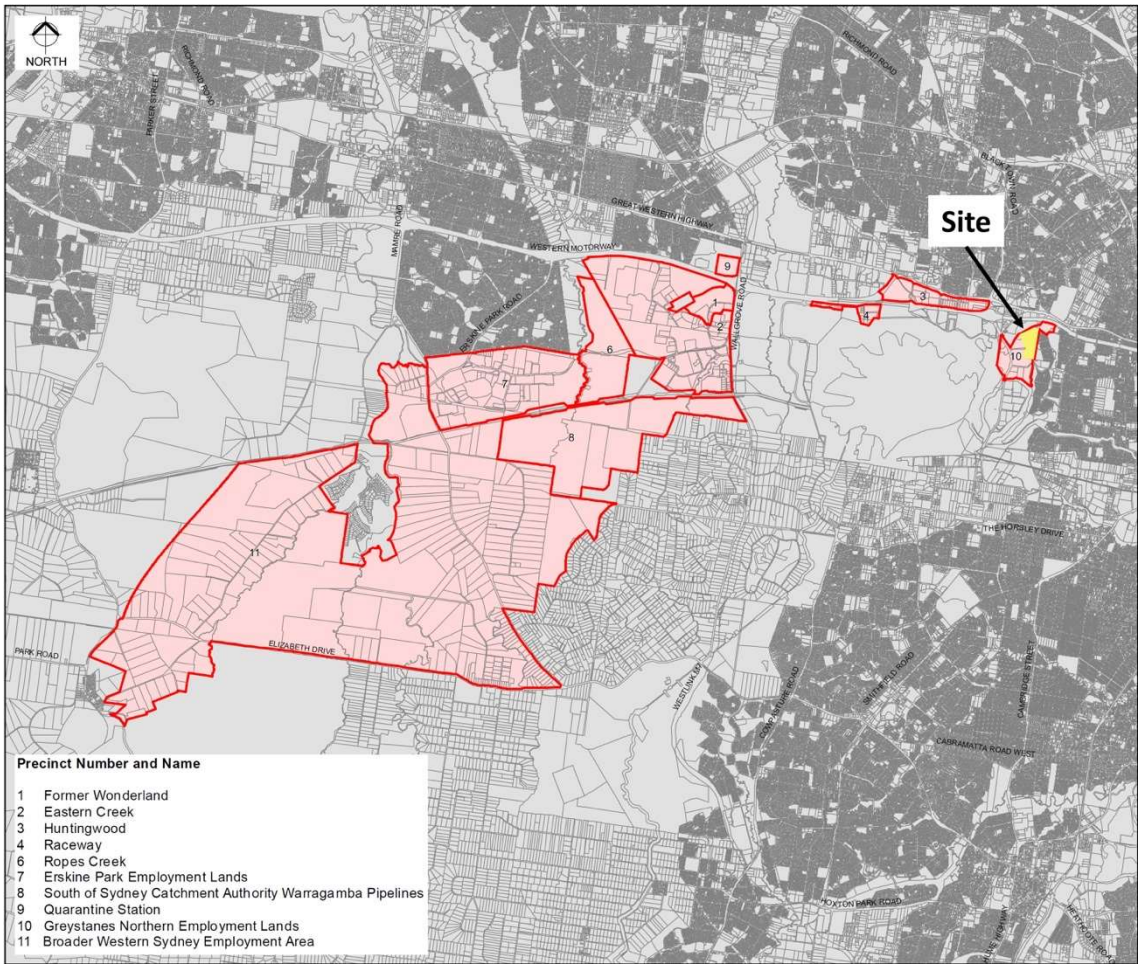

Figure 11: WSEA SEPP Boundary (Source: legislation.nsw.gov.au)

Clause	Provision	Response
3. Aims	To protect and enhance employment lands within the WSEA boundary	The proposed development satisfies the aims of the WSEA SEPP as it will provide for employment of up to 550 jobs during construction and 780 jobs during operation
10. Land use zone	The site is zoned IN1 General Industrial	The proposed development will be designed to ensure land uses are permissible with consent in the IN1 General Industrial zone

Clause	Provision	Response
18. Development control plans	Holroyd City Council (now Cumberland) has prepared a DCP for the Pemulwuy Industrial Area. Blacktown City Council has not prepared a DCP for the area of the site within its local government area	The requirements of Schedule 4 of the WSEA SEPP have been addressed in a site specific DCP which has been prepared as part of this application (see Section 7.8.1 and Appendix I).
20. Ecologically Sustainable Development (ESD)	Development must include measures to minimise the consumption of potable water and greenhouse gas emissions	The EIS addresses the principles of ESD and the proposed development will be designed to achieve a 5-star Green Star rating.
21. Height of buildings	Building heights for proposed development to adequately respond to site topography and preserve the amenity of adjacent residential areas	Details of proposed buildings heights are addressed in Section 3.2 and Section 8.1.
22. Rainwater harvesting	Adequate arrangements must be made to connect the roof areas of buildings to any rainwater harvesting scheme	Details of proposed rainwater harvesting for the development are addressed in Section 8.4 and Appendix D
23. Development adjoining residential land	To address potential amenity and parking impacts of development within 250 metres of land zoned primarily for residential purposes	Detailed consideration of the potential impacts of the development as required by clause 23 are addressed in Section 8.
24. Development Involving Subdivision	The consent authority must consider the potential land use impacts of proposed subdivision	No subdivision is proposed as part of this application.
25. Public utility infrastructure	Requirement to demonstrate that adequate public utility infrastructure for the development is available or suitable arrangements are in place	Public utility infrastructure and services to be provided is discussed further discussed in Section 3.7.
26. Development on or in the vicinity of proposed transport infrastructure routes	Consider any comments of the Director-General as to the compatibility of the development with proposed transport infrastructure routes	The development site is not located in the vicinity of proposed transport routes in the WSEA
29. Industrial release areas	Formal certification that satisfactory arrangements have been made to contribute to the provision of regional transport infrastructure and services prior to consent being granted	The Applicant notes the site's use for industrial purposes immediately prior to lodging the application exempts the Applicant from entering into a VPA with DPIE.
31. Design Principles	A requirement for the consent authority to consider building design and finishes, landscaping and the scale and character of the development	Design details and landscaping will be addressed during the detailed design of the proposal, with details provided in Section 8.1.

Table 16: Provisions of the WSEA SEPP

7.7.3 State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) aims to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact.

The EIS includes a Hazards and Risk Assessment (HRA) at Appendix M. The HRA undertook a preliminary risk screening in accordance with the requirements of SEPP 33. The HRA states that the development will not involve:

- the storage or transport of incompatible materials
- the generation of hazardous waste
- the generation of dust within confined areas
- incompatible, reactive or unstable materials that could lead to uncontrolled reaction or decomposition

The SEPP 33 risk screening determined the development does not constitute 'potentially hazardous' development with respect to the storage and handling of dangerous goods and therefore does not require a Preliminary Hazard Analysis to be prepared.

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

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment by specifying when consent is required, and when it is not required, for a remediation work any by requiring remediation works to meet certain standards and notification requirements.

As required under SEPP 55, a consent authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated and, if the land is contaminated, it is satisfied that the land is suitable in its contaminated state for the purpose for which the development is proposed to be carried out.

The EIS includes a Phase 1 and Phase 2 Environmental Site Assessment (ESA) at Appendix K. The ESA concludes that the site can be made suitable for the proposed commercial/industrial land use subject to the successful implementation of all measures detailed in a RAP to be prepared for the site prior to the issue of a construction certificate. Contamination is further discussed at Section 8.9.

7.7.5 State Environmental Planning Policy No. 64 – Advertising and Signage

State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64) aims to ensure that advertising and signage is well located, compatible with the desired amenity of an area and of high quality.

SEPP 64 applies to all signage, advertisements that advertise or promote any goods, services or events and any structure that is used for the display of signage that is permitted under another environmental planning instrument.

The proposal includes an indicative signage strategy in Appendix N for a building identification signs which will primarily be visible from the internal road and Clunies Ross Street. Any future signage will be subject to a future Complying Development Certificate under *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

7.7.6 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) requires consultation to be carried out with relevant public authorities about certain development types during the assessment process or prior to a development commencing.

Clause 104(3) of the Infrastructure SEPP requires traffic-generating developments, as specified under Schedule 3 of the SEPP, to be referred by the consent authority to TfNSW prior to the determination of a development application. As outlined under Schedule 3, the development meets the criteria of traffic-generating development as it is for a warehouse or distribution centre that has a gross floor area of 8,000 m² or more.

TfNSW were notified of the development during preparation of the SEARs. The Applicant met with TfNSW for further consultation, comments made by TfNSW are summarised at Section 5 of this report. It is expected that TfNSW will be further notified of the development application and invited to provide further comment on the proposal during the EIS exhibition period.

7.7.7 State Environmental Planning Policy (Coastal Management)

The *State Environmental Planning Policy (Coastal Management) 2018* (Coastal Management SEPP) aims to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016. The Coastal Management SEPP replaces the now repealed *State Environmental Planning Policy No 71. – Coastal Protection*.

The Coastal Management SEPP applies to land within the coastal zone which is comprised of the following areas identified by the Coastal Management SEPP maps.

- the coastal wetlands and littoral rainforests area
- the coastal vulnerability area
- the coastal environment area
- the coastal use area.

The Coastal Management SEPP identifies a constructed dam within the northwest of the site as a coastal wetland with an associated proximity area extending further into the site. As a result development consent must not be granted unless the consent authority is satisfied that sufficient measures have been, or will be, taken to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the coastal wetland or littoral rainforest.

The assessment of these matters is discussed further in Section 8.12.

7.7.8 Draft State Environmental Planning Policy (Remediation of Land)

Draft *State Environmental Planning Policy (Remediation of Land)* (Remediation of Land SEPP) aims for better management of remediation works by aligning the need for development consent with the scale, complexity and risks associated with the proposed works.

The new SEPP will retain the core objective of SEPP 55 which is to establish a State-wide planning approach for the remediation of land. Once adopted, the Remediation of Land SEPP will:

- provide a State-wide planning framework for the remediation of land
- require planning authorities to consider the potential for land to be contaminated when determining development applications and rezoning land
- clearly list the remediation works that require development consent and
- introduce certification and operational requirements for remediation works that can be undertaken without development consent.

As discussed in Section 7.7.4, a RAP will be prepared for the site to ensure the site can be made suitable for its intended use.

7.7.9 Draft State Environmental Planning Policy (Environment)

The draft *State Environmental Planning Policy (Environment)* aims to promote the protection and improvement of key environmental assets for their intrinsic value and the social and economic benefits they provide. Once adopted it will consolidate the following existing environmental planning instruments:

- *State Environmental Planning Policy No.19 – Bushland in Urban Areas*
- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*
- *State Environmental Planning Policy No.50 – Canal Estate Development*
- *Greater Metropolitan Regional Environmental Plan No.2 – Georges River Catchment*
- *Sydney Regional Environmental Plan No.20 – Hawkesbury-Nepean River (No.2-1997)*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Willandra Lakes Regional Environmental Plan No.1 – World Heritage Property*

It is noted that the preliminary maps accompanying the Draft Environment SEPP do not identify the site as urban bushland or a critical habitat area. A BDAR has been prepared by Eco Logical Australia and is included at Appendix J.

7.7.10 Blacktown Local Environmental Plan 2015 and Holroyd Local Environmental Plan 2013

The site is within the Blacktown LGA and Cumberland LGA. The *Blacktown Local Environmental Plan 2015* (BLEP 2015) regulates development throughout the Blacktown LGA and the Holroyd Local Environmental Plan 2013 (HLEP 2013) regulates development throughout the Cumberland LGA.

However, the provisions of the BLEP 2015 and HLEP 2013 do not apply given the site is zoned within the WSEA SEPP. Notwithstanding, the Applicant has consulted with both Councils during the preparation of the EIS.

7.8 Development Control Plans

The provisions of the Blacktown DCP 2015 and the Holroyd DCP 2013 do not apply to the site given it is located within the WSEA SEPP. Notwithstanding, a consideration of the proposal with the relevant DCP controls is addressed below.

7.8.1 Site Specific DCP

Schedule 4 of the WSEA SEPP requires a number of matters to be addressed in the preparation of a DCP. A Draft site specific DCP has been prepared for the development based on the *Greystanes Estate Employment Lands Precinct Plan* (2001), *Holroyd Development Control Plan 2013* (HDCP 2013) *Part Q Pemulwuy Industrial Controls* and the Blacktown DCP 2015 and is provided in Appendix I.

Table 17 below identifies the matters to be addressed under Schedule 4 of the WSEA SEPP and how they will be addressed.

Matter to be addressed in the DCP	Where it has been addressed in Site Specific DCP
(a) Traffic, parking and key access points	Section 3
(b) Infrastructure services (including public transport)	Section 3
(c) A detailed staging plan for any proposed development	N/A
(d) Biodiversity	Section 5
(e) Flooding	Section 6.1
(f) Urban design and landscaping	Section 2
(g) Subdivision layout	N/A
(h) Heritage conservation (both indigenous and non-indigenous)	Section 4
(i) Extraction and rehabilitation	Section 6.4
(j) Protection of the Sydney Catchment Authority Warragamba Pipelines	N/A
(k) Protection of electricity transmission facilities	N/A
(l) Management of the public domain	N/A
(m) Community and retail facilities	N/A

Table 17: Matters to be addressed in the DCP – WSEA SEPP

7.8.2 Blacktown Development Control Plan 2015

The provisions of Clause 4 Design Guidelines within *Part E Development in the Industrial Areas* within the Blacktown DCP 2015 are relevant to the site, as detailed Table 18.

Control	Response
4.1 Setbacks No Building is to be erected within 7.5 metres of the street alignment of any other road.	Setbacks are discussed further in Section 8.1.
4.2 Landscaping All setback areas are to be landscaped and maintained. Car parking areas are to be suitably treated with landscaping to soften the appearance of the areas and provide shade for cars. A minimum of 1 tree every 10 metres at a height of 1 metre when planted.	The proposal will ensure all setback areas will be appropriately landscaped and maintained. Landscaping is discussed further in Section 8.1.
4.3 Consideration of adjoining land Provide necessary landscaping and screen walls which require little maintenance to screen industrial development. Use of non-reflective building materials to blend with natural landscape. Consideration on the likely level of air and noise pollution to be emitted from the development. Consideration on the potential effect of the development on solar access to adjoining non-industrial land.	Land within the Blacktown LGA adjoining the site is currently zoned RU4 Primary Production Small Lots and does not contain sensitive visual receptors. The site is located to the west of R3 Medium Density zoned land within the Cumberland LGA. There is an existing visual and acoustic privacy wall separating the residential land from Clunies Ross Street. The built form of the warehouses will present an appropriate bulk and scale when viewed from the residential properties to the east. Potential Impacts and mitigation measures have been discussed in Section 8.
4.4 Development in the IN1 General Industrial zone Consideration of clause 7.8 of the BLEP 2015.	The site is within 250 metres of residential zoned land. The proposal has been designed to be compatible with the character of the existing locality and will be further discussed in Section 8.1. Visual impacts are discussed in Section 8.1, noise is discussed in Section 8.6, parking is discussed in Section 8.3.3.
4.5 Building Design and Construction All building construction must comply with the requirements of the *Building Code of Australia.*	A BCA assessment has been prepared by BCA Logic and is included in Appendix O. The BCA assessment concludes the proposal is capable of complying with all relevant standards.
4.6 Open Storage Areas	All storage areas will be effectively screened to minimise visual impacts.

Control	Response
Open storage areas to be effectively screened and sealed. Screening devices to harmonise with existing or proposed landscaping.	
4.7 Vehicular access and circulation All development must be designed and operated to ensure a single unit truck as defined by *Austroads Design Vehicles and Turning Path Templates* (Austroads 2013) may complete a 3-point turn or semi-circular turn without interfering with parked vehicles, buildings, landscaping or outdoor storage and work areas. All internal roadways are to have a minimum width of 7 metres, with lesser widths to be considered for one way roads.	The site access, car park and loading areas have generally been designed to comply with the relevant Australian Standards. Vehicular access and circulation is discussed further in Section 8.3.
4.8 Car parking Car parking rates are required in accordance with Part A BDCP 2015. The following car parking rates apply to the site: • 1 space per 75m^2 of GFA • 1 space per 40m^2 for the office component All development providing 50 car parking spaces or more must provide at least 2% of the total spaces as accessible.	Car parking has been provided in accordance with the Blacktown DCP Car parking is discussed further in Section 8.3.3.

Table 18: Part E Development in the Industrial Areas

7.8.3 Holroyd Development Control Plan 2013

Cumberland Council is in the process of harmonizing its DCPs, however until such time the existing DCP controls will apply to the site.

The provisions within Part D Industrial Controls within the *Holroyd Development Control Plan 2013* (HDCP 2013) are relevant to the site, detailed in Table 19 below.

Part	Control	Response
2. Design Guidelines	**2.1 Site Area, Frontage and Gross Floor Area** Consent must not be granted for a food and drink premise in Zone IN1 General Industrial or Zone IN2 Light Industrial if the gross floor area of the food and drink premise is more than 300 square metres.	The proposal does not provide for a food or drink premises that is more than 300 m^2.
	2.2 Site Layout Design Buildings to minimise impacts on residential properties, including overshadowing, overlooking, lighting, dust, noise or fumes.	The warehouse buildings and offices have been designed to minimise any impacts on residential properties to the east,

<table>
<tr><th>Part</th><th>Control</th><th>Response</th></tr>
<tr><td></td><td>Locate offices to address and activate the street.

4 metre minimum rear and side building setback where a side adjoins non-industrial land uses</td><td>The offices on warehouses along Clunies Ross St have been located to address street frontages.

The site does not directly adjoin a non-industrial land use.</td></tr>
<tr><td></td><td>2.3 Amenity Impacts on Nearby Adjoining zones

Provide appropriate buffer mechanisms to maintain neighborhood amenity, separation and solar access.

Provide a 3 metre wide nature planting buffer and secondary acoustic fence within industrial lot.

<table>
<tr><th>Boundary</th><th>Minimum building setback (includes landscape setback required)</th><th>Landscaping Setback (within the building setback)</th></tr>
<tr><td>Side – adjoining a non-industrial use/zone other than residential</td><td>4 metres (refer C4 for exceptions)</td><td>2 metres</td></tr>
<tr><td>Side – adjoining a residential use/zone</td><td>6 metres</td><td>3 metres</td></tr>
<tr><td>Rear – adjoining a non-industrial zone other than residential</td><td>4 metres (refer C4 for exceptions)</td><td>2 metres</td></tr>
<tr><td>Rear – adjoining a residential use/zone</td><td>6 metres</td><td>3 metres</td></tr>
</table></td><td>Amenity impacts are discussed in Section 8.1 and 8.6.

Setbacks and landscaping is discussed further in Section 8.1.</td></tr>
<tr><td></td><td>2.4 Building Design and Appearance

Avoid long blank walls facing the street and public domain. Where unavoidable treat them as sculptural elements.

Address the street it presents with architectural elements.</td><td>The built form, visual character and landscaping is discussed further in Section 8.1.</td></tr>
<tr><td></td><td>2.5 Setbacks</td><td>Setbacks are discussed further in Section 8.1.</td></tr>
</table>

Part	Control	Response
	Landscape all front setbacks to provide a high quality street presence. Minimum 1 metre setback is required to at least one side boundary.	
	2.6 Parking and Vehicular Access Car parking rates are required in accordance with Part A HDCP 2013: • 1 space per 300m² GFA – Warehouse • 1 space per 40m² GFA - Office	Car parking has been provided in accordance with the HDCP 2013 Part Q Car parking is discussed further in Section 8.3.3.
	2.7 Road Design and Construction within Industrial Zones Ensure that minimum width of carriage way plus verge is 20 metre wide with 12 metre carriage and 4 metre verges. 1.2 metre wide concrete footpaths are required.	Only internal roads will be constructed as part of the development. Internal road design is discussed further in Appendix C and D
	2.8 Fences Locate fences within the 3 metre wide landscape frontage. Ensure maximum height of 1.2 metre high for fences within front setback, or 2.1 metre high behind front setback. Restrict the masonry element of walls within the frontage to 1.2 metres in height.	The proposal comprises 1.8m high palisade fencing beyond the front setback.
3. Landscaping of Industrial Sites	Minimum of 10% of the site to be landscaped.	The proposal will comprise 18.2% landscaped area. Landscaping is discussed further in Section 8.1
4. Retail and Commercial uses in Industrial Zones	Office premises are permitted if they are: (a) ordinarily incidental (b) cover no more than 20% of industrial building GFA (c) provide no over counter sales	The office buildings will be an ancillary use to the warehouse buildings. The office buildings comprise approximately 8.4% of industrial building GFA. There will be no over the counter sales envisaged for the uses.

Table 19: Part D Industrial Controls HDCP 2013

The site is zoned IN1 General Industrial under the WSEA SEPP and is subject to the provisions of *Part Q Pemulwuy Northern Employment Land Controls* within the *Holroyd Development Control Plan 2013* (HDCP 2013), detailed in Table 20 below.

Clause	Control	Response
2. Public Domain and Open Space	**2.1 Open Space** Provision of open space to create a northern gateway to employment lands.	The proposal comprises of appropriate open space and landscaping to assist in the creation of a northern gateway to the employment lands (Section 8.1).
	2.2 Pedestrian and Cyclist Facilities Provide a minimum width of 1200mm and maximum gradient where possible of 15%.	N/A
	2.3 Entrance Treatment Locate the site entry to the northeast area on Clunies Ross Street and integrate it with the landscape character.	Entry to the site will be provided from Foundation Place and Clunies Ross Street. Landscaping is further discussed in Section 8.1
	2.5 Safety and Security Provide adequate and well lit and marked pedestrian, cycle and vehicle welfares.	All pedestrian, cycle and vehicular welfare will be sufficiently lit to provide increased safety.
	3.2 Lot Sizes and Site Cover Maximum site coverage of 60%	The proposal will have a maximum site coverage of 51.2%.
	3.3 Siting Buildings to be setback 20 metres from property boundary. Setback controls may vary dependent on predominant street building line and existing pattern. Setback buildings 10 metres from any public open space.	Setbacks are discussed further in Section 8.1.
	3.4 Solar Access Site and design buildings so that solar access to staff recreation areas on site and in adjoining developments is not compromised between 12 noon and 2pm.	Surrounding developments will continue to receive adequate solar access between the hours of 12 noon and 2pm.
	3.5 Building Heights and Design Generally, 12 metres is the building height limit in the Northern Employment area.	Building height is discussed further in Section 8.1.
	3.6 External Materials and Colours	External colours and materials have been chosen to complement the surround locality. This is discussed further in Section 8.1.

Clause	Control	Response
	Use materials and colours for buildings and roofs that are subtle, recessive and non-reflective.	
	3.7 Energy and Water Efficiency All buildings to comply with the requirements of the Building Code of Australia.	All buildings will comply with the Building Code of Australia. Energy efficiency is discussed further in Section 8.13.
	3.8 Landscaping Provide and maintain approximately 15% of the site as soft landscaped area at ground level.	The proposal will comprise 18.2% landscaped area Landscaping is discussed further in Section 8.1.
	3.9 Signage Locate directional and tenancy signage in a convenient point close to main entry of development.	A signage strategy is included in Appendix N
	3.10 Fencing Fencing fronting Clunies Ross Street to be 1 metre above natural ground level.	The site fronting Clunies Ross Street is setback from the road with a landscaped setback provided in lieu of fencing.
4. Transport	**4.1 Principles for a Transport Plan** Reduce reliance on car for the journey to work by at least 10%	A Green Travel Plan has been prepared for the development and is discussed further in section and included in Appendix P
	4.4 Access and Circulation Design internal circulation road and heavy vehicle maneuvering areas to comply with relevant Australian Standards.	Internal road circulation and heavy vehicle manoeuvring areas will comply with relevant Australian Standards. Access and circulation are further discussed in Section 8.3.
	4.5 Parking Refer Part D of the HDCP 2013	Car parking has been provided in accordance with the HDCP 2013 Car parking is discussed further in Section 8.3.3.
	4.6 Service Areas Appropriately position loading/unloading facilities to minimise potential noise impacts, do not interfere with existing parking and public areas.	The loading and unloading facilities will be positioned efficiently. This is discussed further in Section 8.3.
	4.9 Pedestrian and Cycle Routes Ensure footpaths have a minimum width of 1.2 metres and minimum grade of 15%.	N/A
5. Heritage	**5.1 Guiding Principles**	The proposal is sympathetic to the surrounding items of heritage significance. The warehouse

Clause	Control	Response
	Development must have regard to surrounding areas of heritage significance.	buildings have been designed to present a sympathetic built form when viewed from Prospect Hill. Heritage is discussed further in Section 8.2.
	5.2 Archaeology Recreate and manage the cultural landscape in conjunction with the local Aboriginal community by vegetating open space to resemble the natural landscape prior to European settlement.	Heritage is discussed further in Section 8.2
	5.3 European Cultural Heritage All development to be sympathetic to items of heritage significance.	The proposal will present a built form that is consistent with the surrounding locality and sympathetic to surrounding items of heritage significance. Heritage is discussed further in Section 8.2
	5.4 Prospect Hill State Heritage Registered Area Development must maintain views from Prospect Hill towards the Blue Mountains and St Bartholomews, Prospect.	The proposal will ensure views from Prospect Hill towards the Blue Mountains and St Bartholomews will be maintained. Heritage is discussed further in Section 8.2.
6. Biodiversity	**6.5 Biodiversity in Development Areas** To maintain and enhance existing level of biodiversity.	Biodiversity is discussed further in Section 8.12.
	6.6 Fauna Movement Corridors Provide vegetation to facilitate movement through the site of non-ground dwelling fauna as well as providing additional foraging habitat.	Biodiversity is discussed further in Section 8.12.
7. Environmental Management	Development must address the following: • stormwater management • water quality control pond management • flood Risk Management • site contamination and remediation • earthworks • salinity • noise • air quality	The proposal addresses the relevant environmental management criteria in Section 8.

Table 20: Part Q Pemulwuy Northern Employment Land Controls HDCP 2013

8 Environmental assessment

This section provides an assessment of the environmental impacts associated with the proposed Elevation at Greystanes Estate development. The environmental assessment is based on a number of specialist studies undertaken for the development.

We note that the area of land to be impacted by the construction of the extension of the regional detention basin is yet to be fully investigated. The assessment of this area was constrained by restrictions imposed during the COVID-19 pandemic response and investigations of this area will be conducted prior to commencing development that affects the existing retention basin and the disturbance of the area within the extension to the basin.

8.1 Built form, visual character and landscaping

The DS prepared by SBA outlines the proposed design, materials, masterplan layout and how the proposal responds to the surrounding environment. The DS finds that the proposed development is appropriate for the site, which is transitioning into an employment generating industrial precinct.

The successful design response to the adjoining residential development and Prospect Hill heritage area is achieved through the siting of the development, setbacks and dense landscaping. The proposal achieves a high standard of design, consistent with the design principles of the WSEA SEPP. These aspects are discussed further below.

8.1.1 Built form

The proposed warehouses are designed to achieve an efficient layout to provide for the successful operation of the site. Warehouses 1 to 5 run north-south, Warehouse 6 runs east-west and Warehouse 7 runs parallel with the Sydney Water easement. This design generally follows the existing landform sloping from south to north. The resultant built form is varied and results in reducing the bulk of the warehouses. This varied built form also provides for articulated warehouses that assist to reduce the overall visual impact.

The development is designed to accommodate the neighbouring Prospect Hill Heritage Reserve by reducing the impact of the development at the south east portion. The design ensures view corridors from Prospect Hill are preserved through siting the maximum ridge heights of the proposed warehouses below the level of the existing office building.

The existing acoustic wall siting along the western boundary of the residential development assists to minimise the visual impact on the adjoining residential dwellings. The acoustic wall assists to minimise direct views from primary living areas of the adjoining dwellings into the proposed development.

The frontage to Clunies Ross Street includes a heavily landscaped area within the 20 metre setback. The setback and landscaped buffer assist to screen the bulk of the buildings from Clunies Ross Street. The sloping topography of the site, the landscaping and existing acoustic wall assist in providing a visual buffer from the residential development.

The proposed development and materials have been selected as they reflect the site's history as an area of Aboriginal importance and as a quarry. The proposed design incorporates deep recesses and dark shaded colours, acknowledging the carved rocks found in the quarry.

The design also draws from the quarry and can be read as quarried blocks along the natural slope of Clunies Ross Street. The diagonal chevrons pattern and industrial materials colour palette acknowledge those used in indigenous art. The proposed development responds appropriately to the site's heritage and the industrial use of the site consistent with the surrounding industrial area.

To support the development of a 42 m high bay cold storage warehouse, the proposed Warehouse 1 is located at the lowest point of the site, approximately 30 m below the floor level of Warehouses 5 and 6 (Figure 12).

The proposed height of this warehouse is required to maintain a 20 m setback from the property boundary with Clunies Ross Street and maximise the benefit of the available footprint, which is also constrained by the existing Sydney Water easement.

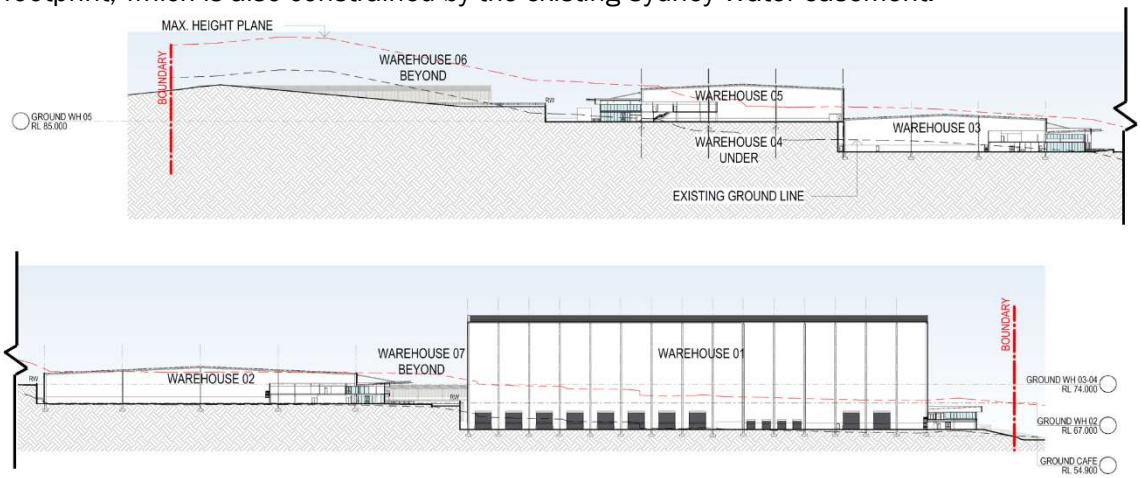

Figure 12: Elevation detail of the proposed warehouses (Source: SBA)

Due to the siting of the proposed development (with no residential areas located to the immediate south) solar access during winter for the residential dwellings to the east of Clunies Ross Street will not be affected.

Despite the height of the proposal, the residential developments will continue to receive adequate access to sunlight as a result of this development (see Figure 13). Therefore, the overshadowing impacts on the adjoining residential developments are acceptable.

The proposal is consistent with the WSEA SEPP design principles as summarised in Table 21.

WSEA Design principle	Consideration
(a) the development is of a high quality design	The proposed development is of a high quality design. The proposal responds to the surrounding heritage items, residential development and industrial developments.
(b) a variety of materials and external finishes for the external facades are incorporated	The proposed development utilises a variety of materials and external finishes for the external facades to acknowledge and reflect the Aboriginal importance of the site and the site's history as a quarry.
(c) high quality landscaping is provided	A landscaped buffer in the setback to Clunies Ross Street will assist to screen the bulk of the buildings from Clunies Ross Street and residences to the east.

(d)	*the scale and character of the development is compatible with other employment-generating development in the precinct concerned*	The proposed warehouses are sited below the level of the existing office buildings to ensure view lines to Prospect Hill are retained.

Table 21: Clause 31 WSEA SEPP Design Principles

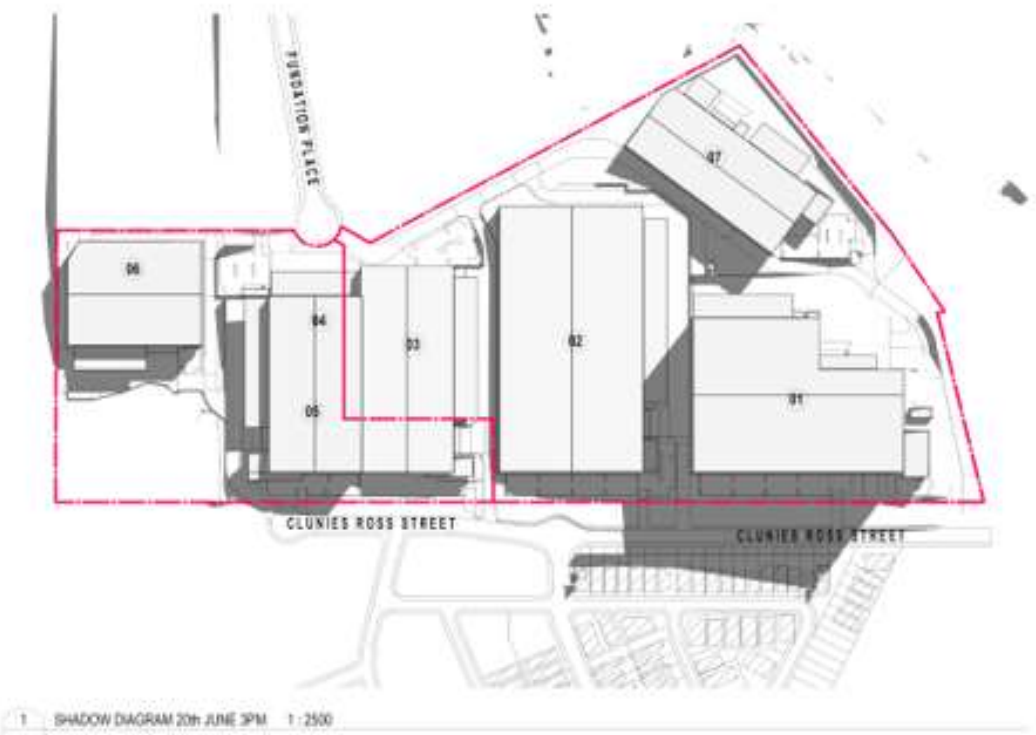

Figure 13: Shadow diagram 20 June 2 pm – Warehouse 1 (Source: SBA)

On balance, the proposed height of the High Bay Cold Storage building is justified for the following key reasons:

- the building is strategically located at the lowest part of the site to reduce visual impact, particularly when viewed from the heritage item
- the building responds well to the existing site constraints
- the building is well setback from adjoining residential properties
- the proposed facades and general building design provide visual interest while maintaining a highly functional building
- the building will not lead to any adverse overshadowing impacts to adjoining residential properties
- the proposed setbacks and advanced landscaping will provide for improved view corridors, which will improve over time as new trees mature
- the proposal allows for a highly functional facility within a state identified industrial area providing future employment and other economic benefits

8.1.2 Visual character

A Landscape and Visual Impact Assessment (LVIA) has been prepared by Habit8 and is included in Appendix G. The LVIA notes the existing landscape contains cultural and heritage significance relating to Prospect Hill and sensitivity associated with the residential development on Clunies Ross Street. The LVIA also notes the site has been affected significantly through previous industrial development with existing structures associated with those uses and characterises the site as having low landscape sensitivity.

The proposed development is designed to ensure it will be consistent with surrounding industrial developments and the DCP for the site. The proposed design reflects high commercial and industrial standards and provides a visually balanced form.

The proposal uses architectural elements that contribute positively to the built form within the immediate streetscape and estate. External articulation of the buildings has been achieved through the balance of large expanses of cladding.

Further, the proposed material palette also assists to articulate the proposed form to minimise the perceived scale of the development. The proposed material palette is also appropriate to the character of the area as it reflects the site's history as an area of Aboriginal importance and as a quarry. No dominant bright colours are proposed with the building form which could potentially draw attention to the development from visual receptors. The dominance of the materials will become even less apparent over time once landscape reaches maturity within the setback zones.

The design is sensitive to adjoining residential receivers and the Prospect Hill Heritage Area. The siting of the development maintains the view corridors from Prospect Hill through siting the maximum ridge heights of the proposed warehouses below the level of the existing office building.

The development incorporates landscaped setbacks as a buffer to neighbouring residential properties along Clunies Ross Street. The frontage to Clunies Ross Street includes a 5 metre landscaped area and parking area within the 20 m setback between the property boundary and buildings (Figure 14). Once the vegetation has matured, the setback and landscaped buffer will assist to screen the bulk of the buildings from Clunies Ross Street.

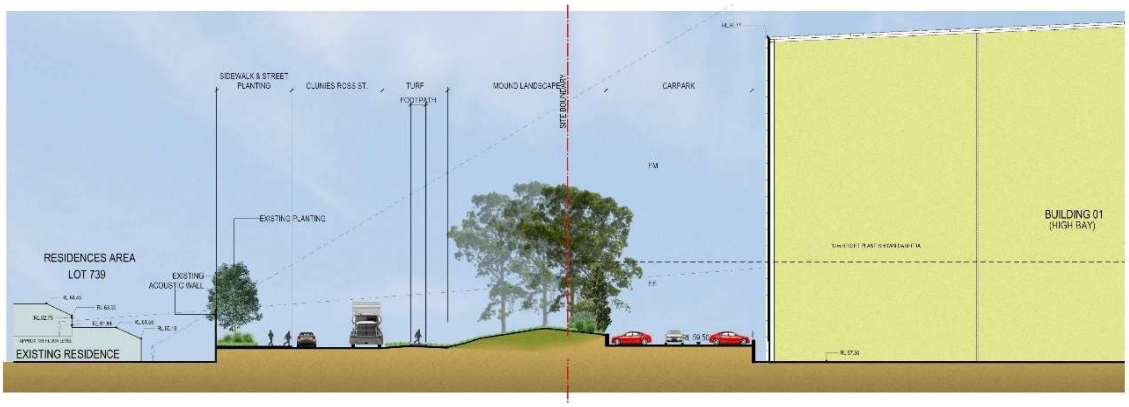

Figure 14: Landscape cross section – Warehouse 1 (Source: Habit8)

The LVIA assesses the visual impacts of the development from eight receptor locations along Clunies Ross Street (Figure 15).

Figure 15: Visual receptor locations (Source: Habit8)

The LVIA found that the visual impacts will range from negligible to minor-moderate based on the existing condition of the site and impacts on viewshed moderated by the existing acoustic wall, screening vegetation and colour scheme.

Example photomontages from the LVIA that demonstrate the acceptable impacts to the streetscape and adjoining landuses are provided in Figure 16 to Figure 19.

Figure 16: Photomontage – Viewpoint C (Source: Habit8)

Figure 17: Photomontage – Viewpoint D (Source: Habit8)

Figure 18: Photomontage – Viewpoint F (Source: Habit8)

Figure 19: Photomontage – Viewpoint H (Source: Habit8)

8.2 Heritage

8.2.1 Aboriginal heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Artefact Heritage and is included in Appendix Q. The ACHAR has been prepared in accordance with the relevant NSW and Commonwealth heritage guidelines and in consultation with key stakeholders, including 17 Registered Aboriginal Parties (RAP).

Aboriginal community consultation was carried out to include RAPs as stakeholders in decisions concerning any heritage objects, archaeological places or sacred sites within a study area. An archaeological survey of the study area was undertaken on the 17 December 2019 with a representative of Deerubbin LALC.

On 26 March 2020, a draft of the ACHAR was provided to all RAPs for their review with comments due by 23 April 2020. At the end of the consultation period, five RAPs commented on the findings, who all indicated support for the assessment undertaken in the ACHAR, with one suggesting further test excavations.

The ACHAR has recommended an unexpected finds policy be implemented, with further test excavations undertaken if any Aboriginal objects are found.

History of the locality

A search of the AHIMS database covering a 16 km^2 area around the site identified 36 Aboriginal archaeological sites, three of which are located within the vicinity of the site. No sites were identified within the proposed development area.

The site has been extensively cleared of any native vegetation. The existing vegetation on the site currently comprises regrowth vegetation, garden plantings, weeds and grasses. Further, the site has undergone extensive historical disturbance and land modification, which is likely to have removed any in-situ archaeological deposits.

The closest registered site is Prospect Hill (AHIMS ID 45-5-2571) 5 m east of the site (Figure 20). Prospect Hill is registered as a cultural and ceremonial place and includes Lot 63 DP 752051 and part of Lot 5 DP 235064 (now Lot 107 DP 1028208) as well as several other lots to the east of Clunies Ross Street.

Prospect Hill is traditionally referred to as 'Marrong' and was a known Aboriginal meeting place used for ceremonies. Following European settlement, the area was associated with conflicts between Aboriginals and settlers during the 1790's and 1800's. Prospect Hill is the site of the first recorded reconciliation meeting in Australia and since European settlement has been subject to quarrying and grazing, including use of Prospect Hill by CSIRO for scientific research associated with sheep pasture.

The cultural values of Prospect Hill and Marrong Reserve are described in the ACHAR and are summarised below.

Prospect Hill

Prospect Hill contains substantial Aboriginal cultural heritage values associated with both pre and post contact use of Prospect Hill. Prospect Hill is a significant element within the wider landscape which has significance associated with its use as a navigation marker and meeting location.

Assessment of the cultural significance of Prospect Hill completed for the Prospect Hill Conservation Management Plan (CMP) and draft Prospect Hill Plan of Management (PHPoM) limit the area of cultural sensitivity of the Prospect Hill site to the south eastern portion of Lot 107 DP 1028208 (shown as Prospect Hill SHR Curtilage in Figure 20). The remainder of the ACHAR study area has not been identified as contributing to the cultural values of Prospect Hill.

The top of Prospect Hill specifically has been identified as a ceremonial place and as a men's site. Historically, Prospect Hill contains associations with the guerrilla warfare between the Aboriginal groups and settlers which was led by Aboriginal warrior Pemulwuy. Later, Prospect Hill was associated with the meeting between Reverend Marsden and the Prospect Aboriginal groups.

Prospect Hill also contains contemporary value associated with the use of the site as an educational location with Prospect Hill visited as part of the school curriculum. The draft plan of management limits the area of cultural sensitivity to the portion of the Prospect Hill SHR listing within the current study area.

Marrong Reserve

Marrong Reserve is comprised of the southern portion of the Prospect Hill SHR curtilage located outside of the current study area to the south of Butu Wargun Drive. Marrong Reserve has been redeveloped into a Parkland which includes a concrete/ bitumen walking trail and regrowth eucalypt species.

The parkland includes several interpretive and educational signs discussing the heritage values of Prospect Hill and the surrounding landscape. Marrong Reserve contains landscape values associated with the connection of the current landscape with the pre European landscape related to the prevalence of eucalypt bushland across the park.

The presence of heritage interpretation elements including educational signage also suggests that Marrong Reserve also contains values associated with its educational potential.

The ACHAR predicts that the impacts on Prospect Hill will be minor based on the aesthetic and social values of the landform and impacts of the warehouses on views to and from the site. The proposed development footprint will not directly impact the land within the Prospect Hill cultural heritage site and the site will be protected from accidental physical impacts given the barrier formed by the existing gabion wall and the erection of construction fencing.

No impacts to the Marrong Reserve are predicted by the ACHAR.

All other areas of the site were found to contain low archaeological potential due to the moderate to high levels of disturbance that are likely to have removed any intact potentially artefact bearing deposits.

In summary, the ACHAR finds that the proposal is unlikely to impact Aboriginal heritage values within the site and finds that no further Aboriginal heritage assessment is required as part of the development.

Figure 20: Archaeological and cultural sites within the site (Source: Artefact, 2020)

The ACHAR recommended the following for the development:

- The proposed development should investigate measures to reduce the visual impact of the proposed development on the prominence of Prospect Hill.
- The proposed development should investigate methods to incorporate Aboriginal cultural heritage values into the proposed design such as through the development of heritage interpretation elements.
- If suspected human remains are located during any stage of the proposed works, work must stop immediately, and the NSW Police notified. An Archaeologist or Physical Anthropologist should be contacted in the first instance where there is uncertainty whether the remains are human.
- An unexpected finds procedure must be in place throughout the proposed works, with procedures in place for notification of DPIE, a heritage consultant and RAPs where unexpected finds are identified.

8.2.2 Historic heritage

A Statement of Heritage Impact (SoHI) was prepared by Artefact Heritage and is included in Appendix R. The SoHI assesses the historical setting and potential impacts of the development in accordance with the relevant Commonwealth and NSW Heritage Assessment Guidelines.

The SoHI also assessed the project against the following relevant plans and policies:

- *Prospect Hill Conservation Management Plan* (Conybeare Morrison, 2005)
- *Prospect Hill Heritage Landscape Study and Plan* (2008)
- HDCP 2013, including Part Q Northern Pemulwuy Employment Area

As noted in section 8.2.1 above, following European settlement, the area was used for grazing and agriculture before the development of extractive industry and associated commercial enterprise.

The SoHI identified six State Heritage Register listings within 1 kilometre of the study area:

- Prospect Hill (SHR 01662)
- Prospect Post Office (former) (SHR 01385)
- St Bartholomew's Anglican Church & Cemetery (SHR 00037)
- Prospect Reservoir and surrounding area (SHR 01370)
- Former Great Western Road, Prospect (SHR 01911)
- Veteran Hall – House Remains (SHR 01351)

There are no heritage items within the site that are listed on the s 170 registers under the *Heritage Act 1970* or on the HLEP 2013 or BLEP 2015. Within 1 km of the site, four items are listed under s170 of the Heritage Act 1970, five items on the HLEP 2013 and nine items on the BLEP 2015.

Many of the items are listed on multiple registers. The SoHI found that there are no items in or near the study area that are registered on the World, National or Commonwealth Heritage Lists. A summary of the heritage listings within the SoHI study area around the project is provided in Table 22 and depicted in Figure 21.

Item	Distance from site	Listing	Significance	Impact	
				Physical	Visual
Prospect Hill	Within site	State Heritage Register (SHR 01662)	State	Neutral	Minor (Marrong Reserve - Neutral)
	Adjacent	HLEP 2013	State		
Prospect Reservoir and surrounding area	600 m west	State Heritage Register (SHR 01370)	State	Neutral	Minor
		HLEP 2013	State		
		Sydney Water s170	State		
St Bartholomew's Anglican Church & Cemetery	930 m north west	State Heritage Register (SHR 00037)	State	Neutral	Minor
		BLEP 2015	State		
Great Western Highway (former alignment)	340 m west	State Heritage Register (SHR 01911)	State	Neutral	Negligible
		BLEP 2015	State		
Great Western Highway Milestones	750 m north west	Roads and Maritime Services s170	Local	Neutral	Neutral
	350 m north	BLEP 2015	Local		
Prospect Post Office	340 m north west	State Heritage Register (SHR 01385)	State	Neutral	Neutral
		BLEP 2015	State		
		DPIE s170	State		
Bridestowe	320 m west	BLEP 2015	Local	Neutral	Neutral
House and School Buildings	315 m north	BLEP 2015	Local	Neutral	Negligible
Veteran Hall – House Remains	960 m south west	State Heritage Register (SHR 01351)	State	Not assessed as the site is outside the study area	
		BLEP 2015	State		
		Sydney Water s170	State		
		NSW Government Gazette/Regional Environmental Plan	State		
Electricity substation	450 m north	BLEP 2015 (I58)	Local	Neutral	Neutral
	400 m north	BLEP 2015 (I59)	Local	Neutral	Minor

Table 22: Summary of Heritage listings (Artefact, 2020)

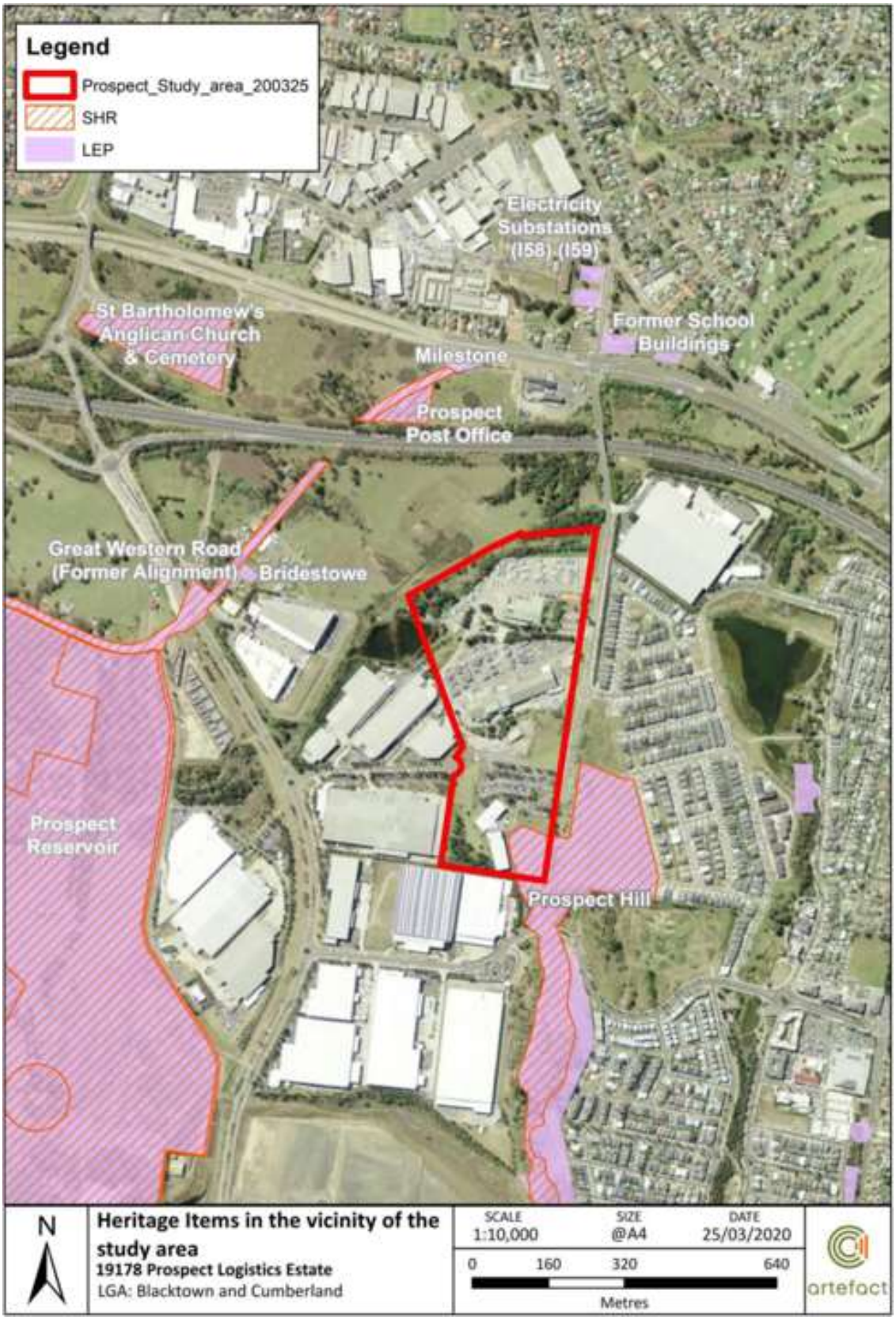

Figure 21: Heritage Sites in the vicinity of the site (Artefact, 2020)

Of these, the Prospect Hill (SHR # 01662) is the only listing within the site, in the south eastern portion of the project footprint (see Figure 21). The curtilage of the Prospect Hill SHR item extends to the south of the study area and includes an area of parkland known as Marrong Reserve, however the Marrong Reserve is outside the project footprint.

Given the project will not encroach on the curtilage of Prospect Hill, the SoHI concluded that the project will have a neutral direct impact on this item. All other items identified in Table 22 are also likely to experience a neutral direct impact.

The SoHI noted that the project involves extensive ground disturbance and earthworks throughout the study area, which will likely partially impact evidence of former landscape modification associated with the Prospect Quarry. However, the SoHI concluded that it is unlikely that significant archaeological remains will be impacted as a result of the proposed works.

The SoHI assessed the potential visual impacts of the new warehouse buildings on the views to and from the Prospect Hill and from other sites with potential views of the project. Warehouse 6 of the proposed development is located immediately west of Prospect Hill and will be situated within significant view lines towards Blue Mountains and Prospect Reservoir. The existing building within this view line of Prospect Hill extends to a maximum height of RL 106.4 m. As Warehouse 6 extends to a RL of 98.2 m and is set back further from Prospect Hill the proposed development it is considered to result in a minor positive impact to these viewsheds.

The SoHI found that the visual obstruction of the high bay Warehouse 1 at (99.5m RL) may obscure views towards Prospect Hill when viewed from the north of the development however it will not obscure view lines towards significant landscape features or heritage items.

The development of the other buildings within the development will create a visual intrusion towards Prospect Hill, particularly from St Bartholomews church and cemetery, and increase the scale of industrial development in the area. However the views will not obstruct views between Prospect Hill and St Bartholomews.

Mitigation

- Colour schemes will involve neutral colours and bold design elements will be minimised to ensure that the warehouses blend into the existing environment and surrounding landscape
- Existing established trees will be retained where possible and additional screening vegetation will be planted to mitigate visual impacts
- Detailed design of the warehouses, particularly warehouse 1 and warehouse 6 will consider the heights of the warehouses to minimise the potential visual obstruction between Prospect Hill and Prospect Reservoir, St Bartholomew's Church and the Blue Mountains
- Undertaking a photographic archival recording (PAR) of Prospect Hill (SHR #01622) and its significant view lines prior to construction. A copy of the PAR will be lodged with Cumberland Council and Heritage NSW – DPC.

On the basis of these mitigation measures, the SoHI concluded that the impacts of the project on heritage significance will be limited to potentially minor visual impacts on the Prospect Hill listed site.

8.3 Traffic and transport

A Traffic Impact Assessment (TIA) has been prepared by Ason Group and is included at Appendix S. The TIA considers the existing traffic conditions surrounding the site, assesses the potential traffic implications as a result of the development and considers the car parking requirements that will be generated by the proposal.

A Green Travel Plan has also been prepared by Ason Group and is included at Appendix P.

8.3.1 Existing traffic conditions

The road network surrounding the site is shown in Figure 22 and is further described below:

- **Prospect Highway**: a State road that traverses in a north-south direction and forms the primary road servicing the Northern Employment Lands. Prospect highway connects Wetherill Park in the south and Blacktown to the north and intersects with the M4 Motorway and Great Western Highway approximately 1.2 km to the north of the site
- **Clunies Ross Street**: a local road along the eastern boundary of the site that traverses in a north-south direction between a cul-de-sac in the south and the Great Western Highway to the north and
- **Foundation Place**: a local road that traverses in an east-west direction between the site and Prospect Highway.

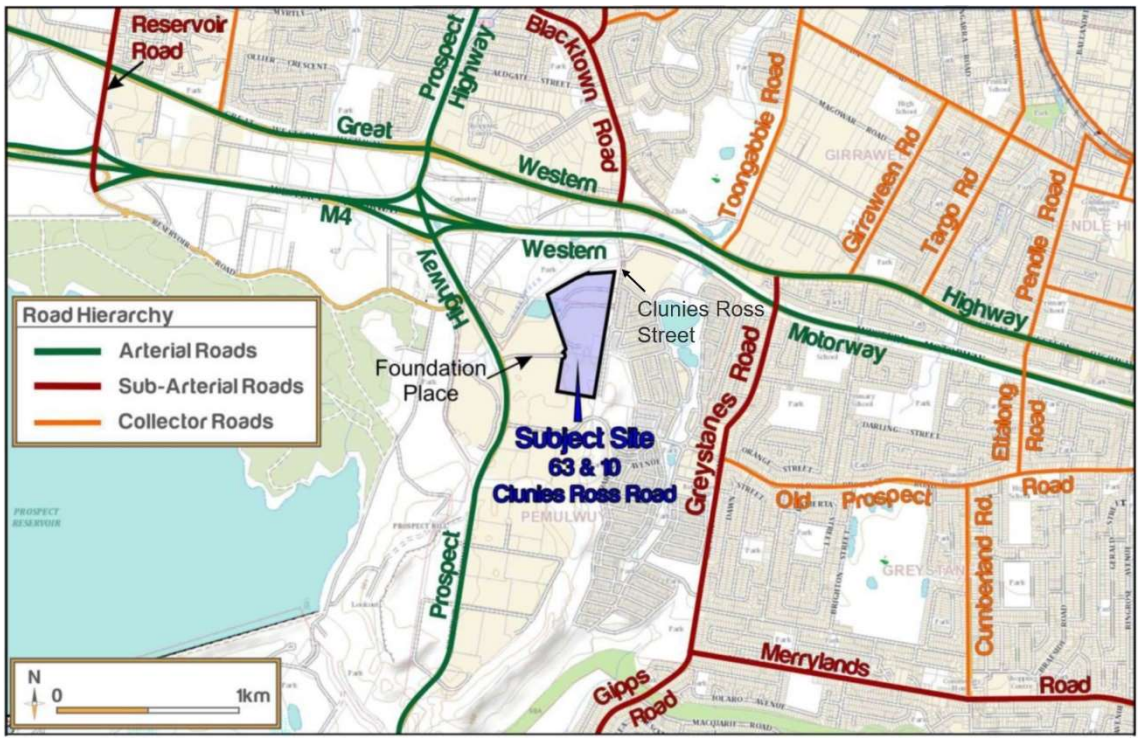

Figure 22: Road network surrounding the site (Ason Group, 2020)

Public transport connections are limited and include bus stops on Clunies Ross Street near Wombat Place and on the Prospect Highway near Reconciliation Rise (south of Foundation Place). The nearest rail station is Pendle Hill station approximately 2.8 km to the east. The pedestrian and cycle network services areas to the south of the site, with cycle access on existing roads from the Great Western Highway via Clunies Ross Street.

The TIA estimates that the current uses of the site will generate approximately 155-200 vehicles per hour (veh/hr) during peak periods and approximately 1,363 vehicles per day. Traffic surveys in December 2019 found that key intersections around the project site performed satisfactorily during the peak periods with the exception of congestion along Prospect Highway, affecting the performance of its intersections with the M4 Western Motorway and Reservoir Road (Table 23).

Intersection	Control Type	Period	Intersection Delay (sec)	Level of Service
Western Motorway / Prospect Highway (North)	Priority	AM	122.7	F
		PM	156.8	F
Western Motorway / Prospect Highway (South)	Signals	AM	36.5	C
		PM	46.3	C
Prospect Highway / Reservoir Road	Priority	AM	465	F
		PM	99.4	F
Prospect Highway / Foundation Place	Priority	AM	19.3	B
		PM	12.3	A
Great Western Highway / Blacktown Road / Clunies Ross Street	Signals	AM	42	C
		PM	41.7	C
Clunies Ross Street / Wombat Street	Priority	AM	9.8	A
		PM	9.4	A

Table 23: Existing performance of key intersections (Ason Group, 2020)

The TIA noted that the NSW Government has committed funding for upgrades to 3.6 km of Prospect Highway between Reservoir Road and St Martin Crescent in Blacktown. Construction of the upgrade is scheduled to commence in 2020. The TIA includes modelling to predict the future performance of these intersections to establish likely future baseline conditions (i.e. without the project), based on the proposed upgrades to Prospect Highway (Table 24).

Intersection	Period	2019 Baseline		2021 Baseline		2031 Baseline	
		Delay (sec)	LoS	Delay (sec)	LoS	Delay (sec)	LoS
Western Motorway / Prospect Highway (North)	AM	122.7	F	25.5	B	30.1	C
	PM	156.8	F	24.8	B	27.6	B
Western Motorway / Prospect Highway (South)	AM	36.5	C	32.1	C	129.7	F
	PM	46.3	C	45.1	D	129.2	F
Prospect Highway / Reservoir Road	AM	465	F	48	D	232.8	F
	PM	99.4	F	21.4	B	29.5	C
Prospect Highway / Foundation Place	AM	19.3	B	32.4	C	1252.9	F
	PM	12.3	A	14.9	B	593.2	F
Great Western Highway / Blacktown Road / Clunies Ross Street	AM	42	C	45.3	D	52	D
	PM	41.7	C	41.7	C	45.3	D
Clunies Ross Street / Wombat Street	AM	9.8	A	8.1	A	8.3	A
	PM	9.4	A	7.4	A	7.5	A

Table 24: Predicted future 'baseline' performance of key intersections (Ason Group, 2020)

This demonstrates that the network will generally operate satisfactorily in the initial year modelled (2021) with the increase in background traffic over 10 years creating significant delays at the Prospect Highway intersections with Foundation Place, Reservoir Road and the M4 Motorway.

8.3.2 Traffic impact assessment

As discussed in Section 3.4, access between the site and State road network will be via Clunies Ross Street and Foundation Place.

The TIA has adopted the traffic generation rates for business parks and industrial estates as outlined in the *Guide to Traffic Generating Developments* (RMS 2002) and *Technical Direction – Updated traffic surveys* (RMS, 2013/04a). The application of these rates to the development anticipates the following traffic generation:

- 252 vehicles per hour during the AM peak period
- 252 vehicles per hour during the PM peak period
- 1,802 vehicles per day

Warehouse	AM Traffic Generation	PM Traffic Generation	Daily Traffic Generation
Warehouse 01	52	52	371
Warehouse 02	69	69	489
Warehouse 03	36	36	254
Warehouse 04	15	15	110
Warehouse 05	31	31	218
Warehouse 06	25	25	179
Warehouse 07	26	26	186
Precinct Totals	**253**	**253**	**1,807**

Table 25: Predicted traffic generation (Ason Group, 2020)

Based on the proposed increase in gross floor area for warehouses and offices, the TIA estimates that the increase in traffic due to the project compared with the current traffic generation capacity is approximately:

- 56 vehicles per hour during the AM peak period
- 98 vehicles per hour during the PM peak period
- 444 vehicles per day

The TIA includes further analysis of the percentage split between light and heavy vehicles for the AM and PM hourly peaks, as well as daily totals, based on RMS 2013/04a of the surveyed 'Business Parks and Industrial Estates' sites. This analysis demonstrates heavy vehicle splits are:

- 28% of total vehicle movements during the AM Peak
- 16% of total vehicle movements during the PM Peak and
- 29% of total vehicle movements throughout the day.

Using the above trip generation rates, traffic distribution was modelled using SIDRA for both the existing (base case) conditions and future (developed site) conditions at the key intersections (Table 26).

Intersection		2021				2031			
		Baseline		Project		Baseline		Project	
		Delay	LoS	Delay	LoS	Delay	LoS	Delay	LoS
Western Motorway / Prospect Highway (North)	AM	25.5	B	26.3	B	30.3	C	30.3	C
	PM	24.8	B	25	B	27.6	B	28	B
Western Motorway / Prospect Highway (South)	AM	32.1	C	31.4	C	137.1	F	160.8	F
	PM	45.1	D	45.3	D	151.7	F	148.5	F
Prospect Highway / Reservoir Road	AM	48	D	101.7	F	274.1	F	262.7	F
	PM	21.4	B	21.6	B	45.9	D	38.9	C
Prospect Highway / Foundation Place	AM	32.4	C	40.2	C	259.2	F	354.7	F
	PM	14.9	B	90.7	F	95.6	F	386.1	F
Great Western Highway / Blacktown Road / Clunies Ross Street	AM	45.3	D	48	D	52	D	53.2	D
	PM	41.7	C	43.2	D	45.3	D	45.3	D
Clunies Ross Street / Wombat Street	AM	8.1	A	7.4	A	8.3	A	8.3	A
	PM	7.4	A	7.1	A	7.5	A	7.5	A

Table 26: Predicted intersection performance (Ason Group, 2020)

The TIA includes analysis of potential further upgrades to Prospect Highway between Reservoir Rd and Foundation Place, to a two-lane carriageway through the intersection with Foundation Place.

The TIA noted that the intersections that have not demonstrated capacity exceedance only experience minor increases to intersection delay with the inclusion of development-associated traffic. With the exception of Foundation Place, the TIA concluded that the project will therefore have minimal impacts to intersection performance, representing approximately 9% of total net growths.

The TIA concludes that the impacts of traffic associated with the development are moderate and contribute to relatively minimal increases to intersection delays in the network. Notwithstanding, Foundation Place has been identified to form a bottle neck for network performance.

Notwithstanding, Foundation Place has been identified to form a bottle neck for network performance. It should be considered that capacity upgrades to the roundabout be facilitated by TNSW at a later stage.

In summary, the TIA concludes that the proposal is supportable on traffic planning grounds

8.3.3 Access and car parking

Access to the development will be via multiple access points constructed along Clunies Ross Street and at the eastern end of Foundation Place and include:

- Eight access points along Clunies Ross Street and
- Two access points in the cul-de-sac of Foundation Place.

The estate has been designed to provide separate access for light and heavy vehicles, providing safer access and avoiding conflicts, with an internal two-lane road connecting Foundation Place and Clunies Ross Street and servicing warehouses 1, 2, 3 and 7. Parking provisions are calculated based on the respective DCPs for each warehouse and the RMS Guide (Table 27) and were reviewed against other warehouse developments in the region.

The analysis of other similar developments in the WSEA indicates the parking rate varies between 1 space per 153 m^2 and 1 space per 817 m^2, with an average of 404 m^2.

Land Use	BCC DCP 2015	HDCP 2013	RMS Guides
Warehouse / Industrial	1 space per 75 m^2	1 space per 300 m^2	1 space per 300 m^2
Office	1 space per 40 m^2	1 space per 40 m^2	1 space per 40 m^2
Café	1 space per 10 m^2 of dining area, plus 1 space per 2 employees	11 space per 8 m^2	15 space per 100 m^2, or 1 space per 3 seats.

Table 27: Car parking guidelines DCP and RMS guide (Ason Group, 2020)

A summary of the parking provided for the development compared with the relevant DCPs is provided in Table 28

Lot No.	Warehouse GFA (m^2)	Office/Café GFA (m^2)	BCC DCP 2015	Holroyd DCP 2013	RMS Guide	On-site Supply
1	18,224	1,396	278	n/a	96	125
2	24,071	1,787	n/a	125	125	127
3	12,088	1,318	n/a	73	73	95
4	5,349	476	n/a	30	30	101
5	10,401	1,109	n/a	62	62	
6	8,441	1,013	n/a	53	53	51
7	8,927	893	141	n/a	52	50
Café		146	15	n/a	22	15
Total	**87,501**	**8,138**	**434**	**343**	**513**	**564**

Table 28: Car Parking Demand vs. Supply (Ason Group, 2020)

The overall parking provisions of the project are generally consistent with the Blacktown DCP, Holroyd DCP and RMS Guide parking requirements, and the following parking rates have been adopted for the Project under the site specific DCP:

- Warehouse / Industrial: 1 space per 300 m^2
- Office: 1 space per 40 m^2
- Café: 1 space per 10 m^2 dining area

The internal design of the car parking areas will comply with AS 2890.1 (2004), AS 2890.2 (2002) and AS 2890.6 (2009).

8.3.4 Loading, collection and servicing

Each warehouse building is proposed to provide an internal loading area capable of accommodating a design vehicle up to and including a 19 metre articulated vehicle. The site access, car park and loading areas have generally been designed to comply with the following relevant Australian Standards:

- AS2890.1 for car parking areas
- AS2890.2 for commercial vehicle loading areas and
- AS2890.6 for accessible (disabled) parking.

The TIA includes a swept path analysis for the largest design vehicle anticipated to service the development which demonstrates that the loading area can be operated satisfactorily.

8.3.5 Sustainable travel

Ason Group has prepared a Green Travel Plan (GTP) for the development to encourage alternative modes of transport such as walking, cycling and public transport use. A GTP is considered the most effective travel planning measure to encourage employees to travel by alternative means other than by private vehicle.

The site is well serviced by pedestrian footpaths on Clunies Ross Street and Foundation Place, however there are no dedicated cycle lanes in the vicinity of the site, therefore requiring cyclists to share the road with local traffic and vehicles from the development. The GTP encourages a reduction in single-driver car travel and increase car sharing, public transport and active transport (walking and cycling) as alternative modes of transportation.

The GTP also encourages the appointment of a centralised Travel Access Coordinator (TAC) to take responsibility for the implementation and review of the GTP and the preparation of a Travel Welcome Pack (TWP) which educates employees of alternative transport options, other than private car usage. The TWP will be distributed to employees and visitors in order to provide relevant transport information.

8.3.6 Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) will be prepared and submitted to Council separate to this DA, and in response to any future conditions of consent. The CTMP will be finalised upon appointment of the head contractor.

The TIA concludes that the ultimate developed site will not have any unacceptable traffic implications on the local road network and can operate satisfactorily.

8.4 Water and infrastructure

A Civil Engineering Report (CER) has been prepared by Costin Roe and is provided at Appendix D. The CER addresses civil engineering components of the development and provides an overview of the proposed infrastructure and services requirements for the site.

The CER includes a detailed Water Cycle Management Strategy (WCMS) which establishes objectives and targets for the following elements:

- stormwater quantity management
- stormwater quality management
- flood management
- water demand reduction
- waterway health

8.4.1 Stormwater infrastructure

The site is currently serviced by an existing regional detention basin to the north-west of the site (see Figure 23).

The basin is owned and managed by Blacktown City Council and services a 167 ha catchment, including the Greystanes NEL precinct, with sufficient capacity for a 1 in 100 year ARI flood event. The basin is noted to be a prescribed dam and is subject to NSW Dam Safety Committee requirements.

A precinct water quality basin/wetland is also present on the north-west of the property, constructed as part of the precinct Stormwater Management Strategy set out in the HDCP 2013 Part Q (Figure 23).

Stormwater Management

The proposed stormwater drainage system for the estate development will comprise a minor and major system to safely and efficiently convey collected stormwater run-off from the development to the legal points of discharge.

The minor system will consist of a piped drainage system which is designed to convey runoff from a 1 in 20-year ARI design storm event. The major system will be designed to cater for storms up to and including the 1 in 100-year ARI storm event. 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 to the regional detention basin.

The design of the stormwater system for this site will be based on relevant national design guidelines, Australian Standard Codes of Practice, the HDCP 2013 Part Q for areas within the Pemulwuy Northern Employment Lands and the standards of Blacktown City Council for areas within Blacktown City Council LGA, and accepted engineering practice.

The constructed water quality dam/wetland will be modified to facilitate the development of Warehouse 7. These modifications are proposed to maintain the existing water quality and storage capacity outcomes of both systems. Detailed assessments have been included in the CER to demonstrate the proposed modifications to the storages will achieve these outcomes.

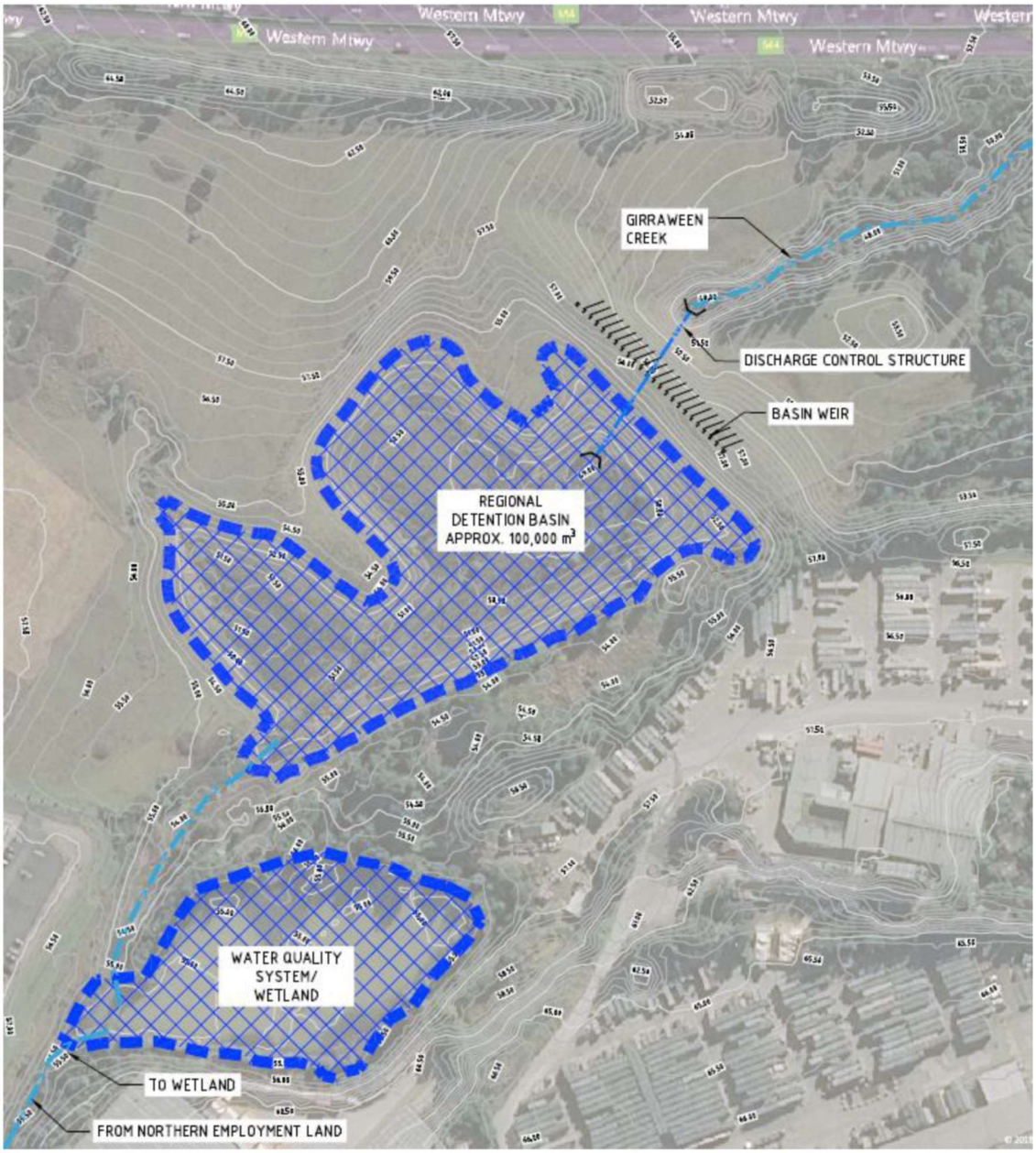

Figure 23: Regional detention basin and wetland in relation to the site (Costin Roe, 2020)

The proposed modifications to the existing detention systems involve filling of the site on the northern boundary of the property and providing compensatory storage to an area on the northern side of the detention system (Figure 24). The Dams Safety Committee will be consulted during detailed design of the amended storage to ensure the ongoing safety and stability of the storage and storage structures is maintained.

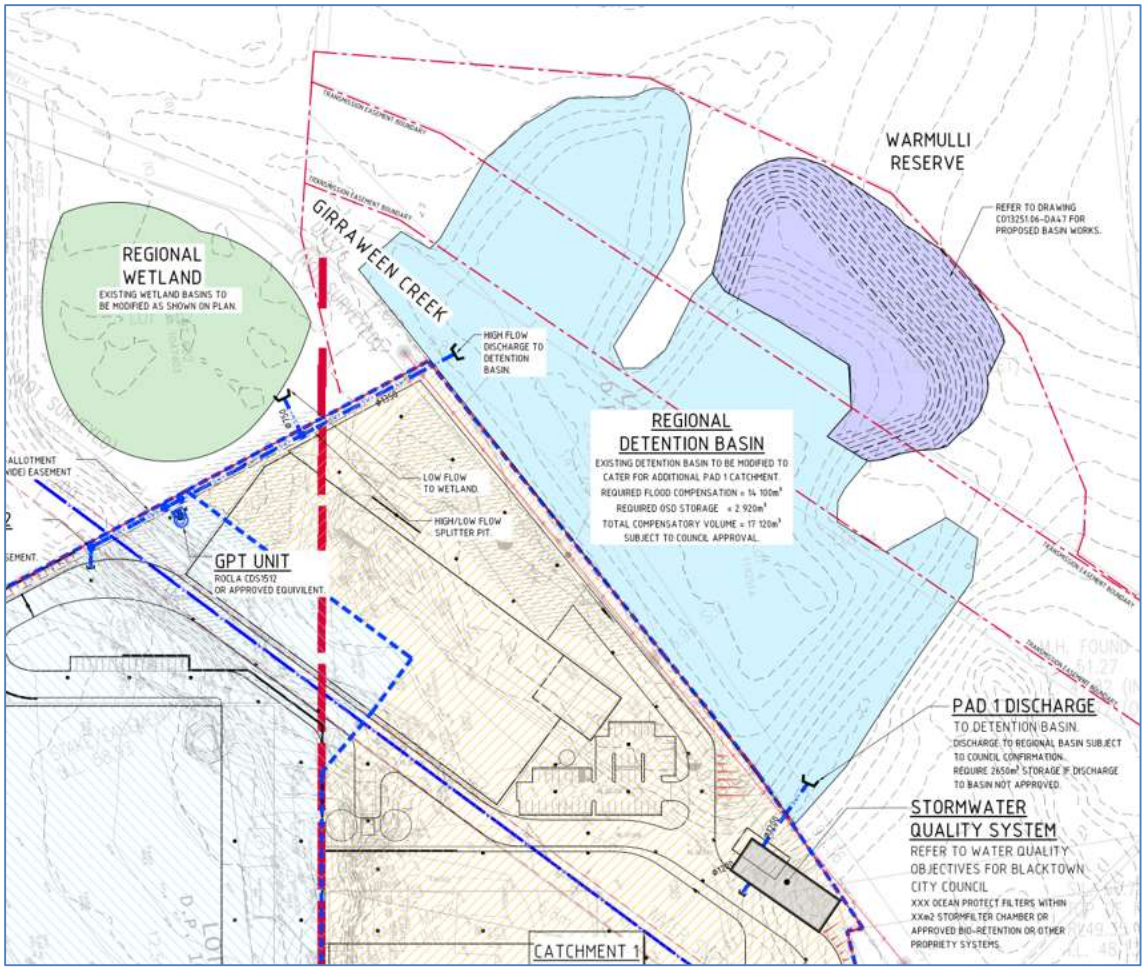

Figure 24: Detail of proposed modifications to regional detention basin and wetland (Costin Roe, 2020)

Additional storage is proposed to be introduced to the on-site system to enable discharge of the portion of the site within Blacktown City Council LGA to discharge directly to the basin. This additional storage will be provided at a rate of 455m³/Ha as required by Blacktown City Council.

The CER includes an assessment of the potential effect of climate change (increased rainfall intensity and sea level rise) on the development and the regional detention basin. The effect on development has been assessed for a 10% increase in rainfall intensity. This increase is considered representative of potential climate change impacts for the Western Sydney area, consistent with projected rainfall increases in accordance with the New South Wales Department of Environment and Climate Change (DECC) *Floodplain Risk Management Guideline Practical Consideration of Climate Change* (Table 1, October 2007).

This assessment shows that the proposed stormwater drainage system and stormwater management systems (including the proposed detention system) will have sufficient capacity to manage the increased peak flows and water volume with minor increase in hydraulic grade line and peak water level within the basins.

The CER confirms the proposed building pad levels will maintain the required minimum 0.5m freeboard on local overland flow paths during the modelled events with increased rainfall intensities.

Rainwater harvesting will be provided for this development with re-use for non-potable applications as part of future individual building development applications. Internal uses include such applications as toilet flushing while external applications will be used for irrigation. The CER design objective is to reduce external water supply from mains with a demand reduction target of up to 80%, with a minimum standard of 50%.

Water Quality

The CER includes designs which incorporates the principles of Water Sensitive Urban Design (WSUD) and which target pollutants that are present in the stormwater. The designs aim to minimise the adverse impact these pollutants could have on receiving waters and to also meet the water quality requirements specified by Cumberland (Holroyd) and Blacktown City Councils.

The proposed stormwater treatment system includes primary treatment through gross pollutant traps and roof rainwater collection systems, with discharge to the regional detention basin subject to tertiary treatment via filtration in the north of the site.

Stormwater modelling using the MUSIC model is further detailed in the CER. The MUSIC model indicates that the stormwater treatment train will result in pollutant load reductions that will meet the relevant Council requirements.

Further, a stormwater quality management strategy has been developed that will reduce both peak flows and pollutant loads leaving the site, which will remain consistent with the existing flows.

8.4.2 Flooding

As noted above, the CER has designed the stormwater system for the estate to ensure flood flows remain below the 0.5m freeboard requirements for the warehouse building pads and to ensure the regional detention basin maintains capacity to adequately service the employment lands catchment.

The following measures have been incorporated in the design:

- All buildings are sited 0.5m above the 1 in 100 ARI design flood level of the regional detention basin
- Development is clear of the 1 in 100 ARI flood extents
- Requirements of both Council DCPs have been met regarding works in and around flooding areas
- Stormwater detention measures (via regional basin) have been included to manage pre and post development runoff
- Overland flow paths to manage runoff in large storm events have been made including achieving at least 0.5m freeboard to building levels from the flow paths.

The CER includes pre-development modelling of flood flows within the site and the regional detention basin and compares the results of the modelling with Blacktown Council's flood mapping. The comparison indicates good correlation with Council's mapping with a 0.04 m (0.07%) difference during 1 in 100 ARI events and 0.02 m (0.03%) difference during the Probable Maximum Flood (PMF) event.

Allowing for the required freeboard of 0.5m to the 1 in 100 year ARI flood level, the corresponding flood planning level for the development is RL 55.6m AHD. Given the lowest proposed building level on the site is RL 60.0m AHD, it will be at least 4.5m above the flood planning level.

Therefore the development meets Council's flood planning requirements. The PMF level is estimated to be RL 56.43m therefore the site will also be well above the PMF level, enabling safe access and evacuation during this event.

8.5 Soil and Erosion

A Civil Engineering Report (CER) has been prepared by Costin Roe Consulting and is provided at Appendix D. The CER addresses civil engineering components of the development and provides an overview of the proposed infrastructure requirements for the site.

A review of geotechnical investigations of the site was prepared by PSM (Appendix T) which reviews existing site conditions.

8.5.1 Soils

The PSM review indicates that the site has been subject to significant disturbance by quarrying related activities and cut and fill earthworks create a sloping site from the southeast to the north west.

The PSM review references the Penrith 1:100,000 Geological Series Sheet and shows the site to be close to the boundary of the following rock units:

- Prospect Picrite (Jp) which typically comprises picrite, dolerite, minor basalt
- Bringelly Shale of the Wianamatta Group formation (Rwb). This group typically comprises shale, carbonaceous claystone, laminate, fine to medium grained lithic sandstone, rare coal and tuff and
- undifferentiated Quaternary alluvium (Qal) which typically comprises fine-grained sand, silt and clay.

Engineering properties of the residual clay soils are that they will be moderately reactive, highly plastic subsoils with poor drainage.

The majority of soils are classified non-saline to slightly-saline with the exception of one soil sample near Foundation Place classified as moderately-saline. The CER indicates that the risk of highly saline or aggressive soils will be considered to be low, and that soil salinity could be managed through typical design and normal best practice engineering completed to industry standards.

To assist in maintaining embankment stability, permanent batter slopes in clay will be no steeper than 3 horizontal to 1 vertical while temporary batters will be no steeper than 2 horizontal to 1 vertical. This is in accordance with the recommended maximum batter slopes for residual clays and shale which are present in the area.

Steeper slopes may be adopted for dolerite if encountered subject to geotechnical assessments during works. Permanent batters will also be adequately vegetated or turfed which will assist in maintaining embankment stability. Stability of batters and reinstatement of vegetation shall be in accordance with the submitted drawings and the Soil and Water Management Plan.

8.5.2 Erosion and sediment control

A concept Erosion and Sediment Control Plan (ESCP) is included in the CER which demonstrates that adequate controls can be established to avoid the pollution of receiving waters during construction.

Prior to commencing construction, a detailed ESCP will be prepared to include sediment and erosion controls to be designed, installed and maintained in accordance with the requirements of Landcom 2004.

8.6 Noise and vibration

A Noise and Vibration Impact Assessment (NVIA) has been prepared by White Noise and is included at Appendix U. The NVIA addresses the potential construction and operational noise and vibration impacts associated with the development.

8.6.1 Existing noise conditions

The site and surrounding locality currently experience industrial noise form surrounding industrial and commercial uses in the WSEA employment lands. The nearest residential receivers experience existing road traffic noise along Clunies Ross Street associated with the Austral facility and local traffic, with traffic noise generated from the M4 Motorway approximately 200 m away.

Existing receivers within the vicinity of the site include industrial receivers to the north, north-east, south and west and residential receivers to the east across Clunies Ross Street. The rear facing residential receivers along Clunies Ross Street to the north of Wombat Street are protected from the site by an existing acoustic barrier.

A survey of the existing acoustic environment at the site was undertaken which included attended noise level measurements at the site on 31 January 2020 as well as unattended noise logging at two locations between 31 January and 7 February 2020. The monitoring

locations are shown in Figure 25. Attended and unattended noise monitoring results are summarised in Table 29 and Table 30 respectively.

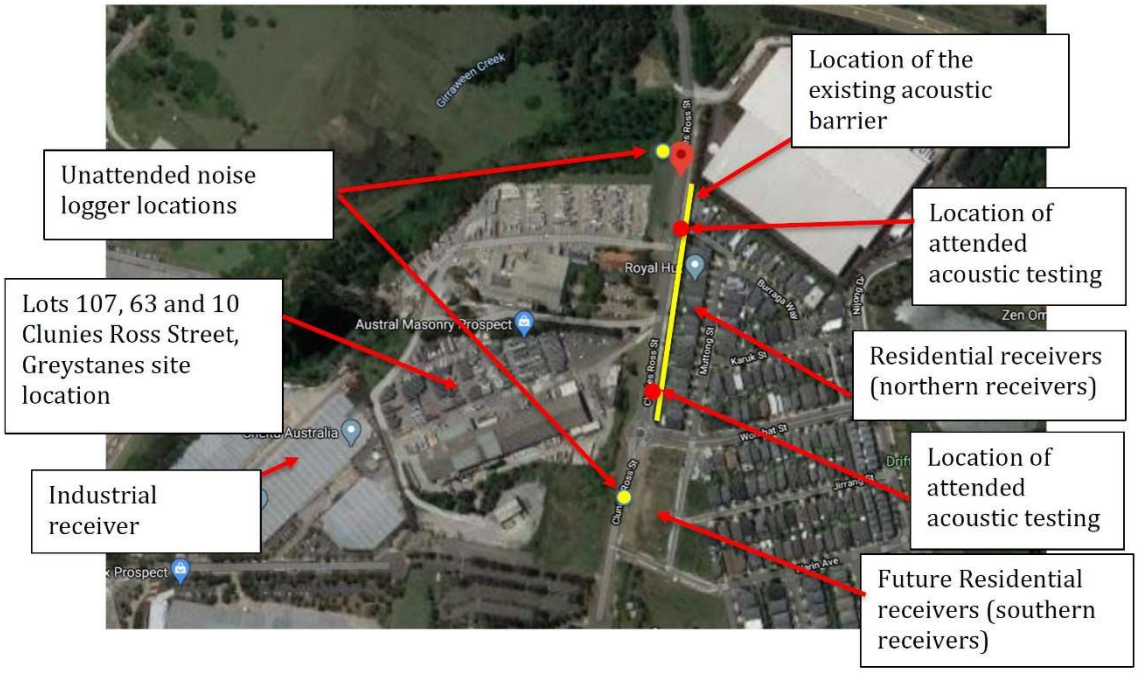

Figure 25: Noise monitoring locations (Source: White Noise)

Measurement Location	Time of Measurement	LAeq, 15min dB(A)	LA90, 15min dB(A)	Comments
Attended noise measurement location, Northern Location	9.05am to 9.20am	58	54	Noise level at the site dominated by vehicle movements on Clunies Ross Street the Motorways and existing industrial facilities
Attended noise measurement location, Southern Location	9.25am to 9.40am	54	44	

Table 29: Attended noise monitoring results (Source: White Noise)

Measurement Location	Time of Measurement	Maximum Repeatable LAeq, 15min dB(A)	Representative Background noise Level (RBL) LA90, 15min dB(A)
Northern noise logger location	Day	58	52
	Evening	54	50
	Night	52	44
Southern noise logger location	Day	52	48
	Evening	51	46
	Night	44	40

Table 30: Unattended noise monitoring results (Source: White Noise)

8.6.2 Construction noise

Construction works will be undertaken in accordance with the NSW *Interim Construction Noise Guideline* (ICNG) as outlined below:

- 7am to 6pm Monday to Friday and
- 8am to 1pm on Saturdays.

The NVIA notes that noise sources during construction works will be generated by the following activities:

- demolition
- site establishment works
- construction of the warehouse buildings
- landscaping works.

The NVIA includes a summary of the predicted noise levels (without any additional mitigation) for each of the closest receivers for the various work activities listed above. The summary is shown in Table 31.

Noise Source	Equipment	Sound power levels dB(A) L_{10}	Aggregate Sound Power Level dB(A) L_{10}	Calculated Construction Noise Levels at Receiver
Site Demolition Works	Jack hammer mounted on skid steer	118	122	Up to 65 dB(A) when items used externally
	Hand held jackhammer	111		
	Concrete Saw	119		
	Skid Steer	110		
	Power Hand Tools	109		
	Excavators	115		
	Trucks	110		
	Earth rollers	112		
Construction Works	Piling	115	120	Up to 60 dB(A) when items used externally
	Welder	101		
	Saw Cutter	109		
	Dump Truck	109		
	Concrete Saw	119		
	Power Hand Tools	109		
	Cranes	110		

Table 31: Predicted worst-case noise levels during construction (Source: White Noise)

The NVIA predicts that construction noise will comply with the noise management levels at all surrounding residential and industrial receivers.

The following management controls are recommended to mitigate construction noise levels on the site:

- all plant and equipment are to be maintained such that they are in good working order
- a register of complaints is to be recorded in the event of complaints being received, including location, time of complaint, nature of the complaint and actions resulting from the complaint
- if required a noise level measurement of the offending plant item generating complaints is to be conducted and noise mitigations undertaken to reduce noise levels to within Noise Management levels in the event magnitude of noise levels is found to be above suitable levels
- the use of percussive and concrete sawing should be undertaken behind a closed façade when possible
- the use of high noise generating equipment including hydraulic hammers, rock cutters or the like should not be undertaken prior to 8am Monday to Friday or 8.30am Saturdays
- the loading of trucks should be conducted such that there is not a requirement to stack truck on the roadways adjacent to the residential receivers.

All feasible and reasonable mitigation measures will be implemented during construction of the development. Impacts from the construction works will be minimised and managed in accordance with the procedures outlined in the NVIA.

8.6.3 Vibration

Vibration may occur during the earthworks particularly if outcrops of dolerite are encountered. Safe working distances for building damage will be complied with at all times and vibration monitoring will be undertaken to ensure acceptable levels of vibration are satisfied. The NVIA notes that safe working distances relate to continuous vibration and that most construction activities will have intermittent vibration emissions. Therefore, higher vibration levels occurring over shorter periods are acceptable.

Construction vibration is not likely to exceed the criteria applicable for human comfort and therefore the nearest residential receivers are not likely to experience adverse vibration impacts.

The NVIA has identified the preparation of a construction and vibration management plan to include mitigation measures to be implemented in order to minimise and manage all construction impacts. These mitigation measures will be adopted to ensure construction noise is acceptable and complies with the relevant guidelines.

8.6.4 Operational noise

Potential operational noise sources of the development include:

- mechanical plant, including cooling units on the cold storage warehouses
- internal warehouse operations
- operation of the loading docks
- truck and light vehicle movements on hardstands and in parking areas

As end users for each of the warehouses within the development have not been identified at this stage of the project, the exact uses that will be carried out within the warehousing structures is yet to be determined. Notwithstanding, the identified operational noise sources are consistent with current activities in the surrounding industrial area.

The relevant operational noise criteria for the development were established based on the noise monitoring results and the *Noise Policy for Industry* (EPA, 2017) (NPfI) and are provided in Table 32. Project Noise Trigger Levels are shown in bold.

Location	Time of Day	Project Amenity Noise Level, LAeq, period [1] (dBA)	Measured LA90, 15 min (RBL) [2] (dBA)	Measured LAeq, period Noise Level (dBA)	Intrusive LAeq, 15 min Criterion for New Sources (dBA)
Urban residences Northern Locations	Day	58	58	52	**57**
	Evening	**48**	54	50	55
	Night	**43**	52	44	49
Urban residences Southern Locations	Day	58	52	48	**53**
	Evening	**48**	51	46	51
	Night	**43**	44	40	45

Table 32: Operational noise trigger levels (Source: White Noise)

Note 1: Project Amenity Noise Levels corresponding to "Suburban" areas, recommended noise levels.
Note 2: L_{A90} Background Noise or Rating Background Level including façade corrections

The NVIA includes predictions for noise generated from each of the warehouses including a combination of noise generated by internal activities, emissions from external noise sources including roof mounted plant and refrigeration equipment on cold storage warehouses and vehicles movements within the site. The results of the noise predictions are summarised in Table 33.

Location	Time of Day	Project Noise Trigger Levels ($L_{Aeq,\ 15\ min}$ (dBA))	Predicted Maximum Noise Level (dBA)	Compliance
Urban residences Northern Locations	Day	57	40.8	Y
	Evening	48	40.8	Y
	Night	43	39.7	Y
Urban residences Southern Locations	Day	53	42	Y
	Evening	48	42	Y
	Night	43	39	Y

Table 33: Operational noise predictions (Source: White Noise)

In recognition that the specific detailed designs of warehouse plant and equipment are yet to be finalised, the NVIA modelling conservatively assumes the noise sources are located at the closest locations to the residential receivers in Pemulwuy.

All future externally located operational plant and equipment will be selected and acoustically treated to ensure the noise levels at all surrounding receivers comply with Project Noise Trigger Levels detailed within the NVIA.

During detailed design of the warehouses, the noise modelling will be updated based on the design, number and precise location of all key key noise sources to ensure that the noise generated during operations will not exceed the project noise trigger levels established by the NVIA. Should modelling predict exceedance, the design of the warehouse will be modified and/or additional noise mitigation installed to reduce noise generation to acceptable levels.

Once the operation of each warehouse is established at operational capacity, or 6 months following the commencement of warehouse operations, whichever is sooner, noise monitoring will occur at representative locations to verify noise predictions in the detailed design modelling.

On this basis, the NVIA finds that the operational noise levels are expected to comply with the Project Noise Trigger Levels under the NPfI.

Based on the expected use of the site the NVIA has calculated the anticipated future traffic noise which is summarised in Table 34.

Note that calculated noise levels include those levels at the façade of existing residential receivers including the attenuating effects of the existing acoustic barrier on the eastern side of Clunies Ross Street, at the façade of the properties adjacent to the site.

Measurement Location	Time of Measurement	Additional Traffic Noise Criteria LAeq, 1 hr dB(A)	Calculated Traffic Noise Levels LAeq, 1 hr dB(A)
Northern residential receivers	Day	60	56.2
	Night	55	<50
Southern residential receivers	Day	60	53.1
	Night	55	47.5

Table 34: Calculated Future Additional Traffic Noise Levels (Source: White Noise)

The NVIA concludes that additional traffic noise generated by vehicles using the site will comply with the requirements of the EPA's *Road Noise Policy*.

Overall, the NVIA finds that the development will result in negligible noise impacts during operation and will comply with the relevant criteria outlined in the NPfI, subject to the adoption of appropriate noise mitigation measures.

8.7 Air quality

An Air Quality Impact Assessment (AQIA) has been prepared by Northstar Air Quality Pty Ltd and is included at Appendix V.

The AQIA assesses air quality impacts during construction and operation of the development in accordance with the:

- UK Institute of Air Quality Management (IAQM) *Guidance on the Assessment of Dust from Demolition and Construction* (IAQM, 2014) and
- NSW EPA *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (Approved Methods).

The AQIA recommends mitigation, management and monitoring measures to address potential air quality impacts during the construction and operation of the development.

8.7.1 Potential emissions

Given the nature of the development it is anticipated that the most likely potential air quality impacts will occur during the construction phase. The key dust and particulate matter generating activities during this phase include:

- demolition works
- earthworks and vegetation clearing
- construction of new roads, pavements, services and hardstands, construction of warehouses and fit out
- emissions from construction plant and equipment

The AQIA predicts the potential emissions generated during the operational phase are primarily associated with vehicle use, including:

- internal vehicular movements on the site and paved road surfaces
- diesel combustion emissions from the consumption of diesel fuel, in the truck movements

The potential emissions as a result of the development include particulate matter (PM_{10} and $PM_{2.5}$ and total suspended particulates TSP) and gaseous emissions associated with vehicle emissions, particularly oxides of nitrogen (NO_x) along with less significant emissions of carbon monoxide (CO), sulphur dioxide (SO2) and air toxics (including benzene and 1,3-butadiene).

8.7.2 Impact assessment

The proposed site is located at the eastern area of the NEL with warehouse and industrial development to the west, south and north east. Recent activities on the site are associated with the operation of the Austral masonry operations. The Pemulwuy residential area is east and of the site and is currently undergoing development along Clunies Ross Street.

Construction impact assessment

The AQIA predicted there will be a high risk of adverse dust soiling and human health impacts at surrounding receptors if no mitigation measures were applied to control emissions during the demolition phase, with a medium risk during other construction phase activities.

Recommended construction phase mitigation measures are outlined in the AQIA and will be described in the Construction Environmental Management Plan. These include, but not limited to:

- developing stakeholder consultation plans and procedures to respond to complaints
- site management, site inspections and monitoring procedures
- preparing and maintaining the site to minimise exposed surfaces and stockpiles, and the potential for tracking soil/mud onto hard surfaces
- dust suppression including covering or stabilising stockpiled materials and wetting exposed surfaces
- demolition management including internal soft strip, water suppression sprays
- revegetating disturbed surfaces as soon as practicable.

With the implementation of the above measures, the AQIA concluded that the construction of the development will pose a negligible risk to the air quality of surrounding sensitive receptors.

Operational impact assessment

The operation of the development is predicted to generate minimal particulate and gaseous emissions. The AQIA concluded that incremental concentrations of TSP, PM_{10} and $PM_{2.5}$ at residential receptor locations are low (less than 4.2 % of the annual average TSP criterion, less than 0.5 % of the annual average PM_{10} criterion and <1.3 % of the $PM_{2.5}$ criterion). Annual average dust deposition is predicted to meet the criteria at all receptors surrounding the Proposal site where the predicted impacts are less than or equal to 5 % of the incremental criterion at receptor locations.

The AQIA concluded that no specific mitigation measures are required to minimise impacts on surrounding receptor locations during the operation phase. Good site management practices, including the observation of speed limits, minimisation of vehicle use and engine idling will minimise impacts to ensure no off-site impacts are experienced.

8.7.3 Conclusion

A range of mitigation measures will be used to ensure short term health and nuisance impacts during the demolition phase and construction phase. The staging of the construction activities will further ensure any potential health risks or nuisance impacts as a result of air emissions are minimised.

Further, the proposed operation of the Prospects Logistics Estate is capable of complying with air quality criteria outlined in the Approved Methods.

8.8 Hazards and risk

A Hazards and Risk Assessment (HRA) has been prepared by SLR in accordance with the requirements of the guidelines published by the Department's *Hazardous Industry Planning Advisory Paper No 6 – Guidelines for Hazard Analysis* and is included at Appendix M. The HRA includes:

- a preliminary risk screening in accordance with SEPP 33 and
- an assessment of the risks posed by the use of Warehouse 1 as a high bay cold storage warehouse and distribution facility.

The risk screening process specified under *Applying SEPP 33* (DPE, 2011) requires consideration of the type and quantity of hazardous materials to be stored on a site, the distance of the hazardous materials storage area to the nearest site boundary and the expected number of transport movements of dangerous goods.

The only dangerous good to be used on the site will be anhydrous ammonia which is required for the refrigeration of the cold storage warehouses. The plant room contains compressors and condensers, and the ammonia is reticulated through the roof, with connections to evaporators in the upper sections of the walls.

The only Dangerous Good of significance associated with this development is the ammonia for the refrigeration system. The system will be a sealed system containing less than 5 tonnes of ammonia for Warehouse 1, below the 5 tonne threshold quantity in SEPP 33. The ammonia is anticipated to require infrequent refilling with delivery from a suitably licensed industrial gas supplier at a rate well below the threshold in SEPP 33 of 6 movements per week.

The SEPP 33 risk screening included as part of the HRA determined the development does not constitute 'potentially hazardous' or 'offensive' development with respect to the storage and handling of dangerous goods and therefore does not require the preparation of a Preliminary Hazard Analysis.

8.9 Contamination

A Phase 1 and Phase 2 Environmental Site Assessment (ESA) has been prepared by JBS&G and is included at Appendix K. The ESA provides a summary of previous investigations and remediation works that have been carried out at the site and outlines an investigation and remediation approach to ensure the site is made suitable for its intended uses as an industrial and logistics facility.

8.9.1 Previous investigations

The site has been subject to a number of previous investigations which identified several areas of environmental concern (AEC) and isolated soil/sediment and surface/groundwater contamination associated with historic land use activities.

The ESA identified a range of potentially contaminating land use activities, including the presence of current/former petroleum and chemical storage, hazardous building materials, waste material production and placement of fill of unknown origin were identified and targeted by previous investigations.

Previous investigations and extensive remediation of contamination hotspots have been carried out at the site. Lot 63 DP 752051 (former Cumberland Council depot/stockpile yard) has been subject to detailed site investigations and preparation of a remedial action plan (RAP) and is currently being remediated for commercial/industrial land use, to address identified soil contamination associated with fibrous asbestos and asbestos containing material (ACM).

Asbestos previously identified at the site surface in the southern portion of Lot 107 DP 1028208 (JBS&G 2019a) was subsequently removed as part of make safe works (JBS&G 2019c), based on previous investigations the potential remained for further asbestos containing material (ACM) to be present within a former service easement within the southern portion of this lot.

8.9.2 Extent and nature of contamination

Review of previous investigation identified a range of data gaps in the current characterisation of potentially contaminating activities at the site. The ESA undertook additional sampling/analysis on Lot 107 DP 1028208 to address identified data gaps where the site was accessible.

Based on the intrusive investigation, the ESA concluded that the sampled fill material was generally consistent with that observed in previous investigations. With the exception of a chromium concentration at one location marginally exceeding the adopted ecological criterion, all other contaminants of potential concern (COPC) were reported below the adopted site criteria for commercial/industrial land use.

The same asbestos impacted fill profile identified on Lot 63 DP 752051 was identified extending beyond the Lot 63 boundary to the south (Lot 107 DP 1028208), albeit to a limited extent.

The ESA estimates that approximately 300 m^2 of asbestos impacted soil surrounding Lot 63 DP 752051 potentially represents an unacceptable health risk requiring remediation and/or management. The ESA also noted that the potential remains for the same fill profile to be present in other areas of the site adjacent to Lot 63 DP 752051.

In addition to the likely presence of asbestos in areas of the site, the ESA identified former underground petroleum storage systems (UPSS) and other petroleum storage (current/former) at the site which will require removal/decommissioning and/or management, including potentially impacted soils and/or groundwater relevant to the proposed land use in.

Other COPC including heavy metals (Cu, Zn, Cr) and Benzo(a)Pyrene were identified but considered to represent natural background conditions (associated with the underlying geology or typical of urban environments) and do not exceed the relevant land use criteria for the proposed use of the site and do not present an unacceptable risk to the downstream environment.

The ESA recommends that a DGI be conducted to address identified potential contamination data gaps and further define the extent of contamination at the site. Following the completion of the DGI, a RAP will be prepared to describe the required remediation and validation works to ensure the site is suitable for the proposed commercial industrial land use without ongoing

management. The RAP will be prepared in accordance with the requirements of the EPA's statutory guidelines.

Due to access restrictions since the preparation of the ESA (due to COVID-19 restrictions) the additional DGI could not be undertaken. Therefore it is proposed to carry out the supplementary DGI and preparation of the RAP prior to commencing earthworks associated with the development.

8.10 Waste

A Waste Management Plan (WMP) has been prepared by Sustainable Development Consultants and is included at Appendix W.

The WMP details the quantities and classification of waste streams to generated during demolition, remediation, construction and operation of the development and includes measures to ensure the development is consistent with the aims and objectives of the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021* (EPA, 2014) (WARR Strategy).

The WMP aims to ensure that all waste generated in all phases of the project is managed in an effective and environmentally responsible manner, in accordance with the relevant regulatory requirements and with a focus on improving sustainable waste management outcomes where possible. The plan aims to:

- maximise resource recovery by reuse and recycling
- minimise the generation of waste to landfill
- maximise waste material avoidance and reuse on the site
- establish record keeping, monitoring and reporting procedures
- comply with the requirements of the relevant statutory authorities and
- adopt an ongoing improvement approach to improve on best practice waste management principles.

The WMP estimates that construction (including demolition) of the development will generate approximately 37,986 m^3 of waste materials, comprised mostly of building materials (bricks, tiles, timber, concrete and metal).

During operation, the WMP estimates the following waste streams will be generated

Waste category	Classification
General landfill garbage	General solid waste (non-putrescible mixed with putrescible
Recyclables such as glass, paper, cardboard, cartons, plastics with ID Codes 1 to 7, steel & aluminium cans	General solid waste (non-putrescible)
Compostable organic material (food scraps)	General solid waste (putrescible)
Sundry waste types such as broken furniture and large objects	General solid waste (non-putrescible)
Electronic waste (e-waste) being all waste items with a plug, battery or power cords	Hazardous waste
Garden organic waste	General solid waste (non-putrescible)

Table 35: Predicted waste streams generated during operation

The development will target a 90% resource recovery rate for all waste during construction with the aim to generate less than 5 kg of waste per GFA of development. This will exceed the waste objectives in the WARR Strategy.

Warehouse areas (office and storage areas) will be designed to allow for the effective segregation of recyclables. Each warehouse will be provided with a sufficient number of bins to allow for effective segregation of wastes and recyclables.

Collection services will be provided by a commercial waste contractor with waste to be transported to a licensed recycling or landfill facility. The collection of e-waste, soft plastic recycling and non-treated timber pallets will take place on an as-needed basis by a qualified private waste contractor.

The WMP recommends the waste storage areas are:

- adequately sized to comfortably accommodate the required number of bins associated with the development
- designed with sufficient space for convenient access and maneuvering and additional specialised waste areas and
- designed with drainage connection to sewer to prevent potential contamination in stormwater.

The recommendations outlined in the WMP are expected to form part of any conditions of consent.

8.11 Bushfire management

A Bushfire Protection Assessment Report (BPAR) has been prepared by Eco Logical Australia in accordance with the SEARs and *Planning for Bush Fire Protection* (RFS 2019) and is provide in Appendix L. As the proposal does not include residential subdivision or special fire protection purpose (SFPP) developments (as defined by Section 100B of the Rural Fires Act 1997), the infill provisions of RFS 2019 relating to commercial and industrial development will apply to future buildings.

The BPAR found that the bush fire prone vegetation potentially affecting the development is a riparian corridor to the north and north west and is classified as 'Forested Wetland' under RFS 2019. This vegetation is not continuous but is interspersed with areas of vegetation classified as 'Grassland' across the northern lot. The effective slope under the vegetation falls into the slope category of '>0-5 degrees downslope'.

To the south east an electrical easement has a mixture of shrubby vegetation classified by PBP as 'Tall Heath' and 'Grassland' and a large undeveloped lot classified by PBP as 'Grassland'. On the western and southern boundaries of the subject land, existing industrial development and managed gardens provide managed land. On north east the land is managed as existing industrial and residential development and associated public roads.

The BPAR describes measures to manage bushfire risk to the site including:

- asset protection zones to be established around the site and managed in perpetuity
- landscaping to be established and managed in accordance with RFS 2019

- design and construction measures in accordance with AS 3959 or the National Association of Steel-framed Housing standard as modified by Section 7.5 of RFS 2019
- detailed design to ensure access and services (water, gas, electricity) meet the requirements of RFS 2019
- emergency and evacuation planning.

The BPAR concludes that with the implementation of the above measures, the proposed development complies with the aim and objectives of *Planning for Bush Fire Protection 2019* in accordance with Section 4.14 of the EP&A Act.

8.12 Biodiversity

A Biodiversity Development Assessment Report (BDAR) has been prepared in accordance with the SEARs and NSW Biodiversity Assessment Method (BAM) 2017 established under the BC Act.

The BDAR was prepared by Eco Logical Australia and is included at Appendix J and will assess the proposed development including the new temporary detention basin.

8.12.1 Existing environment

The site and immediate surrounds are within the Sydney Basin Region Interim Biogeographic Regionalisation for Australia (IBRA) Bioregion and Cumberland subregion, within the Cumberland Plain and Sydney Basin Diatremes Mitchell Landscapes. The remnant vegetation consists of a native vegetation along the northern boundary of the development site (Figure 26).

Landscape vegetation and open exotic lawns also feature within the development site. The vegetated area in the south-western corner of the site consists of a weed-infested pine plantation with little native vegetation.

Given the historical disturbance of the site, the BDAR estimates approximately 3.48 ha of the site contains native vegetation.

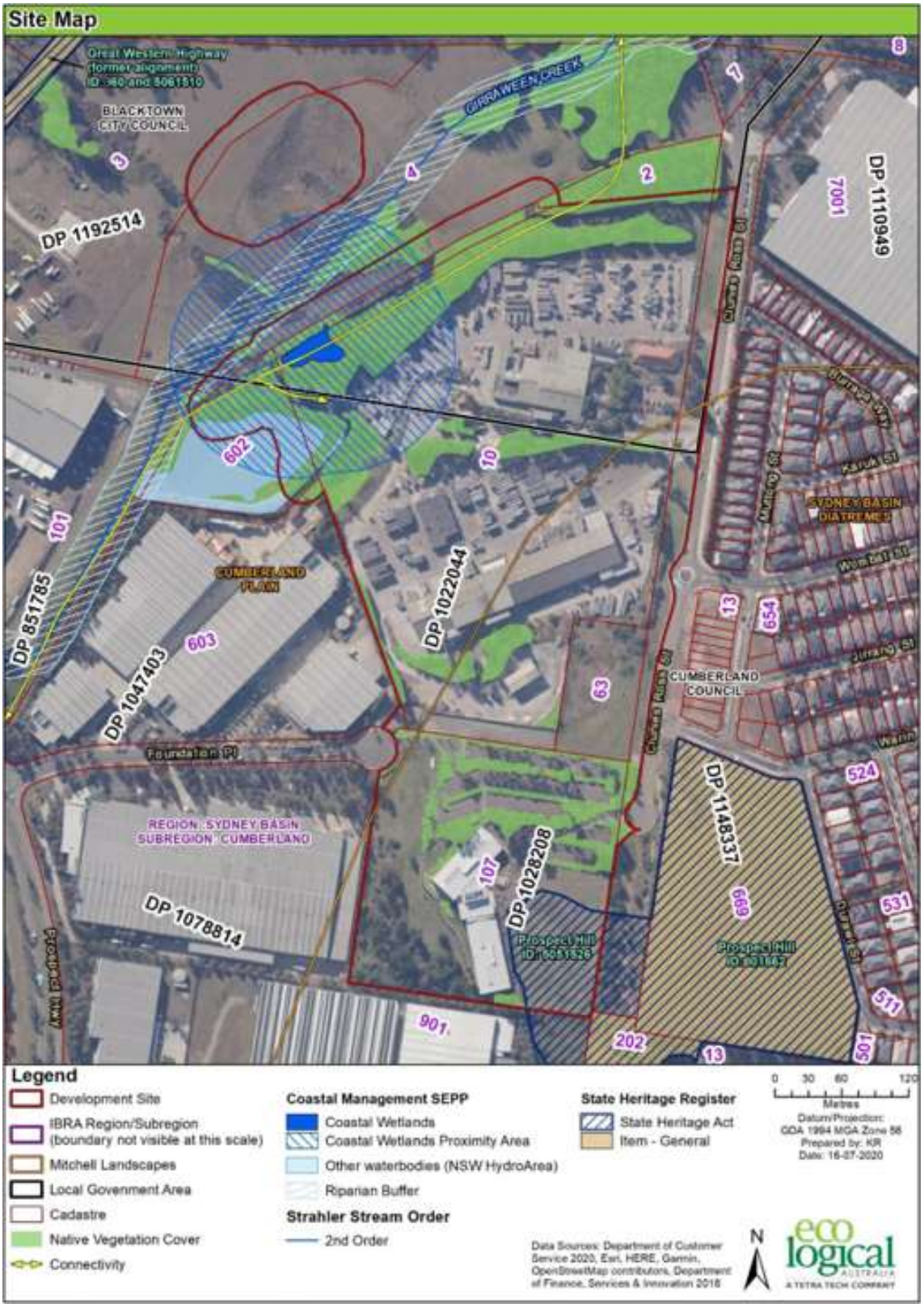

Figure 26: Existing biodiversity features of the site (Eco Logical, 2020)

8.12.2 Flora assessment

Eco Logical identified four native vegetation communities within the site and retention basin site (Table 36 and Figure 27).

PCT ID	PCT Name	Condition	Area (ha)
835	*Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion*	TEC	1.15
830	*Forest Red Gum - Grey Box shrubby woodland on shale of the southern Cumberland Plain, Sydney Basin Bioregion*	Planted	1.31
1071	*Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion*	Dam	0.54
1800	*Swamp Oak open forest on river flats of the Weedy Cumberland Plan and Hunter Valley*	Weedy	0.99
	TOTAL		**3.99**

Table 36: Native vegetation communities within the site (Eco Logical, 2020)

The native remnant vegetation in the development site was mapped as PCT 835- *Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion*. This PCT is part of the threatened ecological community (TEC), *River-flat Eucalypt Forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions* which is listed as an endangered ecological community under the NSW *Biodiversity Conservation Act 2016* (BC Act).

This TEC is also nominated for listing under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), however PCT 835 did not satisfy the criteria for listing under the EPBC Act. For PCT 835, the BAM Calculator generated a vegetation integrity score of 29.4. In total, 17 ecosystem credits are required to offset 1.15 ha of impacts to PCT 835 within the development site.

For the purposes of this assessment, native planted vegetation been mapped as a modified 'Planted' version of PCT 830 *Forest Red Gum - Grey Box shrubby woodland on shale of the southern Cumberland Plain, Sydney Basin Bioregion*. The vegetation comprised native and exotic plantings in a landscaped carpark setting and did not conform to a TEC. The integrity score for PCT 830_planted was 19.2. The removal of 1.31 ha of PCT 830 will require 13 ecosystem credits.

A small amount of semi-aquatic native vegetation around the dams will be directly impacted, resulting in the clearing of 0.39 ha of PCT 1071 *Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion*. The vegetation integrity score was low (2.2) and therefore, this PCT does not require offset.

The proposed temporary detention basin to the north of the site has been located in an area of predominantly exotic grasses and weeds to reduce impacts to PCT 1800. The remainder of the development site is comprised of land classified as cleared/exotic.

Figure 27: Plant Community Types (Eco Logical, 2020)

8.12.3 Threatened Species

No threatened flora or fauna species were recorded within the development site during the fieldwork undertaken for the BDAR. However, no targeted surveys for candidate species credit species were undertaken due to Novel Coronavirus 19 access restrictions into the site. Under Step 5 in Section 6.4 of the BAM the assessor may assumed presence for candidate species credit species. The development site contains potential habitat for one species credit species: *Myotis macropus* (Southern Myotis).

Assuming presence was required as part of this assessment for Southern Myotis. 21 species credits were required to offset the potential impact to 0.82 ha PCT 835, 0.54 of PCT 1071. 0.85 ha of PCT 1800 and 0.10 ha of PCT 830 which represents potential breeding and foraging habitat the Southern Myotis.

One Matter of National Environmental Significance (MNES) was identified as having potential to be adversely affected by the proposed works. *Pteropus poliocephalus* (Grey-headed Flying-fox) is listed as vulnerable under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and it is considered that this species could potentially use some of the development site for foraging.

An assessment of the Commonwealth Significant Impact Criteria was undertaken for the Grey-headed Flying-fox. This assessment concluded that the project is unlikely to have a significant impact on this species.

8.12.4 Avoidance and Mitigation Measures

The BDAR analyses the avoidance and mitigation measures to minimise impacts to the biodiversity values of the site and surrounds.

Noting that the majority of the site has experienced significant disturbance the BDAR acknowledges the concept design is located mostly in areas of poor condition native vegetation or planted vegetation. The BDAR noted that development will also result in the removal of 1.15 ha of vegetation mapped as part of a TEC in low /moderate condition and 2,3 ha of potential habitat for one threatened species, Southern Myotis.

In addition to the offsetting of ecosystem and species credits, the BDAR recommends a range of mitigation measures which include:

- pre-clearing surveys to minimise potential impacts on fauna and careful removal of any hollow bearing trees identified during the pre-clearing surveys
- temporary fencing to avoid disturbance outside the project footprint
- carrying out clearing activities outside breeding season for birds and bats
- clearing identifying trees to be retained or protected
- implementing erosion and sediment controls to minimise potential downstream water quality impacts
- measures to prevent the spread of weeds or pathogens
- staff awareness training
- use of native species representative of the PCTs in landscaping

The BDAR concluded that the development does not contain any candidate species for Serious and Irreversible Impacts (SAII).

8.13 Ecologically Sustainable Development

An Ecologically Sustainable Design Report (ESDR) has been prepared in accordance with the SEARs, Australian Greenhouse Office (AGO) Factors and Methods Workbook, Guidelines for energy Savings Action Plans, the National Construction Code (NCC) and relevant Australian Standards (AS). The ESDR was prepared by Sustainable Development Consultants and is included at Appendix X.

The report outlines initiatives to be incorporated throughout the design, construction, occupation and post occupancy stages of the development to ensure the project will meet best practice Ecologically Sustainable Development (ESD) Principles and address the SEARS.

8.13.1 Greenhouse Gas and Energy Efficiency

The proposed warehouse development will minimise energy use through efficient heating and cooling systems, lighting and superior building envelope. The development will also meet and exceed the requirements of the Building Code of Australia (BCA) – Section J Energy Efficiency.

The following measures in Table 37 will be employed to incorporate ecologically sustainable development at all phases.

Design Requirement	
Thermal and Energy Performance	• Improved building form and thermal envelope building fabric including increased insultation and high specification glazing • Energy efficient HVAC systems • LED lighting with illumination power densities equal to or less than the maximum set out in the 2019 NCC • Lighting controls such as sensors and timers for external lighting and lighting in infrequently used areas • The provision of hot water through either high efficiency heat pump systems or solar boosted systems
Building Sealing	• All windows doors, exhaust fans and pipe penetrations will be constructed to minimise air leakage as required by the provisions of the 2019 NCC
Peak Electricity Demand Reduction	• Peak electricity demands will be reduced by incorporating the measures listed above

Table 37: Greenhouse Gas and Energy Efficiency Strategies (Source: Sustainable Development Consultants)

8.13.2 Mitigation against potential impacts of Climate Change

The development has been designed to incorporate initiatives to adapt to a changing climate and mitigate urban heat island effects. Risks and consequences of climate change have been accessed for the site, considering its location and characteristics based on the Australian Community Climate and Earth System Simulator (ACCESS) modelling. The following potential climate risks and adaptive actions are detailed in Table 38.

Design Requirement	Adaptive Action
Reduced Average Rainfall	• Oversize rainwater tanks and employ drought resistant landscaping to reduce the overall water load required for irrigation
Extreme Rainfall Events	• All downpipes to be capable of withstanding high volumes of water flowing over roofs, with eaves gutters designed for 1 in 20 year storm event • Surface drainage and box gutters designed for 1 in 100 year storm events
Increased Average Annual Temperature – HVAC System Capacity	• Air conditions designed to handle higher specified conditions than required in Western Sydney, to accommodate rising cooling loads
Increased Average Annual Temperature – Thermal Comfort	• Space for adding insultation on the facades of the warehouse will be incorporated into the design to help reduce the thermal heat gain for workers • Any skylights will be insulated and/or well ventilated to reduce the amount of heat transfer into the buildings
Temperature Extremes	• Air conditioners designed to handle higher specified conditions than required in Western Sydney • Policies for workers going home on extreme heat days will be considered to be implemented
Urban Heat Island Effect	• Managed by maximising landscaped areas and the use of green walls • Roofing materials will be selected with a three year solar reflectance index (SFI) greater than 64
Storms – Property Damage	• Solar panels to be high quality with tempered glass to cope with potential hail • Ensure comprehensive insurance to cover the panels and the entire building
Storms – Electricity Infrastructure Damage	• Batteries or alternative back up power generation to run essentials in the event of a prolonged power outage

Table 38: Climate risk and adaptation strategies (Source: Sustainable Development Consultants)

8.13.3 Other

Ecologically Sustainable Development principles have been incorporated in every aspect of the project, with management, indoor environment quality, transport, water, materials, emissions, and innovation discussed further within the ESDR.

8.13.4 Conclusion

The proposed development is capable of meeting best practice ESD outcomes through a number of initiatives employed throughout the whole project. The recommendations discussed above and further detailed in the ESDR will ensure proposal will benefit the surrounding environment with an ecologically sustainable development.

9 Summary of Mitigation Measures

In accordance with the SEARs, the following table provides a consolidated summary of the Applicant's commitments in relation to management, monitoring and reporting activities for the proposed development.

Issue	Mitigation Measure	EIS Reference
Urban Design and Visual	• the proposal consists of varied built form to follow the sloping topography and reduce the perceived bulk of the warehouses • warehouses have been articulated to reduce the overall visual impact of the development on adjoining residential sites • the development has been designed to maintain view corridors from Prospect Hill by siting the height of the proposed warehouses below existing office building • the frontage to Clunies Ross Street will be landscaped to screen the development from adjoining residential properties • the proposed warehouses will be setback a minimum of 3 metres from the property boundary, or 20 metres from the property boundary adjoining Clunies Ross Street to mitigate visual impacts and perceived bulk	Section 8.1.1 Appendix C, E & G
	• the proposed material palette assists in articulating the built form and minimising the perceived scale of the development	Section 8.1.2 Appendix C, E & G
Heritage	• the proposed materials and colour scheme have been selected to respond appropriately to the site's heritage and reflect the sites history as an area of Aboriginal importance and as a quarry • the proposed design will incorporate deep recesses and dark shaded colors to acknowledge the carved rocks found in the quarry • the proposed diagonal chevrons pattern and industrial materials colour palette acknowledge those used in indigenous art	Section 8.1.1 Appendix Q
	• colour schemes will involve neutral colours and bold design elements will be minimised to ensure that the warehouses blend into the existing environment and surrounding landscape • existing established trees will be retained where possible and additional screening vegetation will be planted to mitigate visual impacts when viewed from the nearby heritage item • detailed design of the warehouse, particularly warehouse 1 and warehouse 6 will seek to minimise the potential visual obstruction between Prospect Hill and Prospect Reservoir, St Bartholomew's Church and the Blue Mountains • a photographic archival recording (PAR) of Prospect Hill (SHR #01622) and its significant view lines will be undertaken prior to construction. A copy of the PAR will	Section 8.2.2 Appendix R

Issue	Mitigation Measure	EIS Reference
	be lodged with Cumberland Council and Heritage NSW – DPC	
Traffic and Transport	• a green travel plan has been included as part of the development to provide guidance and targets for sustainable transport options • separate access is provided for light and heavy vehicles to provide for safer access and to avoid conflicts • sustainable travel is encouraged in the form of car sharing, public transport and active transport which will also act to mitigate potential congestion • a construction traffic management plan will be prepared and submitted to Council separate to this DA, in response to any future conditions of consent	Section 8.3 Appendix S
Soils and Water	• additional storage is proposed to be introduced to the on-site system to enable discharge of the portion of the site within the Blacktown LGA to discharge directly to the Basin to avoid overflow • The Dams Safety Committee will be consulted during detailed design of the amended storage to ensure the ongoing safety and stability of the storage and storage structures is maintained • all buildings are sited 0.5m above the 1 in 100 year ARI design flood level of the regional detention basin • rainwater harvesting will be provided as part of the development to encourage reuse and recycling • requirements of both Council DCPs have been meet regarding works in and around flooding areas • stormwater detention measures (via regional basin) have been included to manage pre and post development runoff • overland flow paths to manage runoff in large storm events have been made including achieving at least 0.5m freeboard to building levels from the flow paths	Section 8.4 Appendix D
	• to assist in maintaining embankment stability, permanent batter slopes in clay will be no steeper than 3 horizontal to 1 vertical while temporary batters will be no steeper than 2 horizontal to 1 vertical • an erosion and sediment control plan will be prepared prior to commencing construction	Section 8.5 Appendix D
Noise and Vibration	• all plant and equipment are to be maintained such that they are in good working order • a register of complaints is to be recorded in the event of complaints being received, including location, time of complaint, nature of complaint and actions resulting from the complaint • if required a noise level measurement of the offending plant item generating complaints is to be conducted and noise mitigations undertaken to reduce noise levels to within the Noise Management levels in the event magnitude of noise levels is found to be above suitable levels • the use of percussive and concrete sawing should be undertaken behind a closed façade when possible	Section 8.6 Appendix U

Issue	Mitigation Measure	EIS Reference
	• the use of high noise generating equipment including hydraulic hammers, rock cutters or the like should not be undertaken prior to 8am Monday to Friday or 8:30am Saturdays • the loading of trucks should be conducted such that there is not a requirement to stack truck on the roadways adjacent to residential receivers • a construction and vibration management plan to be prepared to include mitigation measures to be implemented to minimise construction and manage all construction impacts • all future operational plant and equipment are to be selected and acoustically treated to ensure the noise levels at all surrounding receivers comply with noise emission criteria detailed within the NVIA • noise modelling will be updated based on detailed designs of the warehouses, with noise monitoring to verify and ensure compliance with the NVIA noise trigger levels	
Air Quality	• developing stakeholder consultation plans and procedures to respond to air quality complaints • site management, site inspections and monitoring procedures • preparing and maintaining the site to minimise exposed surfaces and stockpiles, and the potential for tracking soil/mud onto hard surfaces • dust suppression including covering or stabilizing stockpiled materials and wetting exposed surfaces • demolition management including internal soft strip, water suppression sprays • revegetating disturbed surfaces as soon as practicable	Section 8.7.2 Appendix V
	• good site management practices, including observation of speed limits, minimization of vehicle use, and engine idling will minimise any potential air quality impacts during the operation phase	Section 8.7.2 Appendix V
Hazards and Risk	• the proposed refrigeration system will require the use of ammonia. The system will be sealed and will be refilled by a suitable licensed industrial gas supplier at a rate below the threshold in SEPP 33	Section 8.8 Appendix M
Contamination	• a data gap investigation (DGI) and remedial action plan (RAP) will be prepared prior to any earthworks associated with the development	Section 8.9.2 Appendix K
Waste	• implementation of a waste management plan for the development • maximise resource recovery by reuse and recycling • minimise the generation of waste to landfill • minimise waste material avoidance and reuse on the site • establish record keeping, monitoring and reporting procedures • comply with the requirements of the relevant statutory authorities	Section 8.10 Appendix W

Issue	Mitigation Measure	EIS Reference
	• adopt an ongoing improvement approach to improve on best practice waste management principles • waste storage areas will be adequately sized to comfortably accommodate the required number of bins associated with the development • waste storage areas will be designed with sufficient space for convenient access and maneuvering and additional specialised waste areas • waste storage areas will be designed with drainage connection to sewer to prevent potential contamination in stormwater	
Bushfire and Incident Management	• asset protection zones to be established around the site and managed in perpetuity • landscaping to be established and managed in accordance with *Planning for Bush Fire Protection* (RFS 2019) • design and construction measures in accordance with AS 3959 or the National Association of Steel-framed Housing standard as modified by Section 7.5 of RFS 2019 • detailed design to ensure access and services (water, gas, electricity) meet the requirements of RFS 2019 • emergency and evacuation planning	Section 8.11 Appendix L
Biodiversity	• pre-clearing surveys to minimise potential impacts on fauna and careful removal of any hollow bearing trees identified during the pre-clearing surveys • offsetting residual impacts of the proposal by retiring credits in accordance with the NSW Offset Policy • temporary fencing to avoid disturbance outside the project footprint • clearing activities will be done outside breeding season for birds and bats • identifying trees to be retained and/or protected • implementing erosion and sediment controls to minimise potential downstream water quality impacts • measures to prevent the spread of weeds or pathogens • staff awareness training to be considerate to surrounding environment • use of native species representative of the PCTs in landscaping.	Section 8.12.4 Appendix J
Greenhouse Gas and Energy Efficiency	• improved building form and thermal envelopment building fabric including increased insulation with high specification glazing will provide for energy efficiency • energy efficient HVAC systems • LED lighting with illumination power densities equal to or less than the maximum set out in the *National Construction Code* (2019 NCC) • lighting controls such as sensors and timers for external lighting and lighting in infrequently used areas have been incorporated into the design • hot water to be provided through either high efficiency heat pump systems or solar boosted systems	Section 8.13.1 Appendix X

Issue	Mitigation Measure	EIS Reference
	• all windows, doors, exhaust fans and pipe penetrations will be constructed to minimise air leakage as required by the provisions of the 2019 NCC	
Ecologically Sustainable Development	• oversize rainwater tanks and employ drought resistant landscaping to reduce the overall water load required for irrigation to mitigate impacts reduced average rainfall • downpipes to be capable of withstanding high volumes of water flowing over roofs, with eaves gutters designed for 1 in 20 year storm event to mitigate extreme rainfall events. Surface drainage and box gutters designed for 1 in 100 year storm events • air conditions designed to handle higher specified conditions than required in Western Sydney to accommodate for potential increased average annual temperature • space for adding insultation on the facades of the warehouse will be incorporated into the design to help reduce the thermal heat gain for workers • skylights will be insulated and/or well ventilated to reduce the amount of heat transfer into the buildings to accommodate for increased average annual temperature • policies for workers going home on extreme heat days will be considered to being implemented to mitigate extreme temperature events • maximised landscaped areas and the use of green walls have been employed in the development to mitigate the impacts of urban heat island effect • solar panels to be high quality with tempered glass to cope with potential hail in extreme storm events • batteries or alternative back up power generation to run essentials in the event of a prolonged power outrage will be available to mitigate impact of storm events	Section 8.13.2 Appendix X

10 Conclusion

The EIS has been prepared in accordance with the SEARs issued by DPIE and provides a comprehensive assessment of the potential impacts associated with the development. It addresses all relevant strategic and statutory documents, policies and instruments. The EIS concludes that the proposal is in accordance with the objectives and relevant provisions of the *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP).

The EIS concludes that the development is justified on the basis that will result in the efficient and effective use of existing industrial land within the Western Sydney Employment Area to provide much needed industrial uses including warehousing and logistics located within an established industrial zone close to existing transport corridors.

The development has been designed to ensure that it will operate without impacting on the adjoining regional flood storage and retention capability and has been designed to ensure habitable floor levels are above the Probable Maximum Flood level for the site.

The development will avoid direct disturbance of Prospect Hill and the development of warehouses on the site are predicted to have a minor visual impact subject to the implementation of design measures sympathetic to the landscape. No items of Aboriginal or European heritage significance were identified on the site.

The development has been designed to accommodate the neighbouring Prospect Hill heritage reserve and reflect the site's history area of Aboriginal importance and as a quarry. The resulting concept reflects the site's heritage and the proposed industrial use in line with the surrounding industrial area.

The conclusions and recommendations provided in the accompanying technical reports confirm the proposal will not have a detrimental impact on the surrounding environment and will not result in serious or irreversible impacts on any endangered or threatened species, ecological communities of their habitats.

Further, the EIS demonstrates the development has strategic merit as it is consistent with the aims and objectives of the relevant strategic plans that apply to the site including the Greater Sydney Region Plan and Central City District Plan. The development will strengthen opportunities in the Central City District and Greater Parramatta region through the provision of additional warehousing, distribution and office facilities.

The development will:

- protect employment land through the provision of additional employment uses
- continue the operation of industrial uses in the *Western Sydney Employment Area*
- attract investment from innovative industries
- continue to develop, innovate and grow the existing cluster of transport and logistics, storage, warehousing and distribution
- reinforce the role of the industrial land around Pemulwuy and Prospect and promote a freight gateway through the provision of additional employment opportunities associated with industrial facilities.

The development is therefore considered to be in the public interest and warrants approval.

Appendix A

Secretary's Environmental Assessment Requirements

Appendix B

Cost Estimate Summary

Appendix C

Architectural Plans

Appendix C1

Demolition Plan

Appendix D

Civil Engineering Report and Plans

Appendix E

Design Statement

Appendix F

Landscape Plan

Appendix G

Assessment of Landscape Plan DCP compliance

Appendix H

Community Engagement Report

Appendix I

Site Specific Development Control Plan

Appendix J

Biodiversity Development Assessment Report

Appendix K

Phase 1 and Phase 2 Environmental Site Assessment

Appendix L

Bushfire Protection Assessment Report

Appendix M

Hazards and Risk Assessment

Appendix N

Indicative Signage Strategy

Appendix O

Building Code of Australia Assessment

Appendix P

Green Travel Plan

Appendix Q

Aboriginal Cultural Heritage Assessment Report

Appendix R

Statement of Heritage Impact

Appendix S

Transport Impact Assessment

Appendix T

Geotechnical Investigation

Appendix U

Noise and Vibration Impact Assessment

Appendix V

Air Quality Impact Assessment

Appendix W

Waste Management Plan

Appendix X

Ecologically Sustainable Design Report