Americold Prospect South Expansion

Environmental Impact Statement

Prepared for Americold Logistics Ltd
Prepared by Beca Pty Ltd
ABN: 85 004 974 341

23 January 2023

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Contents

Appendices

Revision History

Revision Nº	Prepared By	Description	Date
A	Peta Brunel	Draft for internal review.	1.6.22
B	Peta Brunel	Draft for DPE review.	27.6.22
C	Peta Brunel	Draft for DPE review	20.7.2022
D	Fran Soler / Matt Brookes	Final for DPE Submission	10.10.2022
E	Matt Brookes	Final for DPE Submission Rev2	19.10.2022
F	Matt Brookes	Final Updated followings RFIs	23.01.2023

Document Acceptance

Action	Name	Signed	Date
Prepared by	Matt Brookes		23.01.2023
Reviewed by	Matt Brookes		23.01.2023
Approved by	Brandon Tai		23.01.2023
on behalf of	Beca Limited		

Glossary

Term	Meaning
AAC	Australian Acoustical Consultants
ACHAR	Aboriginal Cultural Heritage Assessment Report
AEP	Annual Exceedance Probability
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
ASRIS	Australian Soil Resource Information System
BC Act	Biodiversity Conservation Act 2016
BDAR	Biodiversity Development Assessment Report
CEMP	Construction Environmental Management Plan
CIV	Capital Investment Value
CTMP	Construction Traffic Management Plan
DCP	Development Control Plan
DECCW 2010	Aboriginal Cultural Heritage Consultation Requirements for Proponents
DECCW 2011	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	Environmental Protection Authority
EPBC Act	*Environment Protection & Biodiversity Conservation Act 1999*
EPI	Environmental Planning Instruments
ESCP	Erosion & Sediment Control Plan
EVR	Energy Recovery Ventilator
FRNSW	Fire & Rescue NSW
IAQM	Institute of Air Quality Management
IN1	Industrial 1 Zoning
IN2	Light Industrial Zone
LEP	Local Environmental Plan
LGA	Local Government Area
LoS	Level of Service
LSPS	Local Strategic Planning Statement
MAAS	Membership of Australian Acoustical Society
MNES	Matters of National Environmental Significance
NCC	National Construction Code
NPW Act	*National Parks and Wildlife Act 1974*
OSD	On-site detention
PHA	Preliminary Hazard Analysis
PMF	Probable Maximum Flood
POEO Act	*Protection of the Environment Operations Act 1997*

Term	Meaning
PPE	Personal Protective Equipment
PSI	Preliminary Site Investigation
RAPs	Registered Aboriginal Parties
SEARs	Secretary's Environmental Assessment Requirements
SEPPs	State Environmental Planning Policies
SHR	State Heritage Register
SMP	Stormwater Management Plan
SOHI	Statement of Heritage Impact
SP2	Special Purpose Zone 2 – drainage
TfNSW	Transport for New South Wales
TIA	Traffic Impact Assessment
WMP	Waste Management Plan

Secretary's Environmental Assessment Requirements (SEARs)

On 29 September 2020, Americold Logistics Ltd (Americold) made a request of the Minister pursuant to Clause 3, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* for the Secretary's Environmental Assessment Requirements (SEARs). The SEARs were received on 19 October 2020. On 17 December 2021, a request for formal amendment of the SEARs was made due to amendments to the proposed development. The amended SEARs were issued on 23 December 2021 and are contained in **Appendix A – SEARs.**

Table 1.1 outlines the requirements of the SEARs and the section of this Environmental Impact Statement (EIS) where the requirements are fulfilled.

Table 1.1: Secretary's Environmental Assessment Requirements

SEARs Requirement	EIS Reference
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) and must have regard to the State significant development guidelines. In addition, the EIS must include: - a detailed description of the development, including: o a description of the development;	Section 3
o the need and justification for the development;	Section 1.2
o details on how the proposed expansion will integrate with the existing onsite operations during construction and operations;	Section 3
o likely staging of the development;	Section 3
o likely interactions between the development and any existing, approved and proposed developments in the vicinity of the site;	Section 3
o plans of any proposed works with details of the proposed setbacks, site coverage, car parking, landscaped areas; and	Appendix E – Site Development Plans
o details of infrastructure upgrades or items required to facilitate the development, and a description of any arrangements to ensure the upgrades will be implemented in a timely manner and maintained.	Section 3
- consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments;	Section 4
- a list of any approvals that must be obtained for example under *the Local Government Act 1993*, the *Roads Act 1993*, or any other Act or law before the development may lawfully be carried out;	Section 4.5
- consideration of key issues identified by Government agencies and Cumberland City Council (see Attachment 2); and	Section 8
- a risk assessment of any potential environmental impacts of the development, identifying the issues for further assessment.	Section 10
Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: - adequate baseline data; - consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed);	Section 7

SEARs Requirement	EIS Reference
- measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment; and	
The EIS must also be accompanied by: - a report from a qualified quantity surveyor providing a detailed calculation of the Capital Investment Value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV;	Appendix B – Quantity Surveyor's Report
- an estimate of jobs that will be created during the construction and operational phases of the proposed development; and	Section 3
- certification that the information provided is accurate at the date of preparation.	Section 1.5
Key Issues The EIS must include an assessment of potential impacts of the development (including cumulative impacts) and develop appropriate measures to avoid, mitigate, manage and/or offset these impacts. The EIS must address the following specific matters:	Section 7
1. Statutory and Strategic Context - demonstrate that the development is consistent with all relevant planning strategies, environmental planning instruments, adopted precinct plans, draft district plan(s) and adopted management plans and justification for any inconsistencies. The following documents must be addressed: o State Environmental Planning Policy (State and Regional Development) 2011 o State Environmental Planning Policy No. 33 – Hazardous and Offensive Development; o State Environmental Planning Policy No. 55 – Remediation of Land; o State Environmental Planning Policy No. 64 – Advertising and Signage; o State Environmental Planning Policy (Infrastructure) 2007; and o Cumberland Local Environment Plan 2021.	Sections 4 & 5
2. Community and Stakeholder Engagement – including: - a detailed community and stakeholder engagement strategy identifying who and how stakeholders will be engaged in the process; - a report detailing the issues raised and how they have been addressed including any changes to the development; and - details of proposed engagement activities throughout the construction and operation of the development.	Section 6
3. Traffic and Access – including: - quantitative Traffic Impact Assessment prepared in accordance with the relevant Council, Austroads and RMS/TfNSW guidelines; - details of all daily and peak traffic and transport movements likely to be generated by the development (vehicle type, public transport) during construction and indicative operation; - cumulative assessment that considers the change in traffic and parking impacts between the proposed expansion and the existing development, including how access, parking and loading/unloading operations integrate with the existing onsite operations during construction and operations; - details and a justification of access to, from and within the site (vehicular and pedestrian);	Section 7.1 & Appendix G – Traffic Impact Assessment & Appendix U – Green Travel Plan

SEARs Requirement	EIS Reference
- impacts on the safety and capacity of the surrounding road network (including intersections along Reservoir Road and Prospect Highway) and access points, using SIDRA modelling or similar to assess impacts from current traffic counts and cumulative traffic from existing and the proposed development; - demonstrate that sufficient loading/unloading, car parking and pedestrian and cyclist facilities have been provided for the development; and - details of road upgrades, new roads or access points required for the development, if necessary.	
4. Urban Design Measures to minimise the visual impacts of the development, including: - a detailed assessment (including photomontages and perspectives) of the development including height, colour, scale, building materials and finishes, signage and lighting, particularly from nearby residential receivers and significant vantage points of the broader public domain; - detailed plans showing suitable landscaping; and - include details of any advertising signage or structures proposed as part of the development.	Section 7.8 and Appendix M – Landscape Plans
5. Social and Economic – including: - identifying and analysing the potential social impacts of the development from the point of view of the affected community and other relevant stakeholders; - assessment of the significance of positive, negative and cumulative social impacts; - mitigation measures and monitoring of likely negative social impacts; and - an analysis of potential economic impacts of the development, including a discussion of any potential economic benefits.	Sections 0 & 7
6. Noise and Vibration – including: - a quantitative noise and vibration impact assessment undertaken by a suitably qualified person in accordance with the relevant Environment Protection Authority (EPA) guidelines and including an assessment of nearby sensitive receivers; - cumulative impacts of proposed onsite operations combined with other existing and proposed developments in the locality; and - details of proposed mitigation, management and monitoring measures.	Section 7.2 and Appendix H – Noise & Vibration Impact Assessment
7. Soil and Water – including: - a description of water demands of the development and a breakdown of water supplies;	Section 7.3
- identify any water licensing requirements under the *Water Act 1912* or *Water Management Act 2000*;	Section 7.3
- details of proposed erosion and sediment controls during construction;	Section 7.4 and Appendix I – Stormwater Management Plan
- detailed plans and a description of the integration of the proposed and existing surface and stormwater management system, including on-site detention, designed in accordance with Water Sensitive Urban Design principles;	Section 7.4 and Appendix I – Stormwater Management Plan
- an assessment of potential flooding impacts;	Section 7.5 and Appendix J – Flood Modelling Report

SEARs Requirement	EIS Reference
- an assessment of potential impacts (including from potential spillage of materials) on surface and groundwater resources, drainage patterns, soil (stability, salinity and acid sulfate soils), related infrastructure, watercourses and riparian land and proposed mitigation measures; and	Section 7.6 & Appendix N – Biodiversity Development Assessment Report
- an assessment of potential site contamination and remediation management measures.	Section 7.6 & Appendix K – Preliminary Site Investigation
8. Hazards and Risks – including: - 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 existing and proposed development. - Should preliminary screening indicate that the development 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).	Section 7.7 & Appendix L – Preliminary Risk Screening Report
9. Biodiversity – including: - details of the number of trees to be removed and the number of trees to be planted on the site; and - 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 7.9 & Appendix N – Biodiversity Development Assessment Report
10. Heritage – including: - identification and assessment of potential impacts on Aboriginal cultural heritage values, including a description of any measures to avoid, mitigate and/or manage any impacts. Justification for reliance on any previous Aboriginal Cultural Heritage Assessment Report or other heritage assessment for the site must be provided; and - consideration of heritage items within the vicinity of the site and any potential heritage impacts associated with the development.	Section 7.10, Appendix O – Aboriginal Cultural Heritage Assessment Report & Appendix P – Statement
11. Waste Management – including: - details of the quantities and classification of all waste streams to be generated by the development in accordance with the EPA's Waste Classification Guidelines (2014); - details of waste storage, handling, transport, and disposal; and - the measures that would be implemented to ensure the development is consistent with the aims, objectives and guidelines in the NSW Waste and Sustainable Material Strategy 2041.	Section 7.11 and Appendix Q – Waste Management Plan

SEARs Requirement	EIS Reference
12. Air Quality – including: - a description of all air quality impacts (including dust) from the development, particularly from the outdoor storage area; - an assessment of the air quality impacts at receivers during construction and operation of the development, in accordance with the relevant Environment Protection Authority guidelines; and - details of any mitigation, management and monitoring measures required to prevent and/ or minimise emissions, particularly dust control during site preparation and civil works.	Section 7.12 & Appendix R – Air Quality Review
13. Ecologically Sustainable Development and Energy Efficiency – including: - an assessment of how the development will incorporate ecologically sustainable development principles in all phases of the development; - consideration of the use of green walls, green roof and/or cool roof into the design; - climate change projections developed for the Sydney Metropolitan area and how they are used to inform the building design and asset life of the development; and - an assessment of the energy uses on-site, and demonstrate the measures proposed to ensure the development is energy efficient.	Section 9 and Appendix T – ESD & Energy Efficiency Report
14. Planning Agreement / Development Contributions - demonstration that satisfactory arrangements have been or would be made to provide, or contribute to the provision of, necessary local and regional infrastructure required to support the development.	Section 4
Plans and Documents The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents.	Appendix E – Site Development Plans
Engagement 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. You must detail the engagement undertaken and demonstrate how it is consistent with the Undertaking Engagement Guidelines for State Significant Projects. You must also detail how issues raised and feedback provided have been considered and responded to in the development. Where amendments have not been made to address an issue, a short explanation should be provided. In particular you must consult with: - Cumberland City Council; - Transport for New South Wales; - Environment, Energy and Science of DPIE; - Water Group of DPIE; - Heritage NSW; - NSW Fire and Rescue; - relevant public utility providers; - surrounding landowners and the local community; and - any public transport or community service providers.	Section 6 & Appendix F – Community & Stakeholder Engagement Report

1 Introduction

1.1 Applicant (Americold)

Americold Logistics Limited (Americold) is a global provider of temperature-controlled infrastructure and supply chain solutions, connecting food from farm-to-fork. As an operator of the world's largest integrated network of temperature-controlled warehouses, Americold has extensive experience in the ownership, operation, acquisition, and development of cold storage facilities and is a market leader in the temperature-controlled warehouse environment.

Today, Americold operates a multi-national network of 238 temperature-controlled warehouses, encompassing over 1.4 billion cubic feet of space. Countries of operation include Argentina, Australia, Austria, Brazil, Canada, Chile, Ireland, the Netherlands, New Zealand, Poland, Portugal, Spain, the United Kingdom, and the United States.

1.2 Project Background & Objectives

1.2.1 The Problem

There is a major shortage of temperature-controlled warehouse capacity in the Sydney Market. Americold's customers are seeking to expand their volume of cold storage to ensure that they are able to support their growth and maintain products on shelves for the people of New South Wales. Americold's temperature-controlled warehouse facility in Prospect, NSW, is currently at capacity and therefore to continue to meet growing customer demand an expansion is required.

1.2.2 The Solution

Americold is proposing to expand the warehouse facility to directly respond to current social and economic circumstances by facilitating faster and more reliable on shelf availability of products. This site currently operates 24 hours 7 days a week. The expansion will store approximately 13,450 additional frozen pallets on double deep, 9 high racking, with nine new loading docks with sufficient additional capacity to meet existing and future predicted storage capacity requirements. Building amenities and lunchrooms will also be upgraded to accommodate the increase

d number of staff on site. Our design will also allow for better traffic management through truck and car segregation and a smoother access for trucks entering or exiting the property.

1.2.3 The Result

The proposed development would fulfil a significant role in satisfying our customers and market needs, as well as improving the frozen food operational efficiencies of cold storage goods distribution. This project will expand the Americold Prospect site by approx. 70% and will give Woolworths just over 20% extra temperature-controlled capacity over their existing facility.

1.3 Project Overview

Americold proposes to construct an extension to its existing temperature-controlled warehouse facility at 554-562 Reservoir Road, Prospect NSW. The proposed development will involve:

- Construction of a 5,140m² extension to the east of the existing southern warehouse.
- Reconfiguration of the existing carparking and driveways to improve truck movement, access and loading arrangements within the site; and
- Construction of ancillary buildings and plant, including a new pump house, security office, satellite plant area, staff outdoor seating area and battery storage building.

- Internal refurbishment of the existing staff amenities, lunchroom/outdoor eating area and locker room, located in an existing building to the immediate west of the southern warehouse.

The Capital Investment Value (CIV) of the project is $AUD 32.6 million (**Appendix B – Quantity Surveyor's Report**).

1.4 Site History & Existing Consents

On 1 March 2022 a request was made to the Cumberland City Council for a copy of all current and past Development Approvals relating to the site. Table 1.1 provides a summary of the details received.

Table 1.1: Past Development Approvals

Reference No.	Purpose(s)	Decision Date
93/81	The erection of four (4) factory units.	19 April 1993
95/114	The erection in two stages of two cold storage warehouses and associated offices for the purpose of a 24-hour cold store and transport terminal.	11 May 1995
2010/82/1	88 space carpark to the south-east of the existing warehouse	15 June 2010

1.5 Certification

All information included in this report is accurate as at the date of preparation.

2 Site Context

2.1 Site Description

The site is located at 554-562 Reservoir Road, Prospect, within the Cumberland Local Government Area (**LGA**) and is formally described as Lot 101 in DP851785 (**site**) (Figure 2-1).

Figure 2-1: Site Locality

The site is approximately 6.6ha, with a single access provided off Reservoir Road, northeast of the intersection with Prospect Highway. The site slopes from the front (west) to the rear (east), with a ~10m height difference.

The site is dominated by existing buildings including two existing cold storage warehouses, an existing office building and associated buildings, plant and loading facilities.

In addition to the existing buildings, staff and visitor carparking is located along the northern boundary. Heavy vehicle parking and loading facilities are located between the two existing cold storage warehouses and at the rear of the northern warehouse. An existing site access road provides informal access around the site's perimeter.

Girraween Creek is located within the site and runs parallel to the eastern boundary. Vegetation is located adjacent to the creek.

2.2 Site Context

The surrounding land is put to primarily industrial land uses, consistent with its Industrial 1 (IN1) zoning, with the exception of an undeveloped site to the northeast, zoned Special Purpose 2 – Drainage (SP2).

There are a small number of potentially sensitive receivers located in proximity to the site, including the immediately adjacent properties at 566 & 568 Reservoir Road. The St Mark's Coptic Catholic Church is located diagonally across Prospect Highway, approximately 70m from the site boundary. Details of potentially sensitive receivers within 500m of the site are outlined in Table 2.1 below.

Table 2.1: Sensitive Receivers

Address	Receiver Name / Type	Proximity to Site
N/A (Lot 1/DP325874)	St Bartholomew's Cemetery	~400m (to boundary)
566 Reservoir Road, Prospect (Lot 10/DP374325)	Dwelling	~25m (to dwelling)
568 Reservoir Road, Prospect (Lot C/DP374323)	Dwelling	~25m (to dwelling)
517 Reservoir Road, Prospect (Lot 1/DP617846)	Dwelling	~310m (to dwelling)
525 Reservoir Road, Prospect (Lot A/DP361322)	Dwelling	~250m (to dwelling)
544 Reservoir Road, Prospect (Lot 304 DP1122291)	Dwelling	~240m (to dwelling)
38/2-4 Picrite Close, Pemulwuy (Lot SP92766)	The Berry Patch Preschool and Long Day Care Centre	~120m (to boundary)
533 Reservoir Road, Prospect (Lot 200/DP858088)	St Mark's Coptic Catholic Church	~170m (to boundary)

2.3 Title Context

The site is wholly contained within Lot 101 in Deposited Plan 851785 and is subject to the encumbrances outlined in Table 2.2.

Table 2.2: Site Encumbrances

Encumbrance Reference	Restriction / Benefit
A960804	Right of way appurtenant to the part of the land above described affecting the land shown as right of way A960804 in DP560012.
J349023	Easement for transmission line affecting the part shown so burdened in the title diagram.
N223843	Covenant affecting the part shown so burdened in the title diagram.
DP851785	Easement to drain water variable width affecting the part shown so burdened in the title diagram.
DP1062796	Easement for drainage of water variable width affecting the part(s) shown so burdened in DP1062796.
	Right of access variable width affecting the part(s) shown so burdened in DP1062796.
DP1066996	Easement for sewerage purposes 10 metre(s) wide and variable.
AG323798	Positive covenant.
AG323799	Restriction(s) on the use of land.

A copy of the Certificate of Title is included as **Appendix C – Certificate of Title.**

2.3.1 Right of Way – A960804

Right of way A960804 is appurtenant to Lot 101 in Deposited Plan 851785 (i.e., it benefits the site). As all proposed works are confined to Lot 101 in Deposited Plan 851785 no impacts on this right of way are anticipated.

2.3.2 Transmission Line Easement – J349023

Transmission line easement J349023 runs parallel to the eastern boundary of the site and contains the 33kV transmission lines feeder 434/435/440 from Blacktown Terminal Station. The following works are proposed within the area subject to the transmission line easement:

- Earthworks (cut & fill)
- Pavement reinstatement
- Construction of two stairways providing emergency access/egress to the southern warehouse extension
- Construction of two new three-beam (Armco) barriers to provide additional protection for two existing power poles.
- Construction of a new layback to enhance vehicle access to the easement area.

Details of works within the easement area are shown in the plans included as **Appendix D – Transmission Line Easement (Proposed Works).**

In preparation of this EIS, Americold has engaged with Endeavour Energy in relation to works proposed within the easement. Endeavour Energy has provided Americold with a 'no objection' letter (**Appendix D – Transmission Line Easement (Proposed Works)**) relating to the works proposed.

2.3.3 Covenant – N223843

Covenant N223842 relates to the transfer of electricity easement J349023 from the then owners of the site to Prospect County Council.[1] The covenant sets out certain restrictions on the construction of a fence separating the electricity easement from the bulk of Lot 101 in Deposited Plan 851785 without the easement holder's consent.

An existing 1.8m chain-link security fence is located within the easement area between the existing rows of power poles. The fence is proposed to be earthed at the request of Endeavour Energy; however no other fencing changes are proposed as part of this application. As outlined in the 'no objection' letter from Endeavour Energy, any future proposed works incorporating the existing metal fence would need to be separately assessed.

2.3.4 Easements to Drain Water – DP851785 & DP1062796

Based on a review of the title diagram, these easements are located towards the south & east of the proposed site, as highlighted in Figure 2-2 below. No new buildings are proposed within this area, however part of the existing informal site access road which is located within the easement area will be resurfaced with heavy duty pavement as shown in **Appendix E – Site Development Plans**. A small amount of cut/fill (up to 0.25m) is also required to facilitate this resurfacing as shown in **Appendix D – Transmission Line Easement (Proposed Works).**

[1] It is understood this easement is now held by Endeavour Energy.

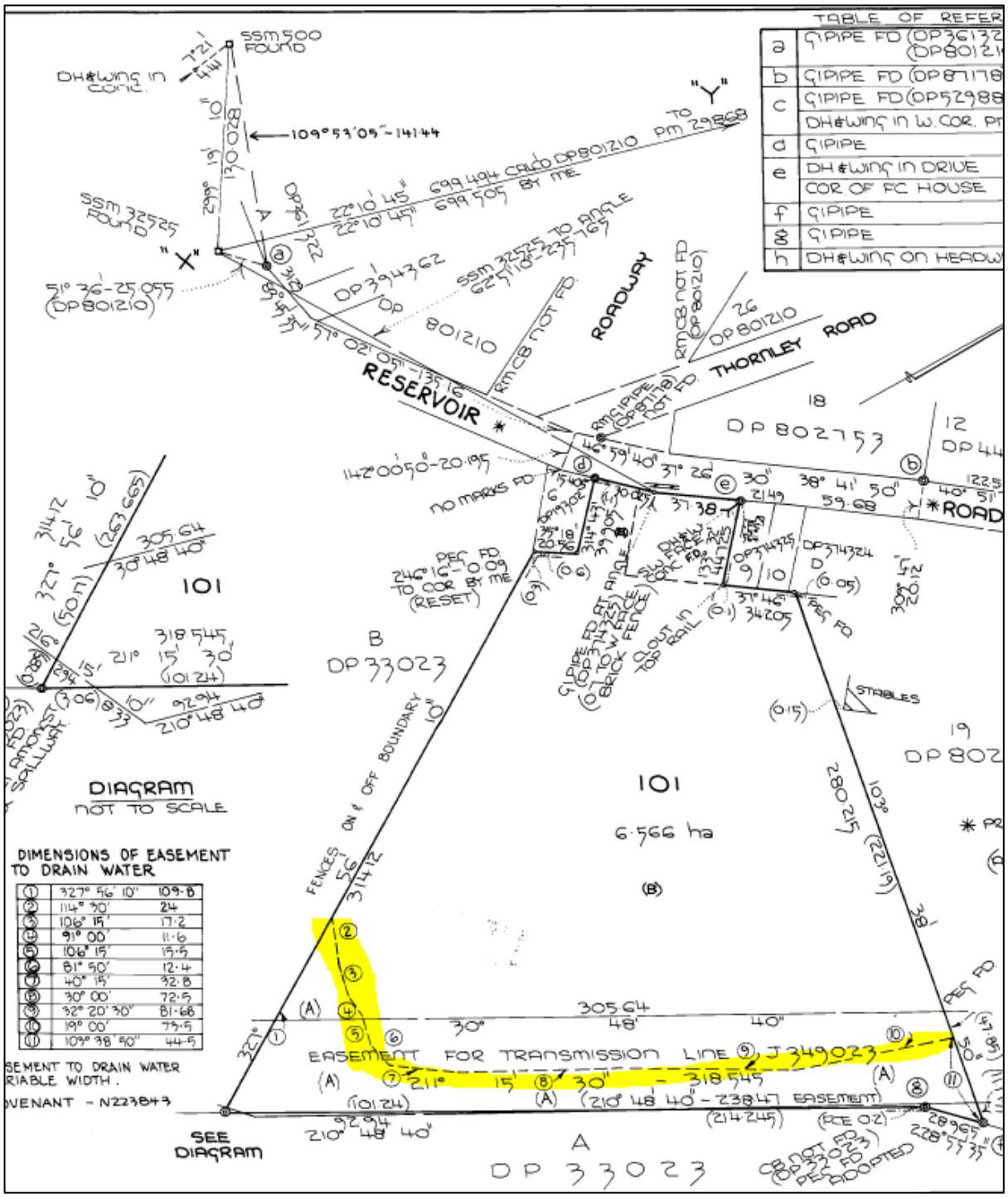

Figure 2-2: Easements to Drain Water (Title Diagram Extract)

2.3.5 Sewerage Easement – DP1066996

Sewerage easement DP1066996 cannot be identified from the title diagram and has not been further assessed.

2.3.6 Stormwater Covenants – AG323798 & AG323799

Covenants AG323798 & AG323799 relate to all gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins, and surfaces designed to treat stormwater as well as all services graded to direct stormwater to these stormwater treatment devices. The covenants include requirements for Americold to:

- Maintain stormwater treatment devices; and
- Obtain Holroyd City Council (now Cumberland City Council) consent for alterations to stormwater treatment devices.

Some alterations are proposed to stormwater management at the site as a result of the proposed development. Further details are outlined in section 7.4 and **Appendix I – Stormwater Management Plan.**

2.4 Employment Context

The site currently employees approximately 291 full and part employees, reflecting a mix of direct Americold employees and labour hire staff. On a typical workday, the site accommodates approximately 198 total employees throughout the day. The proposed development is expected to generate a requirement for up to a mix of 15 additional staff over the first 10 years of operation.

Due to the mix of fulltime and part-time employees, shift times are staggered. At the 11:00 critical shift change times, the maximum numbering of staff on site will be 137 factoring in shift crossover times. Based on this number the site has an adequate number of carparking spaces to meet this demand (i.e. excess of 34 car spaces). Most shift times do not coincide with the typical road network peak hours, and therefore site traffic demand associated with shift changeovers does not coincide with peak background traffic demand.

Shift times and staffing levels on a typical workday are detailed below in Table 2.3 and as follows:

Fulltime Warehouse shift times are:

- Day shift: 5:00am – 1:30pm
- Afternoon shift: 1:30pm – 9:30pm
- Night shift: 9:00pm – 5:00am

Part-time Warehouse shift times are:

- Day shift: 5:00am – 11:00am
- Afternoon shift: 11:15am – 5:15pm
- Night shift: 5:30pm – 11:30pm

Office Admin staff shift times are:

- Day shift: 9:00am – 5:00pm

Gatehouse admin staff shift times are:

- Day shift: 4:00am – 12:00pm
- Afternoon shift: 12:00pm – 6:00pm

Container unpacking crew shift times are:

- Day shift: 6:00am – 4:00pm

As shown in table 2.2 below, the highlighted blue cells identify the maximum number of staff on-site at one time (i.e. 11am part time shift change over). As a comparison, the maximum number of staff on-site at the 1:30pm full time shift changeover will be 130.

Table 2.3: Americold Shift Times and Typical Staffing Levels

Time	05:00	09:00	11:00	12:00	13:00	17:00	18:00	21:00	24:00
Full Time Shift	**05:00 – 13:20**				**13:30 – 21:50**			**21:00 – 05:20**	
Part Time Shift	**05:00 – 11:00**		**11:15 – 17:15**			**17:30 – 23:30**			**n/a**
No. working Full Time Warehouse Employees	61				27			5	
No. working Part Time Warehouse Employees	35		27			26			n/a
No. working Office Staff	n/a	6				n/a			
No. working Gatehouse Admin Staff	1			2			1		
No. working Container Unpacking Staff	n/a	7			n/a				

Total Daily Fulltime Warehouse Staff: 93

Total Daily Part-time Warehouse Staff: 88

3 Project Description

As outlined in section 1.3, Americold proposes to extend to its existing temperature-controlled warehouse facility at 554-562 Reservoir Road, Prospect NSW. The purpose of the development is to provide additional cold storage capacity to meet existing and future predicted demand. The proposed development comprises the following (Figure 3-1):

- A new 5,140m² freezer building extension and annexe to the east of the existing southern warehouse. The extension is intended to provide capacity for approximately 13,450 frozen pallets and will include upgrades to the refrigeration system to service the new freezer building extension and annexe.
- A new battery storage room to enable the charging, storage and changeover of batteries used for materials handling equipment.
- New plant room in the to the south of the existing south building over the top of the proposed new security office.
- Alterations to the site access, parking and loading arrangements including:
  - Construction of a new staff and visitor site access, to eliminate traffic conflicts between heavy and passenger vehicles.
  - Construction of 93 new staff/visitor vehicle carparks (including three accessible spaces) to the north and east of the existing northern warehouse.
  - Construction of two new accessible carparks adjacent to the existing office building.
  - Upgrade of the existing site access road, including:
    - Sealing of the southern and eastern portions of the site access road with heavy duty pavement.
    - Construction of new Armco barriers protecting the power poles to the east of the site.
    - Repaving of the existing car parking access.
    - Minor corner modifications to enhance truck turning and manoeuvrability.
  - New boom gates.
  - Construction of new loading docks.
  - Construction of a new heavy vehicle turnaround and 12 new trailer parking spots to the east of the existing northern warehouse.
- A new pump house and two new firewater tanks.
- A new timber pallet storage area with 3m high masonry walls.
- A new staff outdoor seating area with awning.
- A new security office with boom gates.
- A new weighbridge.
- A new satellite plant area.
- Internal refurbishment of the existing staff amenities, lunchroom/outdoor eating area and locker room, located in an existing building to the immediate west of the southern warehouse.
- Additional site landscaping.

Site development plans are included as **Appendix E – Site Development Plans.**

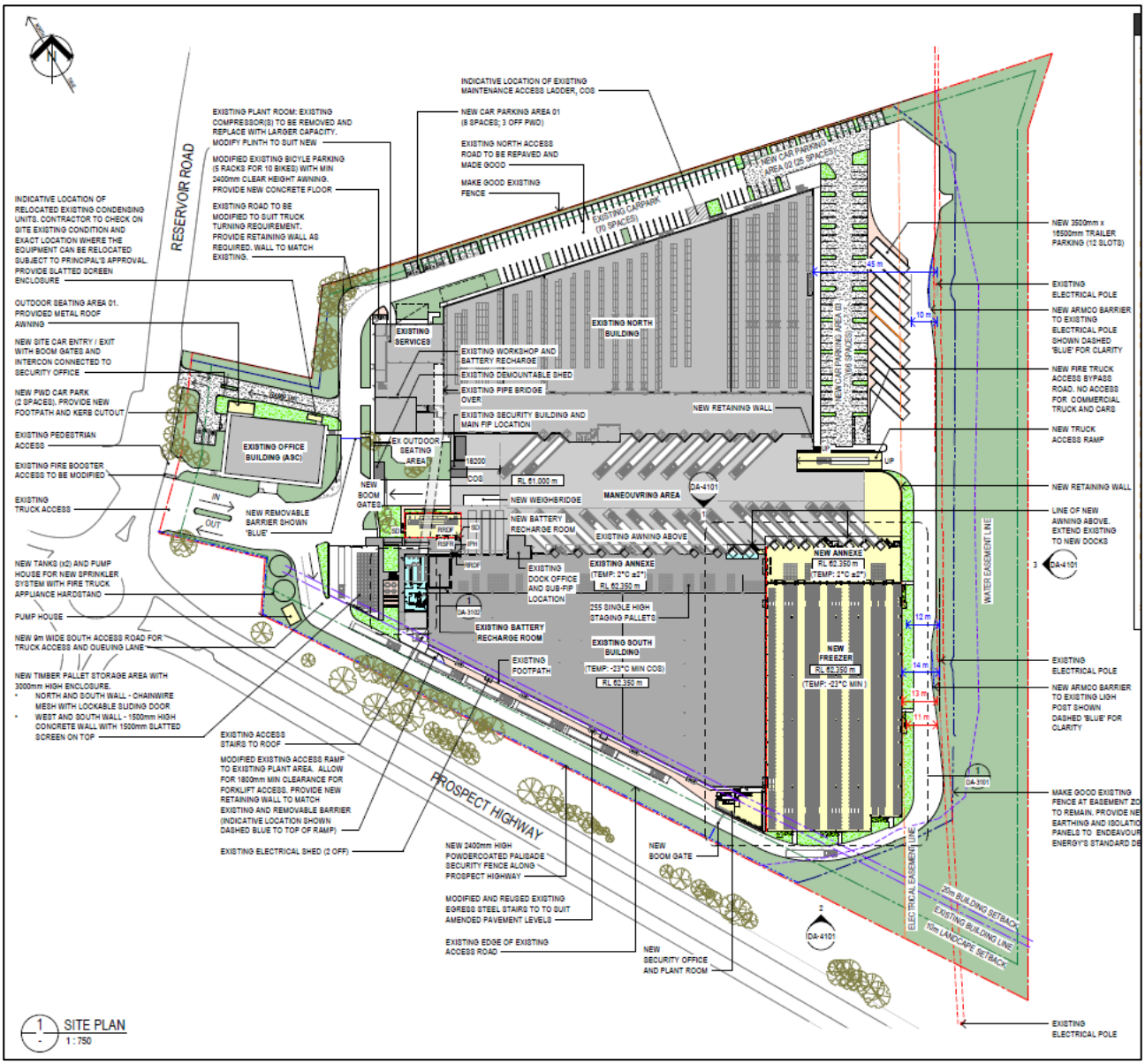

Figure 3-1: Site Development Plan (refer Appendix E for detail)

The existing temperature-controlled storage facility is proposed to remain fully operational throughout the duration of construction. To enable that to occur, the works are proposed to be conducted in three stages:

- Stage 1:
  - Stage 1 is proposed to include all changes to the site access, parking and loading requirements, together with construction of the battery storage room. During Stage 1 of construction, heavy vehicles will continue to access the site through the centre of the two existing temperature-controlled warehouses.
- Stage 2:
  - Stage 2 is intended to encompass the new freezer building extension and annexe, pallet storage area, staff outdoor seating area, weighbridge and ancillary plant and equipment (including the firewater pump and storage tanks).
- Stage 3:
  - Stage 3 is proposed to be limited to the internal fitout of the buildings.

Approval for all stages of construction is sought as part of this application. Staging plans are included as **Appendix E – Site Development Plans.**

Expansion of the facility is expected to generate up to 10-20 additional jobs over the first 10 years of operation. Americold is not aware of any approved / proposed developments within the vicinity that are likely to interact with the proposed development. No infrastructure upgrades are required to facilitate the development.

4 Statutory Planning Context

Statutory environmental planning instruments that are relevant to the proposed development are considered in the subsections below.

4.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (**EP&A Act**) is the primary land use planning statute in NSW. The EP&A Act prescribes the planning approval pathways for new developments, which are in turn determined by environmental planning instruments (**EPI**) such as State Environmental Planning Policies (**SEPPs**) and Local Environment Plans (**LEPs**). Relevant SEPPs and LEPs are detailed below.

4.2 State Environmental Planning Policies

The SEARs required consideration of a number of listed SEPPs. On 1 March 2022, a number of these were repealed and replaced by new consolidated SEPPs. Table 4.1 details the now repealed SEPPs and their consolidated SEPP equivalents.

Table 4.1: Repealed & Consolidated SEPPs Comparison

SEARS Referenced SEPP* **** Repealed 1 March 2022***	**Consolidated SEPP Equivalent**
State Environmental Planning Policy (State and Regional Development) 2011	State Environmental Planning Policy (Planning Systems) 2021
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development	State Environmental Planning Policy (Resilience and Hazards) 2021
State Environmental Planning Policy No. 55 – Remediation of Land	
State Environmental Planning Policy No. 64 – Advertising and Signage	State Environmental Planning Policy (Industry and Employment) 2021
State Environmental Planning Policy (Infrastructure) 2007	State Environmental Planning Policy (Transport and Infrastructure) 2021

Each of the consolidated SEPPs are considered in the following subsections.

4.2.1 State Environmental Planning Policy (Planning Systems) 2021

The *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**) consolidates and repeals the:

- *SEPP (State and Regional Development) 2011* (**State and Regional Development SEPP**)
- *SEPP (Aboriginal Land) 2019* (**Aboriginal Land SEPP**)
- *SEPP (Concurrences and Consents) 2018* (**Concurrence SEPP**).

Amongst other matters, the Planning Systems SEPP identifies State or regionally significant development, State significant Infrastructure, and critical State significant infrastructure.

Schedule 1 of the Planning Systems SEPP defines developments qualifying as State significant. The proposed development is deemed State significant pursuant to Clause 12 of the Planning Systems SEPP as:

- The development has a capital investment value (**CIV**) that is more than the 'relevant amount' for warehouses or distribution centres. As the SEARs were notified before 1 May 2023, the 'relevant amount' is $30 million; and

- The development is not development to which section 18 of 19 of Schedule 1 applies. Section 18 and 19 relate to development for port, wharf, or boating facilities (section 18) and rail and transport related facilities (section 19).

Clause 2.10 of the Planning Systems SEPP clarifies that Development Control Plans (whether made before or after commencement of the Planning Systems SEPP) do not apply to State significant development.

4.2.2 State Environmental Planning Policy (Transport and Infrastructure) 2021

The *State Environmental Planning Policy (Transport and Infrastructure) 2021* (**Transport & Infrastructure SEPP**) consolidates and repeals the:

- *SEPP (Infrastructure) 2007* (**Infrastructure SEPP**)
- *SEPP (Educational Establishments and Childcare Facilities) 2017* (**Education and Childcare SEPP**)
- *SEPP (Major Infrastructure Corridors) 2020* (**Corridor SEPP**)
- *SEPP (Three Ports) 2013* (**Three Ports SEPP**).

Pursuant to Clause 2.48(1)(b) of the Transport & Infrastructure SEPP, development carried out within or adjacent to an easement for electricity purposes or an electricity substation is required to be referred to the electricity supply company. As outlined in section 2.3, part of the proposed development is intended to be located within an electricity easement held by Endeavour Energy. Americold has engaged with Endeavour Energy in relation to works proposed within the easement area and has received the 'no objection' letter included in **Appendix D – Transmission Line Easement (Proposed Works)**. Due to modifications to the proposed development since the SEARs were first requested, no works are now proposed that would have a direct impact on the pad mount substation located on the site.

Pursuant to Clause 2.121 of the Traffic & Infrastructure SEPP certain traffic-generating developments (defined in Schedule 3 of the SEPP) are required to be referred to Transport for New South Wales (**TfNSW**). The proposed development meets the requirement for referral as it is for a 'warehouse or distribution centre' with an overall site area of 8,000m² or larger. The overall site area is approximately 6.6ha with existing buildings comprising a gross floor area of approximately 24,722m². The development proposed as part of this application seeks to add an additional 5,405m² of gross floor area.

TfNSW were notified of the development as part of the SEARs process. Further discussion of traffic impacts and a response to the comments received from TfNSW are outlined in sections 7.1 and 8.

4.2.3 State Environmental Planning Policy (Resilience and Hazards) 2021

The *State Environmental Planning Policy (Resilience and Hazards) 2021* (**Resilience and Hazards SEPP**) consolidates and repeals the:

- *SEPP (Coastal Management) 2018* (**Coastal Management SEPP**)
- *SEPP 33 – Hazardous and Offensive Development* (**SEPP 33**)
- *SEPP 55 – Remediation of Land* (**SEPP 55**)

Chapter 2 of the Resilience and Hazards SEPP relates to coastal management. A small area within the north-eastern extent of the site is located within the 'Proximity Area for Coastal Wetlands' as defined in the Resilience and Hazards SEPP (Figure 4-1). No development is proposed within this area. Pursuant to Clause 2.8 of the Resilience and Hazards SEPP development consent must not be granted within the Proximity Area for Coastal Wetlands unless the consent authority is satisfied that the development will not significantly impact on:

- The biophysical, hydrological, or ecological integrity of the adjacent coastal wetland or littoral rainforest; or
- The quantity and quality of surface and groundwater flows to and from the adjacent coastal wetland or littoral rainforest.

Further discussion of potential impacts of the proposed development on the adjacent coastal wetland are outlined in **Appendix N – Biodiversity Development Assessment Report** and section 7.9 below.

Figure 4-1: Proximity Area for Coastal Wetlands

Chapter 3 of the Resilience and Hazards SEPP presents a systematic approach to planning and assessing proposals for potentially hazardous and offensive development. A preliminary risk screening was completed for the proposed development identified that the screening threshold for storage of Class 2.3 substances (anhydrous ammonia) was not exceeded based on the separation of the new and existing refrigeration systems. As a result the development has been classified as not a 'potentially hazardous industry' in terms of Clause 3.10 of the Resilience and Hazards SEPP. The Preliminary Risk Screening Report (PRS) has been prepared and is included in **Appendix L - Preliminary Risk Screening Report**. Further discussion of the PRS is outlined in section 7.7 below.

Chapter 4 of the Resilience and Hazards SEPP relates to contaminated land. Pursuant to Clause 4.6 of the Resilience and Hazards SEPP that a consent authority must not grant consent to a development unless it has considered whether a site is contaminated, and it is satisfied that the land is suitable (or will be after undergoing remediation) for the proposed use. A Preliminary Site Investigation (**PSI**) has been prepared for the proposed development and is included as **Appendix K – Preliminary Site Investigation**. Further discussion of the site's contamination potential is outlined in section 7.6 below.

4.2.4 State Environmental Planning Policy (Industry and Employment) 2021

The *State Environmental Planning Policy (Industry and Employment) 2021* (**Industry & Employment SEPP**) consolidates and repeals the:

- *SEPP (Western Sydney Employment Area) 2009*
- *SEPP 64 – Advertising and Signage* (**SEPP 64**)

Chapter 3 of the Industry & Employment SEPP sets out planning controls for advertising and signage in NSW. Pursuant to Clause 3.6 the consent authority must not grant development consent to display signage unless the consent authority is satisfied:

- That the signage is consistent with the objectives of Chapter 3; and
- That the signage satisfies the assessment criteria outlined in Schedule 5.

The proposed development seeks to erect a new 'business identification sign' on the southern façade of the southern warehouse extension. A consideration of the proposed signage against the assessment criteria in Schedule 5 is outlined in section 7.13.

4.3 Cumberland Local Environmental Plan

The site is located within the Cumberland LGA and is subject to the provisions of the Cumberland Local Environmental Plan (**Cumberland LEP**). The Cumberland LEP came into force at the site on 5 November 2021, replacing the former Holroyd Local Environment Plan 2013.

4.3.1 Zoning

The site is zoned Light Industrial (IN2) under the Cumberland LEP.

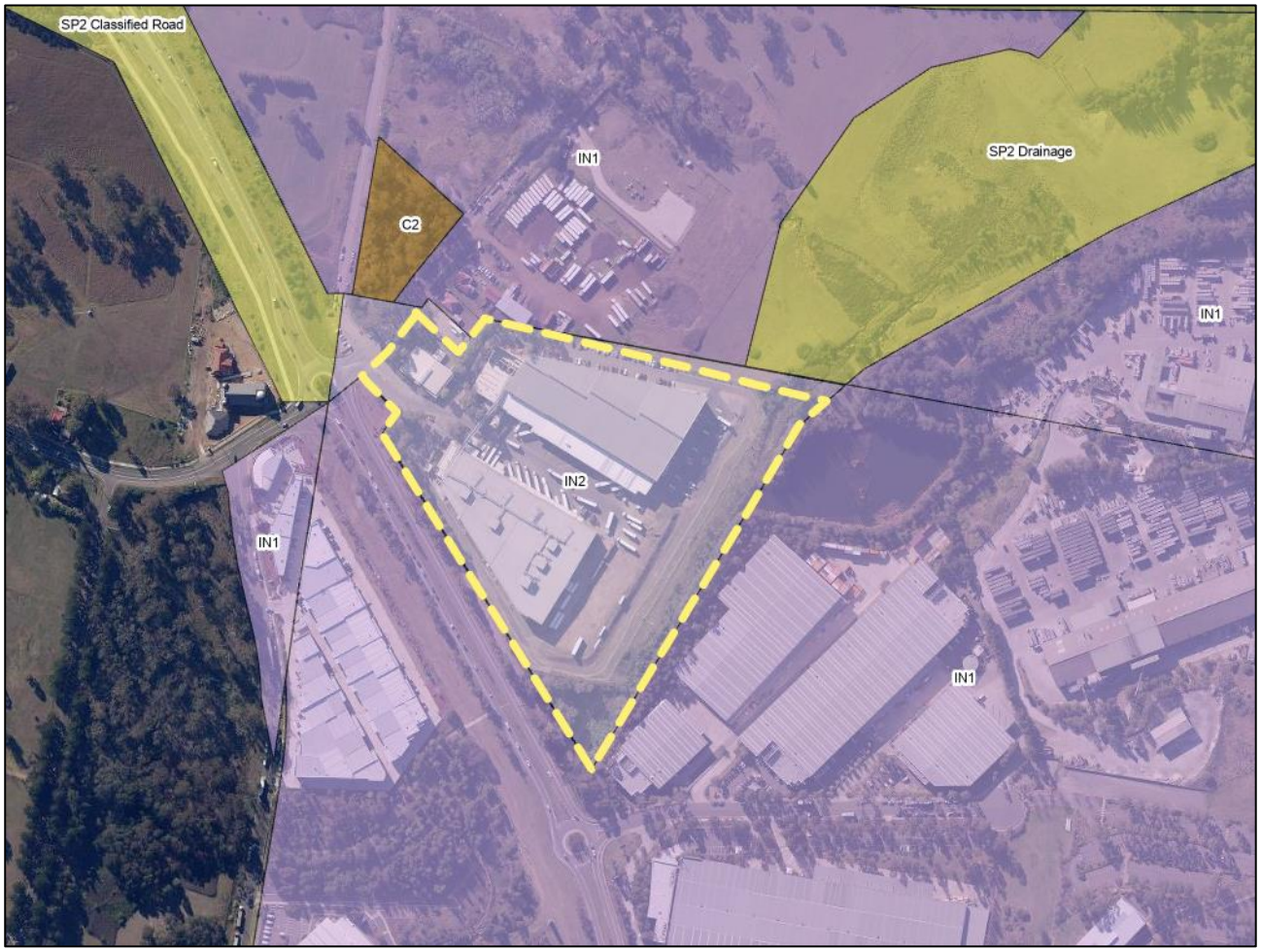

Figure 4-2: Site Zoning (Source: NSW ePlanning Spatial Viewer)

The objectives of the IN2 zone are:

- To provide for a wide range of light industrial, warehouse and related land uses.
- To encourage employment opportunities and to support the viability of centres.
- To minimise any adverse effects of industry on other land uses.
- To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.
- To support and protect industrial land for industrial uses.

The proposed development is generally consistent with the IN2 zone objectives as it would support the ongoing use of the site for cold storage warehousing. Expansion of the facility is also expected to generate up to 10-20 additional jobs over the first 10 years of operation.

The Light Industrial zone sets out categories of development that are Permitted Without Consent, Permitted with Consent, or Prohibited. As the proposal seeks expansion of existing operations on the site for cold storage warehousing, it most closely aligned with the 'warehouse or distribution centres' category of development. This is defined in the Cumberland LEP as meaning:

> *"a building or place used mainly or exclusively for storing or handling items (whether goods or materials) pending their sale, but from which no retail sales are made, and includes local distribution premises."*

Relevant Cumberland LEP provisions applying to the proposed development are outlined in Table 4.2 below.

Table 4.2: Cumberland LEP Assessment

Clause/Requirement	Discussion	Consistent with LEP Requirement?
Principle Development Standards		
4.1 Minimum Subdivision Lot Size	The minimum subdivision lot size is 1,200m². The site is approximately 66,000m². No subdivision is proposed.	Yes
4.3 Height of Buildings	The site is not subject to a maximum building height.	Yes
4.4 Floor Space Ratio	The site is not subject to a maximum floor space ratio.	Yes
4.6 Exceptions to Development Standards	No exceptions to development standards are proposed.	Yes
Miscellaneous Provisions		
5.3 Development Near Zone Boundaries	The proposed development does not seek to allow a use allowed on the other side of a zone boundary within the relevant distance.	Yes
5.4 Controls Relating to Miscellaneous Permissible Uses	No controls relating to miscellaneous permissible uses apply.	Yes
5.10 Heritage Conservation	The proposed development has the potential to impact on one heritage item, the 'Former Great Western Road, Prospect (SHR no. 01911) through construction of the new staff/visitor access. However, as outlined in	Yes

Clause/Requirement	Discussion	Consistent with LEP Requirement?
	Appendix P – Statement , it is unlikely that the original 1818 road fabric of the 'Former Great Western Road' will be disturbed. Overall, the proposed development is expected to have a nil/neutral-low impact on the ''Former Great Western Road' for the reasons outlined in section 7.10 below. No other impacts on heritage items or Aboriginal sites or objects are anticipated.	
Additional Local Provisions		
6.1 Acid Sulfate Soils	The site is not identified as containing acid sulfate soils.	Yes
6.2 Earthworks	The proposed development is consistent with the earthworks requirements of the Cumberland LEP. Further detail is outlined in section 7.4 and **Appendix I – Stormwater Management Plan**	Yes
6.4 Essential Services	The development is able to adequately service with water, electricity, sewage, stormwater drainage and vehicular access.	Yes
6.5 Biodiversity	As outlined in section 7.9 and **Appendix N – Biodiversity Development Assessment Report**, the project is expected to have negligible direct impacts on biodiversity values being the loss of 0.17ha of planted native vegetation and 0.74ha of weeks and exotic vegetation. No indirect impacts are anticipated on the biodiversity values of the land or surrounding land.	Yes
6.6 Riparian Land and Watercourses	The site is not located within 'Riparian Land' on the Riparian Land and Watercourses Map.	Yes
6.7 Stormwater Management	The development has been designed to maximise the use of water permeable surfaces on the land and avoids significant adverse impacts of stormwater runoff on adjoining properties, native bushland and receiving waters. Further detail is outlined in section 7.4 and **Appendix N – Biodiversity Development Assessment Report.**	Yes
6.9 Salinity	The site is located within potential high salinity and potential moderate salinity land. However, as outlined in section 7.6 and **Appendix K – Preliminary Site Investigation** the proposed works are not expected to significantly interfere with groundwater flows which could result in an increase in soil salinity above natural levels on the site.	Yes
6.10 Buffer Area Between Industrial and Residential Zones	The site is not located within an 'Industrial-residential buffer area' on the Site Specific Provisions Map.	Yes

Overall, in light of the assessment in Table 4.2, the proposed development is consistent with all relevant Cumberland LEP requirements and the IN2 zone objectives.

4.4 Cumberland Development Control Plan

Pursuant to Clause 2.10 of the Planning Systems SEPP, the Cumberland Development Control Plan (**Cumberland DCP**) does not apply to the proposed development.

4.5 Other Relevant Approvals

The additional approvals outlined in Table 4.3 may be required before the development may lawfully be carried out.

Table 4.3: Additional Approvals

Legislation	Relevance
Roads Act 1993	The proposed development seeks to establish a new vehicle crossover from Reservoir Road for passenger vehicles. Pursuant to section 138 of the *Roads Act 1993,* consent from the Cumberland Council is required. Pursuant to Division 4.7 of the EP&A Act, any consent under section 138 of the *Roads Act 1993* cannot be refused should this State Significant Development application be granted.
Environment Protection & Biodiversity Conservation Act 1999 (**EPBC Act**)	The EPBC Act is the Federal Government's central piece of environmental legislation and addresses impacts of matters of national environmental significance (**MNES**). Based on the assessment of impacts in section 7, no impacts on MNES are anticipated. Referral of the proposed development to the Department of Agriculture, Water, and the Environment under the EPBC Act is not proposed.
Biodiversity Conservation Act 2016 (**BC Act**)	The BC Act sets out the environmental impact assessment framework for threatened species, threatened ecological communities, and Areas of Outstanding Biodiversity Value (formerly critical habitat) in NSW. Section 7.9 of the BC Act requires that an application for State Significant Development must be accompanied by a Biodiversity Development Assessment Report (**BDAR**) prepared by an accredited assessor in accordance with the Biodiversity Assessment Methodology. A BDAR is attached as **Appendix N – Biodiversity Development Assessment Report** and its findings discussed in section 7.9 below.
Water Management Act 2000	The proposed development is located within 40m of Girraween Creek, which necessitates consideration of the *Water Management Act 2000.* However, no approvals are required under the *Water Management Act 2000* for State Significant Development authorised by a Development Consent pursuant to Division 4.7 of the EP&A Act.
Heritage Act 1977	Natural, cultural, and built heritage is protected in NSW under the *Heritage Act 1977*. The *Heritage Act 1977* creates the State Heritage Register (**SHR**) which provides permanent protection for State Significant heritage items and places. The proposed development has the potential to impact on one heritage item, the 'Former Great Western Road', Prospect (SHR no. 01911) through construction of the new staff/visitor access. However, as outlined in **Appendix P – Statement of Heritage Impact**, it is unlikely that the original 1818 road fabric of the 'Former Great Western Road' will be disturbed. Overall, the proposed development is expected to have a nil/neutral-low impact on the ''Former Great Western Road' for the reasons outlined in section 7.10 below. No other impacts on heritage items or Aboriginal sites or objects are anticipated. As the proposed development is State Significant Development, no separate approvals are required for the proposed works under the *Heritage Act 1977* pursuant to Division 4.7 of the EP&A Act.
National Parks and Wildlife Act 1974 (**NPW Act**)	Aboriginal heritage is primarily protected under the NPW Act. The aims of the NPW Act include the conservation of objects, places, or features (including biological diversity) of cultural value within the landscape, including but not limited to places, objects and features of significance to Aboriginal people. Pursuant to section 86 of

Legislation	Relevance
	the Act it is an offence to harm or desecrate an Aboriginal object, unless in accordance with an Aboriginal Heritage Impact Permit (**AHIP**) or as otherwise permitted under the legislation. Section 90 of the NPW Act deals with the issuing of an AHIP. However, as the proposed development is State Significant Development, section 90 of the NPW Act does not apply pursuant to Division 4.7 of the EP&A Act. An Aboriginal Cultural Heritage Assessment Report (**ACHAR**) is included as **Appendix O – Aboriginal Cultural Heritage Assessment Report** and is discussed in further detail in section 7.10.
Protection of the Environment Operations Act 1997 (**POEO Act**)	Schedule 1 of the POEO Act contains a list of activities requiring a licence before they can be carried out. The proposed development is not expected to trigger any of the activity thresholds listed in Schedule 1 of the POEO Act. For completeness it is recorded that approximately 12.5 tonnes of liquid ammonia is stored on-site, below the 'general chemicals storage' threshold in Clause 9, Schedule 1 of the POEO Act.

5 Strategic Planning Context

Strategic environmental planning instruments that are relevant to the proposed development are considered in the subsections below.

5.1 A Metropolis of Three Cities - Greater Sydney Region Plan

The A Metropolis of Three Cities - Greater Sydney Region Plan divides the Sydney region into three 'cities' and provides strategic vision through to 2056. The plan's vision is to transform Greater Sydney into a Metropolis of Three Cities (the Western Parkland City, the Central River City and the Eastern Harbour City) where most residents live within 30 minutes of their jobs, education, health facilities, services and great places.

The proposed development is generally consistent with the vision of the plan in that it will support the ongoing utilisation of the site for employment generating land uses, enhancing employment opportunities in the Central River City.

5.2 Central City District Plan

The Central City District Plan includes the Blacktown, Cumberland, Parramatta, and Hills local government areas and reinforces the priorities of *A Metropolis of Three Cities - Greater Sydney Region Plan,* bridging the gap between regional and local planning.

The proposed development will contribute to the objectives of the Central City District Plan by:

- Supporting the ongoing use of the site for employment generating land uses, including the creation of up to 10-20 additional jobs over the first 10 years of operation;
- Providing additional employment opportunities during construction, supporting ongoing construction employment opportunities in the Central City District; and
- Appropriately protecting amenity, heritage, biodiversity, and landscape values.

5.3 Future Transport Strategy 2056

The Future Transport 2056 Strategy sets the 40-year vision, directions, and principles for mobility in NSW. The Future Transport Strategy outlines six state-wide principles to guide planning and investment including customer focused experiences; successful places; a strong economy; safety and performance; accessible services, and sustainability. The proposed development aligns with the vision of the Future Transport Strategy 2056 as:

- The proposed development is expected to enhance the safety and efficiency of site access when compared to the existing (pre-development) scenario;
- The surrounding road network and intersections will be able to cater for the proposed development traffic; and
- The proposed development will support utilisation of public and active transport, particularly following planned upgrades to Prospect Highway by TfNSW (discussed in section 2.6 of **Appendix G – Traffic Impact Assessment**).

5.4 Cumberland 2030 Local Strategic Planning Statement

The Cumberland 2030 Local Strategic Planning Statement (**Cumberland LSPS**) considers the Cumberland LGA's economic, social, and environmental land use needs over the next 10 years and is aligned to the 20-year vision for Cumberland. The proposed development will support the vision of the Cumberland LSPS in that it will:

- Retain existing industrially zoned land for employment generating industrial land uses.
- Support ongoing local employment, including the creation of up to 10-20 additional jobs over the first 10 years of operation.
- Support a strong and diverse local economy.

5.5 Cumberland Employment and Innovation Lands Strategy 2019

The Cumberland Employment and Innovation Lands Strategy 2019 provides a framework for managing employment and innovation lands in Cumberland over a ten-year period. The proposed development is located within an Enterprise Park Precinct under the Strategy. The strategic focus of the Enterprise Park Precincts is for established and emerging business parks to build on existing industry specialisations and increasing digitisation of production. The proposed development is consistent with this strategic focus in that it builds on existing use of the site as a specialised cold storage facility.

6 Consultation

Community and Stakeholder Engagement in the pre-EIS period was primarily undertaken by NGH Pty Ltd (**NGH**) on behalf of Americold. A Community and Stakeholder Engagement Report appending the Engagement Action Plan is included as **Appendix F – Community & Stakeholder Engagement Report.**

As outlined in the Community and Stakeholder Engagement Report, a targeted approach to engagement was undertaken in the pre-EIS period, informed by the NSW Government *Undertaking Engagement Guidelines for State Significant Projects* (November 2021) and centred around the following objectives:

- Engage to capture views and support with both wider community and targeted groups as set out in the SEARs.
- Engage proactively with targeted stakeholders by providing a range of opportunities to the local community and stakeholders to discuss key topics and offer their feedback.
- Produce clear information on the project including any potential impacts and planned mitigation measures via delivery of high-quality communications across targeted channels.
- Maintain a positive corporate image for Americold through the delivery of clear, transparent communications by managing social and reputational risks.

No issues were raised with the proposed development during the pre-EIS engagement phase. The following responses to consultation were received:

- TfNSW declined to attend an information session but advised that the TfNSW SEARs comments remain applicable. These are addressed in section 8.8 below.
- The NSW Environment Protection Authority (**EPA**) declined the invitation to attend an information session, however appreciated the invite and highlighted their support for the proposal. The EPA noted that should significant changes to the proposal occur which would otherwise warrant the need for an Environment Protection Licence, then EPA would reconsider its position when the EIS is referred to the agency during the exhibition phase. As outlined in section 4.5, the proposed development is not expected to trigger any of the activity thresholds in Schedule 1 of the POEO Act.
- Endeavour Energy declined to attend an information session but advised they would provide further advice and feedback when the EIS is placed on exhibition. Americold has separately engaged with Endeavour Energy's property services team and received a 'no objection' letter for works proposed within Endeavour Energy’s easement subject to the implementation of certain conditions which Americold has agreed to (refer **Appendix D – Transmission Line Easement (Proposed Works)**.
- The NSW Department of Planning and Environment (Water) declined the invitation to attend an information session but advised it will assess and provide advice on the EIS once it is on exhibition.
- No comments were received from other identified sensitive receivers (refer section 2.2 above), institutional stakeholders, or members of the wider community.

An engagement log has been included within **Appendix F – Community & Stakeholder Engagement Report** which details who and how stakeholders were engaged. No objections to the proposal were received or comments that required alteration to the design or scale of the proposed development as a result of the pre-EIS engagement.

Based on the feedback received and recommendations of the Community and Stakeholder Engagement Report, the following approach to consultation and engagement is proposed throughout the following remaining stages of detailed design, construction, and operation of the development:

- Americold will continue to foster strong relationships with key stakeholder groups and sensitive receivers to ensure that they are well informed during the EIS exhibition period, construction, and operation.

- Americold will engage with sensitive receivers in relation to planned traffic arrangements, construction activities and work through impacts should they arise. A plan for engagement with sensitive receivers during the construction phase is proposed to be included in the Construction Environmental Management Plan (**CEMP**) for the development.
- Americold will undertake proactive updates via email, posted letters, and public notices as required to stakeholder groups regarding construction activities and any expected impacts through the construction phase.
- Americold will highlight updates, key milestones, and project benefits to key stakeholder groups during the construction and operation phases as required.
- Americold will actively engage via phone, email and posted letters should any maintenance work be carried out during operation that may impact sensitive receivers and wider key stakeholder groups.
- Americold will continue to answer questions from community members and organisations regarding potential impacts as they arise and will discuss opportunities for risk mitigation as required.
- Key stakeholder groups will be offered the opportunity to have a one-on-one meeting on request to discuss concerns, impacts and/or opportunities throughout EIS, post approval, construction, and operation phases.

7 Environmental Assessment

The following sections outline the potential environmental impacts that are expected to be associated with the proposed development.

7.1 Traffic & Access Impacts

A quantitative Traffic Impact Assessment (**TIA**) has been prepared by Beca for the proposed development and is included as **Appendix G – Traffic Impact Assessment**. The key findings of the TIA are outlined in the subsections below.

7.1.1 Access

The site is currently accessed via a single crossover off Reservoir Road which provides for heavy, passenger and service vehicles. Pedestrians and cyclists access the site directly from a footpath off Reservoir Road. Under the proposed development scenario, a new access driveway is proposed east of the existing access, leading directly to the carparks on the eastern side of the site (Figure 7-1). This is intended to separate passenger and heavy vehicle movements and is expected to improve safety and efficiency while enabling more direct access to the staff carpark.

A new heavy vehicle ramp is proposed from the existing access driveway, leading vehicles around the southern side of the site and enabling them to enter the loading docks from the back of the proposed southern warehouse extension. This is intended to enable one-way heavy vehicle movements throughout the site, removing the need for a U-turn and providing additional queueing space for trucks along the southern boundary if needed.

Figure 7-1: Proposed Site Access

Pedestrian and bicycle access to the site is proposed to remain as per existing conditions, with a footpath connecting Reservoir Road to the office building and marked pedestrian crossings providing safe access through the site. Faded line markings for pedestrian crossings and accesses are proposed to be renewed.

Overall, the proposed development is expected to enhance the safety and efficiency of site access when compared to the existing (pre-development) scenario.

7.1.2 Parking & Loading

The site currently provides a total of 91 formal and 70 informal staff and visitor parking spaces. This is proposed to be increased to 171 spaces (including 5 accessible spaces). As outlined in the TIA, an excess of parking spaces is to be provided (when compared to the minimum parking requirements of the Cumberland DCP). An assessment of casual, part-time, and full-time staff, as well as exact shift time patterns is outlined in section 2.3.2 of the TIA. This assessment has found that due to the mix of casual and part-time employees, and associated staggered shift times, the worst-case parking demand is 137 spaces of the proposed 171 spaces, based on existing operations. For future operations, expected to increase staff by 15, the worst-case parking demand is 153 spaces of the proposed 171 spaces.

Therefore, the parking provision has been assessed in the TIA as appropriate for the proposed development. The impact of shift crossover may be further addressed by:

- Site management strategies, including staggering shift times to reduce peak parking demand.
- Increased utilisation of bicycle parking and public transport, particularly following planned upgrades to Prospect Highway by TfNSW (discussed in section 2.6 of the TIA).

The existing development contains a total of 27 loading bays. This is proposed to be expanded to 34 loading bays, which has been assessed in the TIA as sufficient loading provision to accommodate the proposed development with additional spare capacity to minimise the likelihood of queueing. In addition, the proposed development includes provision for 12 new semi-trailer parking spaces to the rear of the existing northern warehouse, separated from the proposed staff parking. Vehicle tracking appended to the TIA confirms heavy vehicles utilising this area will be able to manoeuvre effectively into these parking spaces.

Existing bicycle racks allowing for 10 bicycle parking spaces are proposed to be retained. End of trip facilities in the form of three male showers, one female shower and 70 lockers are also proposed.

7.1.3 Traffic

The proposed development is expected to generate an additional 18 vehicles (heavy and light) in the AM peak and 20 vehicles in the PM peak. Anticipated future truck movements are 300-350 heavy vehicles per day, compared to 160-200 under the existing development scenario.

The TIA utilised SIDRA modelling to assess the potential impacts of the proposed development on the surrounding road network. The modelling highlights:

- The proposed site upgrade is expected to have minimal impact on the operation of the Prospect Highway / Reservoir Road intersection. It will continue to operate at a high level of service.
- The primary north and south movements along Prospect Highway will be largely unaffected, while increased traffic egressing the site is expected to cause a delay on the eastern and western approaches. However, the intersection is still expected to operate at an average Level of Service (**LoS**) B (AM peak) and LoS A (PM peak), with the level of service categorised as good operation in accordance with the *RTA Guide to Traffic Generating Developments*. Furthermore, as the planned TfNSW upgrade is expected to be completed by 2024, any impacts will be experienced for a maximum of one year before the intersection capacity is increased.
- The Reservoir Road / Thornley Road intersection is expected to be largely unaffected by the proposed site upgrades.

- In the 2033 future year modelling scenario, when compared to the background traffic only scenario, the site upgrade is expected to have minimal impact on the operation of the Prospect Highway / Reservoir Road intersection. Although the intersection is expected to operate at LoS E (AM peak) and LoS C (PM peak), the poorer performance is attributable to the increase in background traffic over the 10-year period, which represents a total of approximately 97% of traffic growth at the intersection, instead of the upgraded site development which represents only 3% of the traffic growth.
- The Reservoir Road / Thornley Road intersection in the year 2033 modelling is expected to be largely unaffected by the site upgrade and continue to operate at a high level of service.

Overall, the proposed development is not expected to adversely impact road network operations.

7.1.4 Construction

As outlined in Section 3, the proposed development is intended to be staged. During construction, temporary access configurations are proposed as outlined below:

- **Stage 1:**
- A temporary construction hoarding is proposed at the eastern end of the hardstand to enable construction of the new roadways and external areas of the site. This reduces the space for heavy vehicles to U-turn at the hardstand, however swept paths have been undertaken as part of the TIA to ensure these movements can still be accommodated. Two existing loading docks at the eastern end must remain unused to accommodate this manoeuvre.
- Construction vehicles are proposed to travel along the southern boundary of the site separated from other user groups. Other access and circulation configurations are proposed to remain as existing.
- **Stage 2:**
- In Stage 2, a ramp is proposed adjacent to the construction hoarding to enable vehicle access to the hardstand from the southeast and construction of the new warehouse and annex. Heavy vehicles will then enter using the new access driveway and travel along the northern boundary of the site to access the hardstand, removing the need to U-turn. Although heavy vehicle traffic must mix with passenger vehicles in the stage, this improves safety and efficiency at the hardstand, and enables all existing loading docks to be utilised.
- **Stage 3:**
- Stage 3 of the proposed development would involve the construction of staff amenities and the internal fitout. Heavy vehicle access is intended to be provided via the southern roadway, separating heavy vehicles from passenger vehicles and pedestrian movement as per the end state configuration.

A Construction Traffic Management Plan (**CTMP**) is proposed to be developed by the construction contractor to ensure construction access and traffic generation is safely and efficiently managed.

7.1.5 Green Travel Plan

In accordance with referral comments from Transport for New South Wales (TfNSW), a Green Travel Plan (GTP) has been prepared for the site and included in **Appendix U – Green Travel Plan.**

A GTP will allow Americold to manage the transport needs of staff, with the aim of the plan being to reduce the environmental impact of work-related travel, including operational and commuting trips. The GTP supports carpooling, walking, cycling and public transport use for commuting to work through a range of actions, promotional campaigns and incentives.

A GTP is to be considered as a site management tool which incentivises people to make more sustainable transport choices. The development of a GTP is also not a one-off task and involves ongoing implementation, monitoring, and review.

Targets have been developed to increase sustainable transport mode shares and outlined in detail in Table 4.1 of the GTP. The targets are based on the results of the staff travel to work survey, noting that the responses received only represent a sample of staff. In short, the following targets are proposed:

- Carpooling – currently 8% mode share, target 20% by 2026.
- Public Transport – currently 0%, target 3% by 2026.
- Cycling – currently <1%, target 5% by 2026.

Suitable actions to support the implementation of the GTP are included in Section 5 of the GTP an include:

- Encourage sustainable travel choices through internal communications with awards for implementing
- Introduce formal carpooling scheme
- Team challenges to encourage cycling
- Review further actions in relation to public transport once the Prospect Highway Upgrades have been completed.

To ensure the enforcement of the GTP, the Operations Manager for the Americold Prospect site will oversee the implementation of actions within the GTP, manage the travel survey, monitor the progression of the GTP, and action any required adjustments to the GTP.

7.2 Noise & Vibration Impacts

A quantitative Noise and Vibration Impact assessment has been prepared by Resonate Consultants for the proposed development in accordance with the NSW EPA *Interim Construction Noise Guideline* (**ICNG**) and NSW EPA *Noise Policy for Industry* (**NPI**) and is included as **Appendix H – Noise & Vibration Impact Assessment**. The key findings of that assessment are outlined below.

7.2.1 Construction Noise & Vibration

A preliminary quantitative assessment of potential construction noise impacts has been prepared as part of **Appendix H – Noise & Vibration Impact Assessment.** The assessment is preliminary as no detailed construction information is available at this stage, although the assessment has been based on experienced and reasonable assumptions about the likely construction noise associated with a development of this nature. A Construction Noise and Vibration Management Plan (**CNVMP**) is proposed to be prepared, prior to construction, to ensure construction noise and vibration is appropriately managed. As outlined in the preliminary quantitative assessment of potential construction noise impacts:

- The predicted construction noise levels of up to 54 dB(A) at the nearest residential receiver at 566 Reservoir Road are compliant with the 60 dB(A) Noise Management Level (**NML**) for standard hours construction and the 75 dB(A) Highly Noise Affected NML.
- The predicted construction noise levels of up to 51 dB(A) at the nearest receivers to the west of the project along Reservoir Road are compliant with the 64 dB(A) NML for standard hours at these receivers and the 75 dB(A) Highly Noise Affected NML.
- The predicted construction noise levels of up to 46 dB(A) at the residences along Muttong Street are not compliant with the 45 dB(A) NML for this receiver.
- The predicted construction noise levels of up to 61 dB(A) at St. Mark's Coptic Catholic Church are not compliant with the 55 dB(A) NML for this receiver.
- The predicted construction noise levels of up to 63 dB(A) at Berry Patch Preschool and Long Day Care Centre are not compliant with the 55 dB(A) NML for this receiver.
- The construction noise levels of up to 75 dB(A) at adjoining industrial receivers have been assessed to be compliant with the industrial NML of 75 dB(A).
- The increase in noise levels associated with construction traffic is less than 1dB which is well within the 2dB(A) allowance of the NSW Road Noise Policy

Overall, based on the findings of the preliminary construction noise assessment (based on assumed construction activities), three NML exceedances are expected during the day. It is recommended that a detailed construction noise and vibration assessment be prepared during the detailed design stage of the project which would form part of the Construction Noise and Vibration Management Plan (CNVMP). Viable management and mitigation measures that would be expected to be deployed by the construction contractor once the final construction sequencing and scheduling is known may include:

- Erecting temporary acoustic hoarding to reduce noise from works that would be carried out near the boundaries of the site.
- Orientating plant and processes away from receivers.
- Optionally scheduling respite periods for noise-intensive processes carried out near receivers.
- Regularly maintaining and monitoring plant and equipment to ensure that their noise emissions are not excessive.
- Minimising the annoyance from reversing alarms by either fitting closed circuit monitors or non-tonal reversing alarms ("quackers") on vehicles or deploying 'spotters' to oversee reversing movements. Sites should be designed to minimise or remove the need for plant to undertake reversing manoeuvres.
- Reducing throttle settings and switching off equipment when it's not being used.

A full list of construction noise mitigation measures are outlined in section 8.1 of **Appendix H – Noise & Vibration Impact Assessment.** A procedure for any out of hours works is proposed to be included in a CNVMP.

Vibration levels are also considered unlikely to exceed cosmetic damage and human comfort vibration limits at the nearest residential receivers. Due the close proximity of the site to adjoining industrial buildings, lighter construction equipment is proposed to be used wherever practicable to ensure that the vibration management levels for cosmetic damage and human comfort are met.

7.2.2 Operational Noise & Vibration

The proposed development is expected to comply with the NPI day and evening criteria at all surrounding residential receivers, however daytime exceedances are expected at the Berry Patch Preschool and Long Day Care Centre due to the operation of engine compression braking and truck air braking unless management & control measures are adopted. During the night-time period, exceedances of the NPI criteria are expected at 517 and 533 Reservoir Road due to engine compression braking and truck air braking, and at 566 and 568 Reservoir Road due to noise levels emanating from the existing northern plant room, unless management and control measures are adopted.

To mitigate operational noise impacts, the following management and control measures are proposed as part of the development:

- A new acoustic louvre system is to be installed to replace the louvres on the existing northern plant room. The new louvre system must meet the performance requirements set out in section 8.2 of **Appendix H – Noise & Vibration Impact Assessment** (i.e. NAP Flowline 300 S-Line or similar).
- All trucks will be encouraged to be fitted with air brake silencers and exhaust silencers.
- Truck engine compression braking is not to be permitted within the facility. New signage will be erected to this effect.
- Traffic speed limits will be signposted within the facility. All drivers will be expected to comply with the speed limit and to implement responsible driving within the facility.
- When trucks are parked at the parking bays / loading docks truck engines will be turned off and trucks will not be allowed to idle. New signage will be erected to this effect.
- The use of truck, car and forklift horns will be prohibited during evening and night-time operations.

As outlined in section 8.2 of **Appendix H – Noise & Vibration Impact Assessment**, provided the above measures are implemented it is expected that the operational noise of the expanded facility will comply with the NPI criteria at all nearby sensitive receivers.

7.3 Water Supply Impacts

The existing facility is supplied potable water by Sydney Water via a single 150mm incoming water main. The average water demands for the existing facility are 46 – 82 kL/day based on previous water bills. The main existing water uses include:

- Staff amenities;
- Fire water;
- Washdown for various plant and dock areas; and
- Truck / vehicle washing.

It is expected that the proposed development will result in a water demand increase of less than 1% and will nominally be 48 - 84 kL/day. This demand is an estimate with actual demands to be confirmed during the detailed design stage. All existing and future water demands for the site are proposed to be met by the existing Sydney Water mains supply.

The main water uses for the proposed development will be similar to those for the existing facility. The existing domestic water supply system will be extended to the following areas / uses:

- New satellite plant area (including safety shower and hose tap for washdown);
- New security office (for WC fixtures);
- Refurbished amenities and outdoor seating areas;
- Washdown for refrigeration penthouses associated with the southern warehouse extension; and
- New battery storage room

Two 255 kL firewater tanks and a pump house for the new sprinkler system are proposed within the south-western corner of the site. The new sprinkler system demands are proposed to be met by the two new fire water tanks and it is not expected that the sprinkler system will require a continuous demand from the Sydney Water main. There are three existing hydrants for the existing facility with a flow of 10L/s and pressure head of 42m. No additional fire hydrants are proposed.

The site does not have any water licensing requirements under the *Water Act 1912* or *Water Management Act 2000* as no water extraction is undertaken/proposed from waterbodies such as rivers, lakes, or aquifers. All water demands for the site are proposed to be met using the Sydney Water mains supply.

All sewage from the site is proposed to be discharged into the Sydney Water town sewerage system.

7.4 Stormwater Impacts

A Stormwater Management Plan (**SMP**) has been prepared by Beca for the proposed development and is included as **Appendix I – Stormwater Management Plan**. They key findings of the SMP are outlined in the subsections below.

7.4.1 Proposed Stormwater Treatment

A concept stormwater drainage plan has been prepared for the proposed development and is included as an appendix to the SMP. As the SMP outlines:

- An on-site detention (**OSD**) tank is proposed to limit stormwater flow to the Permissible Site Discharges (PSD) detailed by the Upper Parramatta River Catchment Trust (UPRCT).
- A new pit and pipe system is proposed with sufficient capacity to collect and convey runoff from the developed areas in 5% AEP storm events.

- Overland flow paths have the capacity to safely convey the 1% AEP flows that exceed capacity of the system around the proposed buildings in such a manner that flows do not encroach on adjacent properties.

The proposed stormwater system consists of one OSD collecting and controlling the discharge rate of the new roof and another OSD collecting an existing roof area and reducing its flows to offset the new pavement areas that are unable to efficiently drain to an OSD. These interventions combine to control the discharges to the levels specified by the UPRCT. Water quality treatment devices from Ocean Guard have been incorporated into the new system and provide treatment of stormwater runoff.

While the stormwater quality requirements of the Cumberland DCP do not apply directly to this State Significant Development application, the development has sought to implement the following stormwater quality targets drawn from Part G of the Cumberland DCP.

Table 7.1: Stormwater quality targets

Pollutant	Litter	Reduction in Load
Litter e.g., cans, bottles, wrapping materials, food scraps	All anthropogenic materials with a minimum dimension >5mm	90%
Coarse sediment	Coarse sand and soil particles (<0.5mm diameter)	85%
Nutrients	Total phosphorous nitrogen	60%
Fine particles	Coarse sand and soil particles (<0.05mm diameter)	85%
Cooking oil and grease	Free floating oils that do not emulsify Aqueous solutions	90%
Hydrocarbons inc. motor fuels, oils and greases	Anthropogenic hydrocarbons that can be emulsified	90%

To estimate the effectiveness of proposed water quality treatment measures, the SMP has utilised MUSIC (v.6.3) modelling. Based on the outcomes of that modelling, suspended solids, fine particles and nutrients from the proposed development are expected to meet the water quality targets outlined above. As MUSIC modelling is not able to evaluate hydrocarbons, Beca consulted with Ocean Guard to develop a treatment train to of known solutions to mitigate and collect hydrocarbons to this standard. Further breakdown of stormwater modelling and system details is included in Appendix I.

7.4.2 Erosion and Sediment Control Plan

An erosion and sediment control plan (**ESCP**) has been developed to manage erosion and sediment control during construction of the proposed development. The ESCP is included as an appendix to the SMP and has been designed to meet the standards outlined in the International Erosion Control Association (Australasia) (**IECA**) *Best Practice Erosion & Sediment Control – for building and construction sites* (2008). The key erosion and sediment control measures proposed include:

- Sediment fences along/adjacent to the downslope boundary of the site;
- Sandbag sediment traps at the interface of development & non-development areas;
- A sediment basin downstream of the development site;
- Protection of new and existing pits with silt tracks; and
- Stockpile stabilisation measures as outlined in the ESCP.

7.5 Flooding Impact

A Flooding Modelling Report has been prepared by Beca for the proposed development and is included as **Appendix J – Flood Modelling Report.**

As outlined in the Flood Modelling Report, despite multiple attempts to contact the Cumberland City Council to obtain their existing floor modelling information, no response was received. As a consequence, a new flood model was built to analyse the impact of the development on the hydraulics of Girraween Creek. This model consists of a RORB hydrologic model for the catchment upstream of the Prospect Highway, feeding into a TUFLOW 1D/2D hydraulic model to model the passage of flows past the subject site. Further details around the model methodology are included in **Appendix J – Flood Modelling Report.**

To determine the impact of the proposed development on flooding the Probable Maximum Flood (**PMF**), 0.2%, 0.5%, 1%, 2%, 5%, 10% and 20% AEP flood events were assessed under existing and proposed conditions. Under all scenarios modelled, the proposed development was expected to have negligible effect on flood levels in the surrounding floodplain. For all flood events up to and including the PMF, there is no significant interaction between the flood extent and the project works. Because of this, the flood behaviour immediately upstream of, adjacent to, and downstream of the site is expected to remain unaffected by the proposed development.

7.6 Land Contamination Impacts

A PSI has been prepared by Beca for the proposed development and is included **as Appendix K – Preliminary Site Investigation**. They key findings of the PSI are outlined in the subsections below.

7.6.1 Land Contamination

The PSI identified two potential sources of contamination posing a moderate risk to the site, namely:

- Existing fill material in the eastern region of the site footprint;
- Known moderate to high salinity potential (addressed further in subsection 7.6.2).

In terms of the existing fill material in the eastern region of the site footprint, intrusive investigations detected no contamination in exceedance of applied National Environment Protection Council (**NEPC**) National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) (**NEPM**) or NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Land criteria.

Although no specific contamination was identified, the potential for localised contamination hotspots remains, and is proposed to be managed through the inclusion of hotspot contamination measures and an unexpected finds protocol for acid sulfate soils and asbestos in the Construction Environmental Management Plan (**CEMP**).

7.6.2 Salinity

The site is located within an area of moderate to high salinity potential under the Cumberland LEP. However, the proposed works are not expected to significantly interfere with groundwater flows which could result in an increase in soil salinity above natural levels on the site.

7.7 Preliminary Risk Screening

As outlined in section 4.2.3, a risk screening was completed for the proposed development and identified that the screening threshold for storage of Class 2.3 substances (anhydrous ammonia) was not exceeded based on the storage and handling of ammonia associated with the new refrigeration circuit only. Therefore the development is classified as not a ‘potentially hazardous industry’ in terms of Clause 3.10 of the Resilience and Hazards SEPP.

The preliminary risk screening report (PRS) has been prepared and is included as **Appendix L – Preliminary Risk Screening Report.**

The 'Hazards and Risks' component of the Planning Secretary's Environmental Assessment Requirements (SEARs) requires a preliminary risk screening to be completed in accordance with the SEPP (Resilience and Hazards) 2021.

The objectives of the PRS were to:

- Determine whether the proposed development is considered as 'potentially hazardous' within the meaning of the SEPP; and
- Establish whehter a Preliminary Hazard Analysis (PHA) is required.

As the PRS outlines, the main hazard for the facility is ammonia, which is used in the refrigeration circuit for the existing facility and the proposed expansion. As the proposed cold store refrigeration circuit was originally designed to be integrated with the existing circuit and is effectively a single inventory, the combined refrigeration system (i.e. both existing and proposed development) was set to exceed the SEPP thresholds and require a PHA. Approximately 12.5 tonnes of ammonia will be required to service the overall facility refrigeration system, an increase of approximately 2.5 tonnes over and above existing quantities.

However, following significant consultation with NSW Department of Planning and Environment (DPE) a cumulative risk assessment for the entire site (existing plus proposed) was not required if the proposed refrigerant circuit fulfils the following aspects:

- The new refrigeration circuit is independent to the existing refrigeration circuit (i.e.no shared pipework, no means to tie-in the circuits to provide redundancy from one to another). This will be established in the design basis.
- The ammonia storage and handling in the new refrigeration circuit is below the risk screening threshold. Based on Table 3.1 of the PRS, this is achieved.
- The new refrigeration circuit is located at the optimal position that is away from the existing refrigerant circuit and surrounding land users (potential offsite receptors).
    - The new plant room where the new refrigeration circuit equipment (liquid receiver, condenser, compressors, etc) is housed, is situated at the south-east corner of the site. This is away from the Berry Patch Day Care Centre and residential dwellings (immediately north of the site at Reservoir Road), located approximately 240 m and 250 m, respectively.
    - The new plant room is located approximately 200 m and 140 m from the north and south plant rooms respectively, where the existing refrigeration circuit equipment are located.

As the new refrigeration circuit will be designed to meet the above aspects, the outcome of this risk screening was based on the storage and handling of ammonia associated with the new refrigeration circuit only, i.e. below the screening threshold.

Given the ammonia quantity in the new refrigeration circuit is below the risk screening threshold and proposed engineering and procedural controls will be implemented as per the existing facility (e.g. preventative maintenance program, gas detection with alarms and trip functions, forced mechanical ventilation for the plant room), addition of the new refrigeration circuit is not expected to introduce significant contribution to existing risk from the existing refrigeration circuit.

Based on the findings of the PRS:

- The risk screening found that the proposed development is not considered as 'potentially hazardous' and does not require a PHA.
- The new refrigeration circuit is independent to the existing refrigeration circuit.
- The ammonia storage and handling in the new refrigeration circuit is below the risk screening threshold. There will be no other DG stored and handled onsite in significant quantities except ammonia.

- The new refrigeration circuit is located at the optimal position that is away from the existing refrigerant circuit and surrounding land users (potential offsite receptors).
- The storage and transport of DG for the proposed development do not exceed the relevant risk screening threshold.
- The storage and transport of DG for the proposed development do not exceed the relevant risk screening threshold.
- The addition of the new refrigeration circuit is not expected to introduce significant contribution to existing risk from the existing refrigeration circuit. The proposed engineering and procedural controls will be implemented as per existing facility.

As the risk screening has identified the proposed refrigeration systems does not exceed the nominated screening threshold under SEPP 33, not further assessment is required.

7.8 Urban Design Impacts

The primary anticipated urban design impacts of the proposal relate to the new 5,140m² freezer building extension and annexe to the east of the existing southern warehouse. This has been designed to complement the existing cold storage facility and surrounding industrial development. Specifically:

- The freezer building extension is proposed to be clad in Colourbond 'Surfmist' to match the existing southern freezer building.
- Select colour variation has been incorporated at the corners of the building to provide tonal variation in the cladding and visually break down long expanses of wall to create visual interest. The colours chosen have been selected to match Americold's branding.
- Business identification signage is proposed along the southern elevation of the new building to aid in building identification from Prospect Highway. The signage will be approximately 8400mm x 3080mm or 26m².
- The southern freezer building extension has been located away from all potentially sensitive receptors, including the residential dwellings to the northwest of the site.

The development will be primarily visible to vehicles / pedestrians utilising Prospect Highway. Figure 7-2 demonstrates the anticipated visual impact of the development from this vantage point. Elevation drawings are included **in Appendix E – Site Development Plans.**

To enhance urban design outcomes, enhanced site landscaping is proposed. Specifically:

- New landscape planting and infill planting is proposed along the northern site boundary between the new staff/visitor vehicle entry and the adjacent properties at 564, 566, 568 Reservoir Road and Lot 3 DP1192514. This is intended to assist in screening the existing and proposed development when viewed from these adjacent properties.
- Existing trees along the southern boundary will be retained where practicable. New trees and turf are proposed along this boundary to enhance screening of the facility from Prospect Highway. The new trees are proposed to be a mixture of Blackwood, Parramatta Wattle, Spotted Gum, Forest Red Gum and Sydney Blue Gum.
- A row of new trees is proposed to the southwest of the new pallet storage partially screen this area from Prospect Highway.
- New landscaping planting is proposed within and adjacent to the staff parking to enhance the visual amenity of this area for Americold staff.
- New landscape planting is proposed to the north of the existing office building and west of the existing services building and workshop/battery recharge to enhance the amenity of the site for staff and visitors.
- New landscape planting is proposed east of the proposed development, adjacent to the site access road and semi-trailer parking.

Detailed landscaping plans are included as **Appendix M – Landscape Plans**.

Figure 7-2: Prospect Highway - Photomontage

7.9 Biodiversity Impacts

A BDAR has been prepared by Umwelt for the proposed development and is included in **Appendix N – Biodiversity Development Assessment** Report. As outlined in the BDAR:

- The proposed development is expected to have negligible direct impacts on biodiversity values, with direct impacts including the loss of planted native vegetation and exotic vegetation as a result of ground disturbance associated with building extensions and alteration to the site access. An overview of direct impacts is outlined in Table 7.2 below.
- The proposed development is not expected to result on any additional indirect impacts on biodiversity values of the site or surrounding land.
- There will be no substantial change to noise impacts from a biodiversity perspective given the project is adjacent to existing roads in a highly urbanised industrial area with existing noise impacts.
- Dust emissions have the potential to adversely impact native species, however any impacts resulting from dust are not expected to be of any level of significance in relation to threatened species, populations, and communities.
- There will be no substantial change to impacts from weeds, apart from the removal of some exotic vegetation as part of the development footprint.
- No impacts are expected to occur to threatened species or community habitat associated with karst, caves, crevices, cliffs and other geological features of significance, rocks, or human-made structures within the development footprint.
- Important connectivity and movement habitat is unlikely to be substantially impacted by the proposed development.
- No impacts on water quality or hydrological processes that sustain threatened species and threatened ecological communities are likely to occur.

- The Subject Land has been mapped by the Salinity Potential of Western Sydney dataset (DPE, 2002) as having an area of moderate salinity potential in the northwest of the Subject Land, and area of high salinity potential in the southeast of the Subject Land.
- The probability of acid sulfate soils within the Subject Land has been assessed as extremely low to low.
- The Development Footprint for the Proposal is not within the proximity area and therefore any impacts are likely to be indirect impacts associated with construction and changes in surface flows.
- The proposal is unlikely to significantly impact the biophysical, hydrological, or ecological integrity of the adjacent coastal wetland, or the quantity and quality of the surface and groundwater flows into the costal wetland.
- The Project would increase the area of impermeable surfaces within the Subject Land in the catchment of the mapped 'proximity of coastal wetlands area'. However, the Project design includes the inclusion of measures to limit stormwater flow leaving the property, such as on onsite detention tank and overland flow paths.
- Mitigation and control measures would be implemented to manage risks of contamination and to reduce the potential for dryland salinity.

Table 7.2: Direct Biodiversity Impacts (Source: Umwelt)

Vegetation Zone	Area in the Development Footprint (ha)
Planted Native Vegetation	0.17
Weeds and Exotic Vegetation	0.74
TOTAL	**0.91**

To ensure the biodiversity values of the site are appropriately protected in accordance with the safeguard/management measures recommended in the BDAR:

- The CEMP for the development will:
  - Demarcate operational and construction area boundaries.
  - Include appropriate dust and air quality control measures.
- Mitigation measures to reduce the potential for dryland salinity development on-site will be incorporated such as minimising groundwater impact, minimising vegetation removal, and corrosion protection if required.
- Any water management systems proposed as part of detailed design will seek to minimise potential for damage to flora and fauna habitats.
- An ESCP will be implemented throughout the duration of construction (refer **Appendix I – Stormwater Management Plan** for further detail).
- Waste will be managed in accordance with **Appendix Q – Waste Management Plan**.

The proposed development will necessitate removal of between 3-5 mature tress to facilitate development of the new staff/visitor vehicle access. As outlined in **Appendix M – Landscape Plans**, most of the existing site landscaping is proposed to be retained, and new infill planting is proposed, including 47 new trees. The proposed landscaping has sought to utilise a mixture of indigenous species to further enhance the biodiversity value of the site.

7.10 Heritage Impacts

7.10.1 Aboriginal Cultural Heritage

It is Beca's position that the assessment of Aboriginal cultural heritage impact is a matter for determination by Traditional Owners in accordance with their customs, practices, and beliefs.

For the purposes of assessing potential impacts of the proposed development on Aboriginal cultural heritage in terms of the NPW Act and EP&A Act a draft ACHAR has been prepared by NGH and is included in **Appendix O – Aboriginal Cultural Heritage Assessment Report**. The draft report has been sent out to Registered Aboriginal Parties (**RAPs**) for their review, with the final expected in early-mid August. As that report highlights:

- No Aboriginal sites or potential archaeological deposits were identified during the assessment.
- No previously identified Aboriginal Heritage Information Management System (**AHIMS**) sites are located within the project area.
- As a result, the proposed development is not expected to impact on Aboriginal heritage.

As outlined in the ACHAR, the RAPs who attended the site survey suggested that to mitigate general impacts on the landscape the proposed development might consider:

- Replanting of the area with native vegetation after the works have been completed in order to encourage the rehabilitation of the natural environment.
- Preparation of a cultural interpretation plan for the project to provide an opportunity for the local Aboriginal community to interact with the proposed development through design, art, digital displays, native gardens or landscaping, allowing for a visible representation of local Aboriginal heritage associated with the project.

The ACHAR states that these mitigation proposals/recommendations are not tied to the assessment and that as no physical Aboriginal heritage is present in the project area, no further mitigation measures are required. To give partial effect to proposed measures Americold intends to replant the area with indigenous vegetation as outlined in **Appendix M – Landscape Plans** in order to encourage rehabilitation of the natural environment. A cultural interpretation plan is not proposed as part of the development.

In addition to the measures requested by the RAPs, to safeguard against unexpected finds of Aboriginal cultural heritage significance:

- If any items suspected of being Aboriginal in origin are discovered during the work, all work in the immediate vicinity must stop and the Unexpected Finds Protocol (Appendix C of the ACHAR) must be followed. The find will need to be assessed and if found to be an Aboriginal object, an Aboriginal Heritage Impact Permit (**AHIP**) may be required.
- In the unlikely event that human remains are uncovered during the proposed works, all work must cease in the immediate vicinity. The appropriate heritage team within Heritage NSW and the local police should be notified. Further assessment should be undertaken to determine if the remains are Aboriginal or non-Aboriginal. If the remains are deemed to be Aboriginal in origin the RAPs should be advised of the find as directed by the appropriate heritage team within Heritage NSW. Heritage NSW will advise Americold on the appropriate actions required.
- Should the proposed development activities (including construction activities) extend beyond the area assessed in the ACHAR, further archaeological assessment and consultation with RAPs will be required.

7.10.2 Colonial Heritage

A Statement of Heritage Impact (**SOHI**) has been prepared by NGH for the proposed development and is included in

Appendix P – Statement . As outlined in the SOHI, the proposed development is located in the vicinity of three heritage listed items:

- 'House – Bridestowe' – Blacktown LEP 2015 #I64
- 'Prospect Reservoir and Surrounding Area' – Blacktown LEP 2015 #4
- 'Former Great Western Road, Prospect' - State Heritage Register (SHR): 01911; and Blacktown Local LEP 2015 # I60

The 'House – Bridestowe' is located approximately 45m northeast of the project area. This item has the potential to be visually impacted by the proposed new site access due to its close proximity. However, as outlined in the SOHI, the majority of the works for the new site access are paving and ground works and will not generate visual impacts on views to and from the house. The development will not otherwise be visible from the house or physically impacted by the proposed development.

The 'Prospect Reservoir and Surrounding Area' is located approximately 220m west of the project area with views blocked by an intervening commercial complex. As such no physical or visual impacts on this heritage item are anticipated.

The 'Former Great Western Road, Prospect' is located immediately adjacent to the Americold site. Construction of the new staff/visitor vehicle crossing is expected to have a nil/neutral-low impact on the significance of this heritage item. Based on the findings of the SOHI, it is unlikely that the original 1818 road fabric of the 'Former Great Western Road' will be disturbed during construction of the proposed vehicle crossing given the difference between the road's historic and current width. Therefore, the archaeological potential in this area is low. There will also be no impact on the heritage significance of the original alignment of the road as the proposed works will not result in a change to the alignment.

In the unlikely event that heritage finds relating to the 'Former Great Western Road, Prospect' are found, an unexpected finds procedure is proposed to be implemented and has been included as Appendix A of the SOHI.

7.11 Waste Impacts

A Waste Management Plan (**WMP**) has been prepared by Beca for the proposed development and is included as **Appendix Q – Waste Management Plan**. The key findings of the WMP are outlined in the subsections below.

7.11.1 Operational Waste

Anticipated operational waste streams include general waste, soft plastic packaging, carboard, and metal scraps. Locally placed wheelie bins are proposed to be located across the site to effectively segregate waste, achieve source separation, avoid cross contamination of streams, and avoid littering. Waste is proposed to be stored on-site in existing 4.5 m^3 and 30 m^3 skip bins and be collected and transported for offsite disposal/recycling by licenced contractors.

The WMP includes details of bin storage areas, accessibility to collection points, scheduled collection, education measures, and ongoing management of waste on site.

7.11.2 Construction Waste

Waste streams anticipated during the construction phase include general waste, recyclables, excavated spoil from bulk excavation for footings, concrete, timber, plasterboard, metals, bricks, and potentially hazardous and/or special waste. Handling of construction waste in accordance with the NSW EPA *Waste Classification Guidelines* is proposed to be detailed within the CEMP for the proposed development.

7.11.3 NSW Waste and Sustainable Material Strategy 2014

The WMP aligns with the NSW *Waste and Sustainable Material Strategy 2041* in that is seeks to:

- Divert waste going to landfills, recover reusable and recyclable waste, and contribute to NSW's goal to triple the plastics recycling rate;
- Reduce littering and illegal dumping and promote behavioural change;
- Promote responsible management and disposal of waste and contribute to improving waste infrastructure by supporting waste management businesses; and
- Reduce carbon emissions and increase carbon efficiency

Excavated spoil will be sampled, tested, and characterised prior to off-site disposal, and all off-site movements will be carried out in accordance with the NSW EPA *guidelines on transporting waste* and *NSW EPA Waste Classification Guidelines*.

7.12 Air Quality Impacts

An Air Quality Review of the proposed development has been prepared by Trinity Consultants and is attached as **Appendix R – Air Quality Review**. The key findings of the Air Quality Review are outlined in the subsections below.

7.12.1 Construction Impacts

Standard construction works will be required to give effect to the proposed development. These are expected to include minor earthworks using diesel heavy machinery and exhaust emissions from truck movements and heavy machinery.

To provide an assessment of construction air quality impacts, the Air Quality Review has made reference to the Institute of Air Quality Management (**IAQM**) guideline *Guidance on the assessment of dust from demolition and construction* (2014). The guideline provides a method for assessing construction air quality risks and for identifying relevant mitigation measures. Based on the findings of that assessment, the proposed construction works are expected to have a low risk of air quality impacts as outlined in Table 7.3 below.

Table 7.3: Construction Air Quality Impacts (Source: Trinity Consultants)

Source	Dust Soiling	Human Health
Demolition	Low	Negligible
Earthworks	Low	Negligible
Construction	Low*	Low
Trackout	Low	Negligible

* It is noted that a medium magnitude and medium area sensitivity corresponds to a risk rating of medium. However, the medium area sensitivity is defined by a single industrial lot adjacent to the driveway works near the existing office building. The major construction works are to the east at a distance of more than 180 metres away. On this basis, it is appropriate to consider a small magnitude for this particular receptor.

To appropriately mitigate construction air quality impacts, the dust control measures outlined in Table 6.8 of **Appendix R – Air Quality Review** are proposed to be implemented as part of the CEMP for the proposed development.

7.12.2 Operational Air Quality Impacts

Relevant ambient air quality goals are defined in the NSW EPA *Approved methods for the modelling and assessment of air pollutants in New South Wales* (2017). The ambient air quality goals relevant to the site's operation are outlined Table 7.4 below.

Table 7.4: Ambient Air Quality Goals (Source: Trinity Consultants)

Compound	Air Quality Criteria (µg/m^3)	Averaging Period
Carbon monoxide	100,000	15 minutes
	30,000	1 hour
	10,000	8 hours
Nitrogen dioxide	246	1 hour
	62	Annual
TSP	90	Annual
PM_{10}	50	24 hours
	25	Annual
$PM_{2.5}$	25	24 hours
	8	Annual
Sulfur dioxide	712	15 minutes
	570	1 hour
	228	24 hours
	60	Annual
Ammonia*	330*	1 hour*
Deposited Dust	4 g/m^2/month total 2 g/m^2/month maximum increase	Annual

NB: ammonia is addressed in further detail in subsection 7.12.3 below.

Due to the nature of the proposed development, site operations are not expected to have any major air emission sources, with air quality impacts expected to be minimal. The main potential operational air emission sources are truck movements and associated engine exhausts, standby generators, and solid waste. In relation to those sources, the Air Quality Review concludes:

- *Truck Movements:* Truck emissions would pose minimal risk to the closest sensitive receptors as well as the Berry Patch Preschool and Long Day Care Centre based on predominant north to north-westerly and south-easterly wind directions. Furthermore, emissions would be relatively minor compared to the local road network including the Western Highway.
- *Standby Generators:* In the event of a power outage, up to 2 x 1000 kVA generators are required. Power outages are a rare occurrence, with the last event occurring almost 3 years ago. The potential for air quality impacts is low given the limited frequency and low number of generators required. There is no other fixed plant on site with a potential for air emissions (e.g., boilers).
- *Solid Waste:* On-site waste is to be stored in a designated location and is associated with odour. Waste on site is typical commercial type waste, and as there is no processing on site (only storage of food), food waste associated with operations is not expected. Furthermore, generators are used on site in the event of a power outage, which will ultimately prevent food spoilage and associated odour.

To appropriately mitigate operational air quality impacts associated with the proposed development, the General, Vehicles and Mobile Plant, Generator Usage and Waste Storage management measures outlined in section 7.2 of **Appendix R – Air Quality Review** are proposed to be implemented.

7.12.3 Ammonia Storage & Use

Ammonia is used in site operations as a refrigerant. As ammonia is stored and used in an enclosed, fully sealed, recirculating refrigeration system, ammonia is not expected to be emitted unless there is an accidental spill. A spill/leakage could have an immediate impact to workers on site, and depending on the prevailing wind conditions, a plume could disperse towards sensitive receptors in the surrounding area.

As outlined in the Air Quality Review, the main potential for an ammonia spill/leakage is associated with:

- Condenser tube corrosion failure.
- General mechanical damage to plates and hose connections
- Component fatigue
- Impact by mobile plant on pipework
- Piping failures due to corrosion

To minimise the likelihood of an ammonia spill/leakage:

- The refrigerant system is proposed to be properly and regularly inspected and maintained to minimise the potential for leakage/spills.
- Safety Data Sheets are to be maintained on site at all times.
- Prior to construction, an Emergency Management Plan – Ammonia Leakage is proposed to be developed in accordance with *AS/NZS 2022 Anhydrous Ammonia – Storage and Handling*. The plan will include maintenance, emergency response mechanisms and clean up procedures in order to minimise the potential for emissions of ammonia.
- Access to Personal Protective Equipment (PPE) is to be made available on site.

All mitigation measures outlined in Table 6.8 of **Appendix R – Air Quality Review** will be incorporated as part of the development. These mitigation measures are also outlined in section 7.15 of this EIS under Air Quality.

7.13 Signage Impacts

As outlined in section 7.8, a new business identification sign is proposed on the southern elevation of the proposed southern warehouse extension. The sign will be approximately 3,080mm x 8,400mm or 26m^2.

An assessment of the proposed signate in terms of the assessment criteria outlined in Schedule 5 of the Industry & Employment SEPP is outlined below.

Table 7.5: Signage Assessment

Schedule 5 Requirement	Assessment
Character of the Area	
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The site is located in an established industrial area. The proposed sign is consistent with this existing industrial context.
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	There is no consistent signage theme in the locality, however the proposes sign is similar in nature to other nearby industrial facilities.
Special Areas	
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed development is not expected to detract from the amenity or visual quality of any nearby areas.
Views and Vistas	
Does the proposal obscure or compromise important views?	No.
Does the proposal dominate the skyline and reduce the quality of vistas?	No.
Does the proposal respect the viewing rights of other advertisers?	There are no other advertisers in the immediate vicinity.

Schedule 5 Requirement	Assessment
Streetscape, Setting or Landscape	
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	Yes, the scale, proportion and form of the site are generally consistent with the surrounding streetscape, setting and landscape.
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	Yes, the proposed sign will contribute to visual interest by breaking down the wall expanse.
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	Not applicable.
Does the proposal screen unsightliness?	Not applicable.
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	No.
Does the proposal require ongoing vegetation management?	No.
Site & Building	
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed sign has been scaled to suit the proportions of the southern freezer building expansion.
Does the proposal respect important features of the site or building, or both?	Yes.
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed sign is appropriate given nature of the surrounding industrial area.
Associated Devices and Logos with Advertisements and Advertising Structures	
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	No.
Illumination	
Would illumination result in unacceptable glare?	The sign is not proposed to be illuminated.
Would illumination affect safety for pedestrians, vehicles or aircraft?	Not applicable.
Would illumination detract from the amenity of any residence or other form of accommodation?	Not applicable.
Can the intensity of the illumination be adjusted, if necessary?	Not applicable.
Is the illumination subject to a curfew?	Not applicable.
Safety	
Would the proposal reduce the safety for any public road?	The sign is not expected to reduce safety for any public road. Addition of building identification signage may support in identification of the Americold site from Prospect Highway, enhancing navigation to/from the site.
Would the proposal reduce the safety for pedestrians or bicyclists?	The sign is not expected to impact safety for pedestrians / cyclists.
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	Due to its proposed position, the sign is not expected to reduce safety for pedestrians or obscure sightlines from public areas.

Overall, the proposed signage satisfies the assessment criteria outlined in Schedule 5 of the Industry & Employment SEPP.

7.14 Cumulative Impacts

The proposed development is generally consistent with the surrounding land use. Americold is not aware of any approved / proposed developments within the vicinity that are likely to give rise to cumulative impacts in associated with the proposed development.

7.15 Mitigation Measures

Based on the foregoing assessment in sections 7.1 to 1.1, the following mitigation measures / safeguards are proposed.

Table 7.6: Proposed Mitigation & Management Measures

No.	Environmental Issue	Proposed Mitigation Measure
		General
1	General	A Construction Environmental Management Plan (CEMP) will be prepared for the proposed development prior to construction and will be implemented during all stages of the construction process.
2	General	The proposed development will be constructed and operated in general accordance with this EIS and all associated appendices.
		Traffic
3	Construction Traffic	A Construction Traffic Management Plan (CTMP) will be prepared by the construction contractor to ensure construction access and traffic generation is safely and efficiently managed. The CTMP will incorporate the temporary construction access configurations described in section 7.1.4.
4	Parking (Staff)	Americold will explore operational management strategies, including staggering shift times, to reduce peak parking demand.
		Noise and Vibration (Construction)
5	Construction Noise & Vibration	Construction Noise and Vibration Management Plan (CNVMP) will be prepared prior to construction. The CNVMP will include a procedure and appropriate controls for any proposed out of hours works.
6	Construction Noise & Vibration	Selecting quieter plant and equipment.
7	Construction Noise & Vibration	Erecting temporary acoustic hoarding to reduce noise from works that would be carried out near the boundaries of the site.
8	Construction Noise & Vibration	Maximising offset distances between receivers and noisy plant or activities.
9	Construction Noise & Vibration	Orientating plant and processes away from receivers.
10	Construction Noise & Vibration	Optionally scheduling respite periods for noise-intensive processes carried out near receivers.
11	Construction Noise & Vibration	Regularly maintaining and monitoring plant and equipment to ensure that their noise emissions are not excessive.
12	Construction Noise & Vibration	Minimising the annoyance from reversing alarms by either fitting closed circuit monitors or non-tonal reversing alarms (“quackers”) on vehicles or deploying ‘spotters’ to oversee reversing movements.
13	Construction Noise & Vibration	Reducing throttle settings and switching off equipment when it’s not being used.

No.	Environmental Issue	Proposed Mitigation Measure
14	Construction Noise & Vibration	If possible, restrict the use of vibratory roller to not more than 4 tonnes, especially when working near buildings on adjoining properties.
15	Construction Noise & Vibration	If heavier vibratory rollers; i.e. more than 18 tonnes, are required to be used, the safe working distances recommended in Table 17 of **Appendix H – Noise & Vibration Impact Assessment** should be adhered to.
		Noise and Vibration (Operational)
16	Operational Noise	A new acoustic louvre system will be installed to replace the louvres on the existing northern plant room. The new louvre system must meet the performance requirements set out in section 8.2 of **Appendix H – Noise & Vibration Impact Assessment** (i.e. NAP Flowline 300 S-Line or equivalent).
17	Operational Noise	All trucks will be encouraged to be fitted with air brake silencers and exhaust silencers
18	Operational Noise	Truck engine compression braking will not be permitted within the facility. New signage will be erected to this effect.
19	Operational Noise	Encourage all trucks to be fitted with a maintained Original Equipment Manufacturer exhaust silencer or a silencer that complies with the National Transport Commission's 'In-service test procedure' and standard.
20	Operational Noise	Traffic speed limits will be signposted within the facility. All drivers will be expected to comply with the speed limit and to implement responsible driving within the facility.
21	Operational Noise	When trucks are parked at the parking bays / loading docks truck engines will be turned off and trucks will not be allowed to idle. New signage will be erected to this effect.
22	Operational Noise	The use of truck, car and forklift horns will be prohibited during evening and night-time operations.
		Stormwater
23	Erosion & Sediment Control	An Erosion & Sediment Control Plan (ESCP) has been prepared for the proposed development in accordance with the *International Erosion Control Association (Australasia) (IECA) Best Practice Erosion & Sediment Control – for building and construction sites* (2008) and is included as an appendix to **Appendix I – Stormwater Management Plan**. The ESCP will be implemented for the duration of construction activities.
24	Erosion & Sediment Control	Sediment fences will be installed along or adjacent to the downslope boundary of the site. Sediment fences will be constructed from an approved geotextile filter fabric to capture the sediment from stormwater runoff. Contractors will be required to remove excessive sediment building up behind the fence regularly in order to for the fence to stay effective.
25	Erosion & Sediment Control	Sandbag sediment traps are to be provided at the interface of development area and non-development area.
26	Erosion & Sediment Control	Sediment basin is to be provided at the downstream limit of the site.
27	Erosion & Sediment Control	All new pits and existing pits will be protected by silt traps.
28	Erosion & Sediment Control	Stockpiles will be protected with appropriate sediment & erosion control measures. Clean run-off from upstream is to be diverted around disturbed areas.

No.	Environmental Issue	Proposed Mitigation Measure
29	Erosion & Sediment Control	Erosion and sediment control measures will be implemented including the use of temporary sediment fences, absorbent spill bunds and impervious barriers during construction.
		Land Contamination
30	Land Contamination	The CEMP will detail a procedure to address the potential for localised contamination hotspots and will include an unexpected finds protocol for acid sulfate soils and asbestos.
31	Land Contamination	Mitigation measures to reduce the potential for dryland salinity development on-site will be incorporated such as minimising groundwater impact, minimising vegetation removal, and corrosion protection if required.
32	Contamination	If contaminated areas are encountered during construction, appropriate control measures will be implemented to manage the immediate risks of contamination as outlined in the Preliminary Site Investigation Report. All other works that may impact on the contaminated area will cease until the nature and extent of the contamination has been confirmed and any necessary site-specific controls or further actions identified in consultation with the Project Manager.
		Biodiversity
33	Biodiversity	The CEMP will: • Demarcate operational and construction area boundaries. • Include appropriate dust and air quality control measures.
34	Water Management	Any water management systems proposed as part of detailed design will seek to minimise potential for damage to flora and fauna habitats.
35	Erosion & Sediment Control	Erosion and sediment controls will be checked and maintained on a regular basis (including the clearing of sediment from behind barriers) and records kept and provided upon request
36	Erosion & Sediment Control	Erosion and sediment control measures will not to be removed until the proposed works are complete, and areas stabilised
37	Erosion & Sediment Control	Erosion and sediment control measures will be implemented and maintained to: • prevent sediment moving off-site and sediment laden water entering any water course, drainage lines, or drain inlets • reduce water velocity and capture sediment on site • minimise the amount of material transported from site to surrounding pavement surfaces.
38	Chemical Storage and Handling	Fuels or chemicals will be stored, handled and disposed of to meet relevant standards. Bunded or contained areas and a spill kit will be provided as appropriate by the Contractor
39	Chemical Storage and Handling	The storage of large quantities of fuels on or around the compound or laydown areas will generally be avoided and vehicles and equipment will be refuelled off site.
40	Spills	An Emergency Spill Response Plan will be prepared as part of the Construction Environmental Management Plan (CEMP). This plan would include as a minimum: measures to avoid spills, clean-up procedures, recording and notification procedures, and requirements for storage of hazardous materials.
		Heritage (Aboriginal Cultural)

No.	Environmental Issue	Proposed Mitigation Measure
41	Aboriginal Cultural Heritage	Following completion of construction, landscaping of indigenous vegetation shall be undertaken as outlined in **Appendix M – Landscape Plans** in order to encourage rehabilitation of the natural environment.
42	Aboriginal Cultural Heritage	If any items suspected of being Aboriginal in origin are discovered during construction, all work in the immediate vicinity must stop and the Unexpected Finds Protocol (Appendix C of the ACHAR) must be followed. The find will need to be assessed and if found to be an Aboriginal object, an AHIP may be required.
43	Aboriginal Cultural Heritage	In the unlikely event that human remains are uncovered during construction, all work must cease in the immediate vicinity. The appropriate heritage team within Heritage NSW and the local police should be notified. Further assessment should be undertaken to determine if the remains are Aboriginal or non-Aboriginal. If the remains are deemed to be Aboriginal in origin the RAPs should be advised of the find as directed by the appropriate heritage team within Heritage NSW. Heritage NSW will advise Americold on the appropriate actions required.
44	Aboriginal Cultural Heritage	Should the proposed development activities (including construction activities) extend beyond the area assessed in the ACHAR, further archaeological assessment and consultation with RAPs will be required.
45	Aboriginal Cultural Heritage	All access to the site and laydown areas will be within the project area assessed in the ACHAR. If any access or laydown areas are to be outside the project area assessed an addendum to the ACHAR will be required.
46	Aboriginal Cultural Heritage	If any mature or large trees outside of the area subject to the visual inspection and assessment are to be impacted as a result of the proposed works, additional investigation may be required. This must be completed by a qualified archaeologist.
		Heritage (Colonial)
47	Colonial Heritage	In the unlikely event that heritage finds relating to the original Convict Road are found, an unexpected finds procedure is proposed to be implemented and has been included as Appendix A of the SOHI.
48	Colonial Heritage	If any additional works are proposed outside of the scope assessed in the SOHI, additional assessment may be required.
		Waste
49	Waste Management	All site waste will be managed in accordance with **Appendix Q – Waste Management Plan.**
50	Waste Management	Waste management measures will be implemented including: • Classifying all waste materials generated as part of the project in accordance with NSW EPA Waste Classification Guidelines; • Storage of waste material in designated areas and storage containers during construction; and the • Retaining waste transport and disposal records.
51	Construction Waste	The CEMP will detail procedures for the management of construction waste in accordance with the NSW EPA *Waste Classification Guidelines.*
52	Construction Waste	Excavated spoil will be sampled, tested, and characterised prior to off-site disposal, and all off-site movements will be carried out in accordance with the NSW EPA *guidelines on transporting waste* and NSW EPA *Waste Classification Guidelines*.
		Air Quality (Construction)
53	Construction Air Quality	The name and contact details of person(s) accountable for air quality and dust issues will be displayed on the site boundary. The contact information of the head or regional office will also be displayed.

No.	Environmental Issue	Proposed Mitigation Measure
54	Construction Air Quality	A Dust Management Plan (DMP) will be developed and implemented, including measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk and should include as a minimum the highly recommended measures in **Appendix R – Air Quality Review**. The desirable measures should be included as appropriate for the site.
55	Construction Air Quality - Site Management	All dust and air quality complaints will be recorded with appropriate measures taken and recorded to reduce emissions in a timely manner.
56	Construction Air Quality - Site Management	The complaints log will be available to the local authority when asked.
57	Construction Air Quality - Site Management	Any exceptional incidents that cause dust and/or air emissions, either on- or off-site, will be recorded and the action taken to resolve the situation in the logbook.
58	Construction Air Quality - Monitoring	Daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust will be undertaken with inspection results recorded. The log will be made available to the local authority when asked. This will include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100m of site boundary, with cleaning to be provided if necessary.
59	Construction Air Quality - Monitoring	Regular site inspections will be undertaken to monitor compliance with the DMP, inspection results recorded, and inspection logs made available to the local authority when asked.
60	Construction Air Quality - Monitoring	The frequency of site inspections by the person accountable for air quality and dust issues on site will be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
61	Construction Air Quality - Monitoring	The site layout will be planned so that machinery and dust causing activities are located away from receptors, as far as is possible.
62	Construction Air Quality - Monitoring	Solid screens or barriers will be erected around dusty activities or the site boundary that are at least as high as any stockpiles on site.
63	Construction Air Quality - Monitoring	Site or specific operations will be enclosed where there is a high potential for dust production and the site is active for an extensive period.
64	Construction Air Quality - Monitoring	Site runoff of water or mud will be avoided.
65	Construction Air Quality - Monitoring	Site fencing, barriers and scaffolding will be kept clean using wet methods.
66	Construction Air Quality - Monitoring	Materials that have a potential to produce dust from site will be removed as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.
67	Construction Air Quality - Monitoring	Materials being re-used on site that have a potential to produce dust will be covered, seeded or fenced to prevent wind whipping.

No.	Environmental Issue	Proposed Mitigation Measure
68	Construction Air Quality – Operating vehicle/machinery	All on-road vehicles will comply with the requirements of the relevant Australian Design Rules.
69	Construction Air Quality – Operating vehicle/machinery	All vehicles will be required to switch off engines when stationary – no idling vehicles.
70	Construction Air Quality – Operating vehicle/machinery	The use of diesel or petrol powered generators will be avoided, and mains electricity or battery powered equipment used where practicable.
71	Construction Air Quality – Operating vehicle/machinery	A maximum-speed-limit of 25 km/h on surfaced and 15 km/h on unsurfaced haul roads and work areas will be imposed and signposted (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).
72	Construction Air Quality – Operations	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
73	Construction Air Quality – Operations	An adequate water supply will be provided on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
74	Construction Air Quality – Operations	Enclosed chutes and conveyors and covered skips will be used.
75	Construction Air Quality – Operations	Drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment will be minimised and use fine water sprays on such equipment wherever appropriate.
76	Construction Air Quality – Operations	Equipment will be readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
77	Construction Air Quality – Waste management	No burning of waste materials will occur.
78	Construction Air Quality – Demolition	The inside of buildings will be soft stripped before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).
79	Construction Air Quality – Demolition	Effective water suppression will be used during demolition operations. Hand held sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground.
80	Construction Air Quality – Demolition	Explosive blasting will be avoided, using appropriate manual or mechanical alternatives.

No.	Environmental Issue	Proposed Mitigation Measure
81	Construction Air Quality – Demolition	Any biological debris will be bagged or removed or damped down before demolition.
82	Construction Air Quality	Scabbling will be avoided (roughening of concrete surfaces) if possible.
83	Construction Air Quality	Sand and other aggregates will be stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
84	Construction Air Quality – Trackout	Water-assisted dust sweeper(s) will be used on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.
85	Construction Air Quality – Trackout	Dry sweeping of large areas will be avoided.
86	Construction Air Quality – Trackout	Vehicles entering and leaving sites will be covered to prevent escape of materials during transport.
87	Construction Air Quality – Trackout	All inspections of haul routes and any subsequent actions will be recorded in a site log book.
88	Construction Air Quality – Trackout	A wheel washing system will be implemented (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).
		Air Quality (Operational)
89	Operational Air Quality	Air quality management measures (such as those given in this section) will be included in the environmental management plan developed for the site.
90	Operational Air Quality	Information and training will be provided to staff and contractors on key air quality issues as outlined in this report.
91	Operational Air Quality	All relevant records will be maintained (e.g. complaints, environmental incidents such as a leakage, maintenance logs).
92	Operational Air Quality	A complaints handling procedure to respond to air quality issues will be implemented. This will be covered off by a general complaints procedure which typically includes an identification of the issue, complaint details (e.g. complainant, time/date), responding person, immediate and long-term response actions.
93	Operational Air Quality	Spill kits and PPE around any chemical/fuel storage areas will be provided.
94	Operational Air Quality – Vehicles and mobile plant	All vehicles and mobile plant used on site will be properly maintained according to manufacturing specifications.

No.	Environmental Issue	Proposed Mitigation Measure
95	Operational Air Quality – Vehicles and mobile plant	Unscheduled inspections of vehicles will be undertaken where visible and excessive smoke is being emitted from the exhaust.
96	Operational Air Quality – Vehicles and mobile plant	Where possible, vehicles will not be left idling.
97	Operational Air Quality – Generator use	Standby generators will be located as far as practicable from the nearest houses
98	Operational Air Quality – Generator use	Where possible, standby generators will be located in an open area (away from major buildings/structures) to allow for improved dispersion of combustion pollutants.
99	Operational Air Quality – Waste storage	Waste storage areas will be kept appropriately ventilated to avoid build-up of odour (e.g. if in an enclosed room, provide louvres and passive whirlybird vents).
100	Operational Air Quality – Waste storage	When not in use, waste receptacles will be closed.
101	Operational Air Quality – Ammonia use	Prior to construction, an Emergency Management Plan – Ammonia Leakage will be developed in accordance with AS/NZS 2022 Anhydrous Ammonia – Storage and Handling. The plan will include maintenance, emergency response mechanisms and clean up procedures in order to minimise the potential for emissions of ammonia.
102	Operational Air Quality – Ammonia use	The refrigerant system will be properly and regularly inspected and maintained to minimise the potential for leakage/spills.
103	Operational Air Quality – Ammonia use	Access to PPE will be made available on site at all times.
104	Operational Air Quality – Ammonia use	Safety Data Sheets will be maintained on site at all times.

8 Key Issues Analysis

8.1 Background

The SEARs request for the proposed development dated 29 September 2020 was referred to public authorities for comment. Responses were received from the following:

- Fire & Rescue NSW (FRNSW).
- Department of Planning Industry and Environment – Environment, Energy and Science Group
- Cumberland City Council
- NSW EPA
- Heritage NSW[2]
- Endeavour Energy
- TfNSW
- Department of Planning, Industry and Environment – Water and Natural Resources Access Regulator.

The comments received related to the then proposed development, which comprised more extensive development than is now proposed. At the time of the responses, the proposed development comprised:

- Construction of two new cold store buildings and ancillary staging areas;
- Upgrades and amendments to vehicles accessways and car parking areas;
- New plants rooms;
- A new entry gate; and
- Other minor amendments associated with the ongoing use and operation of the site.

The proposal was not re-referred to these public authorities prior to issue of the amended SEARs which relate to the reduced-scale development now proposed. A response to the key issues raised by each of the authorities is outlined below in the subsections below.

8.2 Fire & Rescue NSW

Table 8.1: Fire & Rescue NSW - Key Issues

Comments Received	Response / Where Addressed
We request that we be given the opportunity to review and provide comment once approvals have been granted and the project has progressed such that there is more relevant detailed information available.	The FRNSW request to review and provide comments once approvals have been granted and the project has progressed through to detailed design is noted. FRNSW were invited to attend an information session as part of the consultation process but elected not to attend.
FRNSW note that screening will be carried out under SEPP 33 to determine if the site is deemed potentially hazardous or offensive.	A PRS has now been prepared for the proposed development and is included in **Appendix L – Preliminary Risk Screening Report**. The findings of the PRS are summarised in section 7.7.
As additional details become available Fire & Rescue NSW requests to be consulted with respect to the proposed fire and life safety systems and their configuration at the project's preliminary and final design phases.	FRNSW were invited to attend an information session as part of the consultation process. The FRNSW request to review and provide comments once approvals have been granted and the project has progressed through to detailed design (when more information about the

[2] NB: two separate sets of comments were received from Heritage NSW relating to Aboriginal Cultural Heritage and Colonial Heritage respectively.

Comments Received	Response / Where Addressed
	proposed fire and life safety systems will be available) is noted.
While there is currently no requirement for a fire safety study, FRNSW may request one be undertaken at a later stage should information be provided such it is deemed that the development poses unique challenges to the response to and management of an incident.	In light of the feedback received from FRNSW to date, and in absence of any unique challenges being identified, no fire safety study has been prepared.

8.3 Department of Planning Industry and Environment – Environment, Energy and Science Group

Table 8.2: Environment, Energy & Science Group - Key Issues

Comments Received	Response / Where Addressed
Biodiversity	
Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the *Biodiversity Conservation Act 2017* the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method, including an assessment of the impacts of the proposal (including an assessment of impacts prescribed by the regulations).	A BDAR has been prepared for the proposed development and is included as **Appendix N – Biodiversity Development Assessment Report**. The BDAR addresses the requirements of the *Biodiversity Conservation Act 2016, Biodiversity Conservation Regulation 2017* and Biodiversity Assessment Method.
The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.	The avoid, minimise and offset framework including all direct, indirect and prescribed impacts are addressed in **Appendix N – Biodiversity Development Assessment Report**. A summary of impacts is included in section 7.9.
The BDAR must include details of the measures proposed to address the offset obligation as follows: • The total number and classes of biodiversity credits required to be retired for the development/project; • The number and classes of like-for-like biodiversity credits proposed to be retired; • The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; • Any proposal to fund a biodiversity conservation action; • Any proposal to conduct ecological rehabilitation (if a mining project); • Any proposal to make a payment to the Biodiversity Conservation Fund. • If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.	Based on the findings of **Appendix N – Biodiversity Development Assessment Report**, no offsets are required or proposed.

Comments Received	Response / Where Addressed
The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.	Relevant spatial data associated with the survey and assessment is included in **Appendix N – Biodiversity Development Assessment Report.**
The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*.	The BDAR was prepared by Rachel Musgrave (BAM Accredited Assessor) and Senior Ecologist, Larissa Abbott.
Water and Soils	
The EIS must map the following features relevant to water and soils including: • Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map) • Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method) • Wetlands as described in s4.2 of the Biodiversity Assessment Method • Groundwater • Groundwater dependent ecosystems • Proposed intake and discharge locations	In terms of the features identified: • A search identified no EPI classification of Acid sulfate soil risk within a 1000m site buffer. Information obtained from the Australian Soil Resource Information System (**ASRIS**) identified the site and the surrounding region lies within an area of extremely low (1 –5%) to low (6 –70%) probability of occurrence of Acid Sulfate Soils. • Rivers, streams, wetlands and estuaries proximate to the development site are mapped in Figure 3.2 of **Appendix B – Biodiversity Development Assessment Report.** • Given the nature of the proposed development, no impacts on groundwater / groundwater dependent ecosystems are anticipated. • No new water intakes or discharge locations are proposed, with all existing and future water demands for the site proposed to be met by the existing Sydney Water mains supply. The two existing stormwater discharge outlets are proposed to be utilised with no new stormwater discharge locations proposed.
The EIS must describe background conditions for any water resource likely to be affected by the development, including: • Existing surface and groundwater. • Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. • Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters. • Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.	All landscape features proximate to the development, including water resources, are described in **Appendix B – Biodiversity Development Assessment Report**. Based on the findings of that report as summarised in section 7.9 above, no impacts on water quality or hydrological processes that sustain threatened species and threatened ecological communities are anticipated. To further safeguard water resources, an ESCP is proposed to be implemented throughout construction and is included as an appendix to **Appendix I – Stormwater Management Plan.**

Comments Received	Response / Where Addressed
• Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning.	
The EIS must assess the impacts of the development on water quality, including: • The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction. • Identification of proposed monitoring of water quality. • Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan).	Refer response above.
The EIS must assess the impact of the development on hydrology, including: • Water balance including quantity, quality and source. • Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas. • Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. • Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches). • Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water. • Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options. • Identification of proposed monitoring of hydrological attributes.	Refer response above.
Flooding and Coastal Hazards	
The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including: • Flood prone land.	A new flood model was developed for the project consisting of a RORB hydraulic model for the catchment upstream of the Prospect Highway, feeding into a TUFLOW 1D/2D hydraulic model to model the passage of

Comments Received	Response / Where Addressed
• Flood planning area, the area below the flood planning level. • Hydraulic categorisation (floodways and flood storage areas) • Flood Hazard.	flows past the site. Flood extent maps as well as flood hazard maps have been provided.
The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.	As outlined in **Appendix J – Flood Modelling Report** flood assessment and modelling has been undertaken for the 0.5%, 0.2%, 1%, 2%, 5%. 10% and 20% AEP event. A qualitative assessment has been undertaken assuming a flow of 28.2 m^3/s, as well as a further sensitivity check with a flow of 98 m^3/s.
The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios: a. Current flood behaviour for a range of design events as identified in [the comment] above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.	Flood behaviour has been modelled for the PMF, 0.5% and 0.2% AEP year flood event as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
Modelling in the EIS must consider and document: • Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies. • The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood. • Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories • Relevant provisions of the NSW Floodplain Development Manual 2005.	As detailed in **Appendix J – Flood Modelling Report**, a number of attempts were made to obtain existing flood modelling information from the Cumberland City Council, however to date such attempts have been unsuccessful. The impact of flood behaviour has been considered for the 1%, 2%, 5%. 10% and 20% AEP event. The PMF is approximately 3 times larger in flow than the 1% AEP and to this end a flow of 28.2 m3/s has been modelled using TUFLOW. Modelling demonstrates no adverse affects on the floodplain resulting from project works up to and including the PMF. The NSW Floodplain Development Manual 2005 has not been directly considered. The Manual is intended to guide councils in the development and implementation of detailed local floodplain risk management plans to produce robust and effective flood management outcomes.
The EIS must assess the impacts on the proposed development on flood behaviour, including: • Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure. • Consistency with Council floodplain risk management plans. • Consistency with any Rural Floodplain Management Plans. • Compatibility with the flood hazard of the land. • Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.	As the results indicate that all flood events up to and including the PMF do not interact with the proposed development (including development earthworks) no detrimental increases in the potential flood affectation of other properties, assets and infrastructure are anticipated.

Comments Received	Response / Where Addressed
• Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. • Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses. • Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council. • Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council. • Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES. • Any impacts the development may have on the social and economic costs to the community as consequence of flooding.	

8.4 Cumberland City Council

Table 8.3: Cumberland City Council - Key Issues

Comments Received	Response / Where Addressed
Parks / Open Space	
The report acknowledges the closest heritage site, the Prospect Hill State Heritage Registered area, which is located approximately 500 metres to the west of the development property. The proposal is not expected to have a significant effect on the heritage site due to elevational differences and an intermediate commercial property located between the sites.	The SOHI has confirmed that no physical or visual impacts on the Prospect Hill State Heritage Registered area are anticipated.
The southern boundary of the development site is a vegetated riparian corridor that forms the headwaters of Girraween Creek. The proposed development of the site is an opportunity to undertake creek restoration including weed removal and restoration planting which derive from the conforming ecological community. The perimeter of the site is also established with indigenous plantings and should be similarly enhanced.	No development is proposed in the vicinity of Girraween Creek. Creek restoration is not proposed. However, as outlined in **Appendix M – Landscape Plans**, new landscape planting is proposed throughout the site. Indigenous trees, shrubs, groundcover and grasses are proposed to enhance the broader site environment.
The verge is degraded along parts of road frontages that border the development site. The proposed development of the site is an opportunity to remove redundant fencing, signposts and to reinstate verge plantings and turf on road frontages adjacent to the property including the	No changes are proposed to the publicly owned verges adjacent to the site which are not within Americold's ownership. The existing site fences along the road boundaries are proposed to be retained. Within the Americold site, landscaping is proposed along the road

Comments Received	Response / Where Addressed
reinstatement of missing 'Hoop Pines' at equidistant intervals along the adjacent section of the Prospect Highway median.	boundaries as shown in **Appendix M – Landscape Plans**, to enhance amenity of these areas. As part of this work, any redundant signposts/fencing that lie within the Americold boundary will be removed.
Noise / Acoustic Impacts	
The proposed development may cause a variety of acoustic impacts on surrounding sensitive receivers. Acoustic concerns include (although are not limited to) the following: • Construction works; and • Noise from the existing 24 hour 7 days per week operations. • It is recommended that prior to construction works commencing, an appropriately qualified acoustic consultant having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/or grade membership of the Australian Acoustical Society (MAAS) be engaged to assess the noise impacts of the proposal. • The acoustic consultant should address the noise impact of the proposed construction works onto the closest sensitive receivers and provide recommendations on how to minimise disturbance. The consultant should also assess the impact of the proposed infrastructure installations/upgrades and also provide recommendations (if any required) on noise mitigation measures. The acoustic report must be prepared in accordance with the EPA document Noise Policy for Industry. • Recommendations in the report must be adhered to for the duration of construction works on site. Should any recommendations be made regarding noise mitigation measures for the proposed infrastructure, these must also be implemented into the design.	An acoustic report has been prepared in accordance with the NPI and is included as **Appendix H – Noise & Vibration Impact Assessment.** Recommendations to minimise disturbance are outlined in the report and are summarised in sections 7.2 and 1.1 above.
SEPP55 – Contaminated Land	
The intended use of the site is for ongoing industrial use. The report for the proposed expansion (Document Set ID 8459975) details that to demonstrate compliance with SEPP 55 a contamination assessment will be submitted with the EIS to inform the DPIE of the site's contamination status.	Since this comment was received, SEPP 55 has been replaced by the State Environmental Planning Policy (Resilience and Hazards) 2021. A PSI has now been prepared and is included as **Appendix K – Preliminary Site Investigation**.
General Environmental	
General Environmental Waste Management: It is advised that a waste management plan be prepared by an appropriately qualified consultant that outlines waste minimisation and waste management strategies to be implemented for the duration of demolition, construction and operational phases of the proposed infrastructure upgrades. It is also advised that waste disposal dockets/waste data is kept for all waste disposed of on site.	A WMP has been prepared for the proposed development and is included in **Appendix Q – Waste Management Plan**.

Comments Received	Response / Where Addressed
Sediment and Erosion Control: It is advised that a sediment and erosion control plan be developed and implemented for the entirety of construction works on site. The sediment and erosion control plan must be designed to prevent the offsite migration of sediment from the proposed development.	An ESCP has been prepared for the proposed development and is included as an appendix to **Appendix I – Stormwater Management Plan**. The ESCP is intended to be implemented for the entirety of construction works and has been designed to prevent the offsite migration of sediment.
Air Quality (Odour/dust): The report for the proposed expansion (Document Set ID 8459975) details that an air quality assessment will be undertaken to determine potential impacts on local and regional air quality and will detail any proposed mitigation measures that will prevent (or reduce) the generation and emission of dust particles during construction.	An Air Quality Assessment has been prepared for the proposed development and is included in. **Appendix R – Air Quality Review**. Based on the findings of that assessment no significant air quality impacts are anticipated. Proposed dust and air quality controls are outlined in section 1.1.
Landscape Section	
The proposal will require the following information: 1) Based on the conceptual plans, it appears that some existing trees within the site may require removal for the proposed development. 2) A fully documented Landscape Plan prepared by a qualified Landscape Architect/ Designer at a minimum scale of 1:100 to show all surface treatments and any required OSD system, walls, pits, drainage swales, easements etc. and designed to correspond with all other plans.	Landscape Plans have been prepared for the proposed development and are included in **Appendix M – Landscape Plans**. Between 3-5 trees are expected to require removal to facilitate the proposed development as outlined in section 7.9 above.
Planning	
There are no building height controls for the subject site under Holroyd LEP 2013. However, it is noted that the proposal seeks a significant building height up to 45m. This is discussed below under Holroyd DCP 2013. *[extract omitted]*	The Holroyd LEP has been replaced by the Cumberland LEP since the comments were received. The Cumberland LEP also contains no building height controls for the site. In addition, the scale of the proposal has been substantially reduced since these comments were received. The proposed height of the tallest building proposed (the southern freezer building extension) is 21.1m including refrigeration penthouses, which is generally in keeping with the size and scale of industrial buildings in the locality.
In this regard, industrial developments shall be of a high architectural quality, incorporating articulation in building facades and variety in building materials and finishes to minimise the overall visual impact of the proposed structures as viewed from the street. The overall design shall be compatible with the existing built form and streetscape in terms of façade treatment, building materials and finishes.	The design has sought to achieve a high architectural quality, having regard to the industrial environment in which it is situated. In particular: • The freezer building extension is proposed to be clad in Colourbond 'Surfmist' to match the existing southern freezer building. • Select colour variation has been incorporated at the corners of the building to provide tonal variation in the cladding and visually break down long expanses of wall to create visual interest. The colours chosen have been selected to match Americold's branding. • The southern freezer building extension has been located away from all potentially sensitive receptors,

Comments Received	Response / Where Addressed
	including the residential dwellings to the northwest of the site. • Enhanced site landscaping is also proposed to partially screen the proposed development, as outlined in section 7.8 above.
The proposal is in the vicinity of a heritage site - the Prospect Hill State Heritage Registered area. Given that the proposal is of significant height, view analysis may be required to ensure that views to/from the heritage item are maintained.	The height of the proposed development has been significantly reduced since this comment was received. As outlined in **Appendix P – Statement** no physical or visual impacts on the Prospect Hill State Heritage Registered area are anticipated.
The subject site is identified as having 'Moderate to High Salinity Potential'. In this regard, salinity investigations shall be undertaken by an appropriately qualified professional with experience in salinity investigations and management.	As outlined in **Appendix K – Preliminary Site Investigation**, the proposed works are not expected to significantly interfere with groundwater flows which could result in an increase in soil salinity above natural levels on the site.
Appropriate landscaping shall be provided within the front setback to soften the impact of car parking area.	A landscape plan incorporating additional landscaping in the area is included as **Appendix M – Landscape Plans.**
The proposed development shall comply with all the relevant development standards and provisions/guidelines applicable at the time of development application lodgement.	The comment is noted. Some relevant development standards and provisions/guidelines, including the SEPPs have been amended since the development application was lodged. The proposed development will comply with all relevant legislative/approval requirements that may be applicable throughout construction and operation.
Waste Section	
The applicant has not addressed waste management at this stage. In this regard, a detailed assessment will be undertaken when Council receives the Development Application.	A WMP is now included as **Appendix Q – Waste Management Plan**. Further discussion of waste management is outlined in section 7.11 above.
Development Engineering – Flood	
The site is affected along the Eastern side boundary including the North-eastern corner by the adjacent creek. Appropriate flood risk management measures as outlined in part A of Holroyd DCP2013 including the following must be complied. • Obtain available flood information from council by submission of application for the flood information. • Submit a survey drawing prepared by a registered surveyor that includes existing site contours and spot levels throughout the site along with the location of all existing structures to the Australian Height Datum (mAHD).	The Holroyd DCP has been replaced by the Cumberland DCP since these comments were first received. Pursuant to Clause 2.10 of the Planning Systems SEPP the Cumberland DCP does not apply to the proposed development. As outlined in **Appendix J – Flood Modelling Report,** a number of attempts were made to obtain existing flood modelling information from the Cumberland City Council, however, to date such attempts have been unsuccessful.

Comments Received	Response / Where Addressed
• Ensure that the finished floor level of the proposed building is set at least at 500mm above the 1% AEP flood event, and the parking area 150mm above the 1%AEP flood event. • Address the flood related issues and comply with the relevant "flood risk management" measures as outlined under section 8 of Holroyd DCP 2013 Part A.	
Development Engineering – Stormwater Management	
No stormwater management plan is noted to have been submitted. Nevertheless, the requirement as outlined under Section 7 of Holroyd DCP2013 part A, including the followings must be complied with: • The site stormwater runoff must be managed with appropriate measures. The development must incorporate i) On-site detention system and ii) water sensitive urban Design (WSUD) measures, including stormwater quality improvement measures, as the part of stormwater management system. No such provisions or the stormwater plan was noted. • The On-site detention system must be designed with the OSD parameters of site storage requirement (SSR) of 470m3/ha and the Permissible site discharge (PSD) of 80l/s/ha. Further, the On-site Detention storage must not cause the blockage or obstruction of overland flow through the site. The design needs to be accompanied with the OSD design calculation summary sheet prepared by a qualified Professional Engineer with an engineer's design certificate. • All the runoff from the site must be directed to the OSD system and the outflow from the OSD system must be disposed by gravity onto the appropriate council's stormwater system. If the land slopes away from the street and outflow cannot be discharged onto the front street by gravity, it must be directed to the downstream street through a drainage easement through neighbouring property (ies). • The OSD system must be designed based on the tail water level at the point of discharge and the OSD storage adjusted accordingly. • Information on the point of disposal such as the existing council pit, or the nearby creek, on to which the site stormwater is intended to the discharged, must be obtained from council or relevant authority, or by appropriate survey investigation. If it is intended to discharge the site runoff into the council pit, then details of the connection into council pit must be shown on the drawing with the levels of the pit and connecting pipe.	A Stormwater Management Plan has now been prepared for the proposed development and is included as **Appendix I – Stormwater Management Plan**. The Holroyd DCP has been replaced by the Cumberland DCP since these comments were first received. Pursuant to Clause 2.10 of the Planning Systems SEPP the Cumberland DCP does not apply to the proposed development however the following findings of the Stormwater Management Plans satisfy the Cumberland DCP: - Due to the relatively steep slope of the site, instead of providing an above ground OSD system, an underground tank is more feasible for the development site and proposed layout. - As per section 3.4.3 in Upper Parramatta River Catchment Trust On-site Stormwater Detention Handbook, *'on an already-developed property, the OSD requirements apply only to the area of the new development, provided runoff from previously developed areas can be excluded from the OSD storage'*. Therefore, the roof of the new freezer building, the eastern new car parking area, northern new car parking area and semi-trailer parking spaces will be diverted to the OSD tank while the eastern circulation road and eastern manoeuvring area will bypass the OSD. - DRAINS modelling was used to design and calculate the volume of OSD tank. The modelling approach is consistent with the latest (2016) Australian Rainfall and Runoff guidelines. - From an analysis using DRAINS, a proposed OSD tank with volume of 400m3 with orifice plate control has been designed within the semi-trailer parking area. - The existing stormwater drainage system of the undeveloped area will be retained. The new stormwater drainage system within the site has been designed to service both major and minor events. - The stormwater runoff from the new southern access road will be captured by inlet pits then conveyed to the northern outlet point. The stormwater runoff from northern car parking and semi-trailer parking will be

Comments Received	Response / Where Addressed
• The stormwater system including the OSD system and the WSUD/ stormwater Quality Improvement measures must be designed in accordance with the council's stormwater policy, guidelines etc.	also discharged to the existing northern outlet via the piped system. - WSUD has been prepared in accordance with Council's Development Control Plan G.
Development Engineering – Vehicular Access & Manoeuvring	
The access requirement must comply with the requirements and controls as outlined under Holroyd DCP 2013 together with the general requirements as specified in AS2890.1-2004/AS2890.2-2002.	They Holroyd DCP has been replaced by the Cumberland DCP since these comments were first received. Pursuant to Clause 2.10 of the Planning Systems SEPP the Cumberland DCP does not apply to the proposed development. Parking facilities are proposed to comply with AS2890.1-2004 & AS2890.2-2002.
A minimum sight line and distance as specified in the section 3.2.4 of AS2890.1.2004 must be complied.	Driveway minimum sight line and distance addressed in the technical note attached as **Appendix S – Sightline Assessment Technical Memo**
The vehicle must enter and exit the site in the forward direction with the provision of turning area within the site to accommodate largest vehicle expected to serve the site.	The site facilitates forward direction access and egress and enables the largest vehicles to turn using the new circulation path. U-turning within the hard stand manoeuvring area, as with the existing circulation, is still possible.
Swept path clearance line diagram must accompany the turning and manoeuvring provisions. The swept path analysis must be provided for all driveways demonstrating the following: • Ensure that the swept paths lines do not overrun/ encroach the adjacent parking spaces, loading area, or the structures • A vehicle can pass another vehicle at all passing areas (particularly at the entry points). • A vehicle can enter and exit the driveway in a forward direction. Details of the road including, kerb line, signs, traffic devices, power poles, other structures and neighbouring driveways shall be shown on the plans. • The largest vehicle (heavy vehicle) can enter the site, manoeuvre into the loading area and exit the site in a forward direction.	Swept paths for vehicle movements relevant to the site upgrades are provided as an appendix to the **Appendix G – Traffic Impact Assessment**. This includes access and circulation to the new car parks (light vehicle and semi-trailer), the upgraded southern access road for truck access, and the new eastern driveway for light vehicle access from Reservoir Road. All vehicle types can enter the site, maneuver into the loading area, and exit the site in a forward direction.
The width of the vehicular crossing and driveway within the nature strip must be in accordance with AS2890.2-2002.	As per AS2890.2-2018 (replacing AS2890.2-2002): the minimum crossing width requirement is 12.5m (Heavy Rigid Vehicle) and 6m (Small Rigid Vehicle). The existing driveway width is >20m, and thus complies with AS2890.2-2018 requirements for all vehicle types. The proposed new driveway, to be used for light vehicles only, will be 6m wide.
The vehicular crossings shall be in accordance with Council's Vehicular crossing (VC) Policy, including compliance with the followings. • A minimum 1.5m offset from the side boundary. • Perpendicular to the line of the kerb and gutter. • Provide clearance to existing services.	The existing heavy-vehicle vehicular crossing is not proposed to be altered. A new light-vehicle vehicular crossing is proposed to the east of the existing driveway. Both vehicular crossings are a minimum 1.5m offset from the site boundary. Both vehicular crossings are

Comments Received	Response / Where Addressed
	perpendicular to the line of the kerb and gutter. Both vehicular crossings are clear of any existing services.
Exclusion zone of relevant services such as sewer pipeline and manhole, Telstra pit, electricity power pole etc. apply and must not encroach the zone.	The exclusion zones of relevant services and utilities are not encroached upon.
Queuing area(s) must be provided within property boundary for the largest vehicle that will enter the site in accordance with Australian Standard.	Queueing space exists in the form of a 130m truck holding area along the southern access path, which could accommodate six of the largest trucks expected to serve the site.
The long-sectional profile of the driveway and the ramp must be provided showing the sectional length, gradient, and finished surface levels from one level to another level and compliance with gradient requirements and other requirement as per AS2890.1-2004. The driveway must rise up from the street gutter with a crest along the property boundary across the full width driveway to prevent the street stormwater spilling through the driveway into the basement. The crest is recommended to be at least 100mm higher than the associated top of the kerb.	These requirements are proposed to be addressed during detailed design.
Development Engineering –Loading	
Details of loading, deliveries time and size of the largest heavy vehicle must be provided.	Information provided by Americold indicates that the site currently generates around 160-200 heavy vehicle movements per day, comprised of heavy rigid vehicles, semi-trailers and B-doubles. The anticipated future truck movements provided are 300-350 heavy vehicles per day. The site currently, and will continue to, operate 24/7 over 3 shifts, and truck loading and delivery occur throughout this period, but primarily in the morning and night shift. The shift details are as follows: - Day shift: 5:00am – 1:30pm - Afternoon shift: 1:30pm – 9:30pm - Night shift: 9:00pm – 5:00am
Adequate facilities must be provided on-site for servicing of the development. Details must be provided demonstrating that the design (largest) heavy/delivery vehicle is suitable for the proposed development and measures to ensure safety while heavy vehicles are entering, manoeuvring and exiting the site.	The proposed site layout reduces conflict points in the by removing the need to U-turn in the hard stand. Heavy vehicle movements and circulation are completely separated from light vehicles, pedestrians, and cyclists. The southern access road will be formalised for heavy vehicle access. Service and maintenance vehicles may access the site through both the site's northern and southern access roads. Access and circulation of vehicles are detailed in section 3.3 of **Appendix G – Traffic Impact Assessment.** Swept paths are included in Appendix D of Appendix G.
Development Engineering – Parking and Car Spaces	
The provision of number of car spaces for the employee/staff and visitors must comply with the requirements and controls as outlined under Holroyd	They Holroyd DCP has been replaced by the Cumberland DCP since these comments were first received. Pursuant to Clause 2.10 of the Planning Systems SEPP the

Comments Received	Response / Where Addressed
DCP 2013 together with the general requirements as specified in AS2890.1-2004.	Cumberland DCP does not apply to the proposed development.
Each of the car spaces and the loading / unloading area/zone must be dimensioned and must comply with the requirements as outlined in Holroyd DCP and AS2890.	They Holroyd DCP has been replaced by the Cumberland DCP since these comments were first received. Pursuant to Clause 2.10 of the Planning Systems SEPP the Cumberland DCP does not apply to the proposed development. Parking facilities are proposed to comply with AS2890.1-2004 & AS2890.2-2002.
Development Engineering – Traffic & Parking Report	
A Traffic and Parking Assessment Report/Statement prepared by a suitably qualified traffic practitioner in accordance with RTA (now RMS) Guide to Traffic Generating Development 2002 shall be submitted with any DA. In addition to the requirements detailed in the RMS guide, the report shall assess the following: • Impact of the proposed development on surrounding intersections subject to traffic generation assessment of the proposed development. • Impact of the proposed development on local roads with consideration for local road environmental capacities and impact on residential amenities. • Assessment of the traffic and road safety impact of the proposed access driveway on Toongabbie Road. • Address all the issues.	A Traffic Impact Assessment is included as **Appendix G – Traffic Impact Assessment**

8.5 NSW EPA

The response received from the NSW EPA on 14 October 2020 recorded that the EPA had no comments on the proposal at that stage & requested that the proponent notify the EPA if any Schedule 1 activity thresholds under the POEO Act were exceeded. No exceedance of the POEO Act activity thresholds is anticipated. For completeness it is recorded that approximately 12.5 tonnes of liquid ammonia is stored on-site, below the 'general chemicals storage' threshold in Clause 9, Schedule 1 of the POEO Act.

8.6 Heritage New South Wales

8.6.1 Aboriginal Cultural Heritage

Table 8.4: Heritage NSW - Key Issues

Comments Received	Response / Where Addressed
The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigation in NSW (OEH 2010), and be guided by the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (DECCW 2011).	An ACHAR has been prepared which identifies and describes the Aboriginal cultural heritage values that exist across the area. The ACHAR is attached as **Appendix O – Aboriginal Cultural Heritage Assessment Report.**

Comments Received	Response / Where Addressed
Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.	Consultation with Aboriginal people has been undertaken in accordance with DEWCCW 2010. The significance of cultural heritage values for Aboriginal people who have a cultural association with the land is documented in the ACHAR.
Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to Heritage NSW.	Based on the findings of **Appendix O – Aboriginal Cultural Heritage Assessment Report** no impacts on Aboriginal cultural heritage values are anticipated.
The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature, and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the ACHAR.	A surface survey was conducted on 15 June 2022. No Aboriginal sites or potential archaeological deposits were identified. Furthermore, it was confirmed that the landforms within the project area have been significantly modified in the past and therefore contain negligible potential for Aboriginal heritage.
The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.	The ACHAR includes an Unexpected Finds Protocol which is proposed to be implemented during construction.
The ACHAR must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.	As proposed in the ACHAR, the unlikely event that human remains are discovered, all works in the vicinity will immediately cease and the appropriate team within Heritage NSW and the local police will be notified. Further assessment will then be undertaken to determine if the remains are Aboriginal or non-Aboriginal. If the remains are deemed to be Aboriginal in origins the Registered Aboriginal Parties will be advised of the find as directed by Heritage NSW. Heritage NSW will then advise on the appropriate actions required.

8.6.2 Colonial Heritage

Table 8.5: Heritage NSW - Key Issues

Comments Received	Response / Where Addressed
The proposed SSD is in the immediate vicinity of State Heritage Register (SHR) item 'Former Great Western Road, Prospect (SHR no. 01911). It is also in the vicinity of SHR item 'Prospect Reservoir and surrounding area' (SHR no. 01370). In addition to being listed on the SHR, 'Former Great Western Road, Prospect' is listed on the Blacktown Local Environmental Plan (LEP) 2015 as an item of State	The 'Former Great Western Road, Prospect (SHR no. 01911), 'Prospect Reservoir and surrounding area' (SHR no. 01370), and 'House – Bridestowe' (#I64) have all been considered as part of the SOHI. No impact on the 'Prospect Reservoir and surrounding area' (SHR no. 01370) or 'House – Bridestowe' (#I64) is anticipated. The only work with the potential to impact the 'Former Great Western Road, Prospect (SHR no. 01911) is construction

Comments Received	Response / Where Addressed
heritage significance ('Great Western Highway (former alignment', I60). The 'Prospect Reservoir and surrounding area' is listed on the Holroyd LEP 2013 as an item of State heritage significance (I01370). The proposed SSD is also in the immediate vicinity of an item of local heritage significance, as identified on the Blacktown LEP 2015 as 'House – Birdestowe' (I64).	of the new staff/visitor access, however it has been assessed as unlikely that the original 1818 road fabric of the 'Former Great Western Road' will be disturbed and there will be no impact on the heritage significance of the original alignment of the road as the proposed works will not result in a change to the alignment. Overall, the proposed site access is expected to have a nil/neutral-low impact on the ''Former Great Western Road'.
A Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The SOHI is to address the impacts of the proposal on the heritage significance of the site and adjacent areas and is to identify the following: • All heritage items (state and local) within the vicinity of the site including built heritage, landscapes and archaeological resources, detailed mapping of these items, and assessment of why the identified items are of heritage significance; • The impacts of the proposal on the identified heritage items including visual impacts; • The attempts to avoid and/or mitigate the impact on the heritage significance of the heritage items; and • Justification for any changes to the heritage fabric or landscape elements including any options analysis.	A SOHI has been prepared and is included as **Appendix P – Statement** .
If the SOHI identifies impact on potential historical archaeological resources, a historical archaeological assessment should be prepared by a suitably qualified archaeologist in accordance with the guidelines *Archaeological Assessment* (1996) and *Assessing Significance for Historical Archaeological Sites and Relics* (2009). This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or in part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed archaeological programme.	As outlined in the SOHI (**Appendix P – Statement**) the new staff and visitor site access will result in physical impact to the 'Former Great Western Road', however the archaeological potential of this area is low, given the extent of past works and the buffer offered by the difference between the historically recorded width and the current width of the road.
As the proposed SSD is in the vicinity of items listed on the Blacktown LEP 2013 and the Holroyd LEP 2013, advice should also be sought from the local council.	Both the Blacktown LEP and Cumberland LEP (which replaces the former LEP) were consulted during preparation of the SOHI. No specific advice was sought from either Council as to heritage sites/items.

8.7 Endeavour Energy

8.7.1 Key Issues

The comments received from Endeavour Energy include commentary on Endeavour Energy site infrastructure, requirements & procedures. The submission raises key issues around:

- Potential impacts on an existing Padmount substation and 11kV high voltage underground cables held by Endeavour Energy.
- Electricity network capacity.
- Risks associated with the proximity of electrical infrastructure.
- Earthing
- Easement Management / Network Access
- Vegetation management

Each of these issues is addressed below.

8.7.2 Padmount Substation and 11kV High Voltage Underground Cables

The Endeavour Energy comments highlight the existence of a Padmount substation and 11kV high voltage underground cables within the Americold site. The location of this infrastructure is shown in Figure 8-1. This infrastructure is not subject to an easement but is protected pursuant to section 53 of the *Electricity Supply Act 1995.*

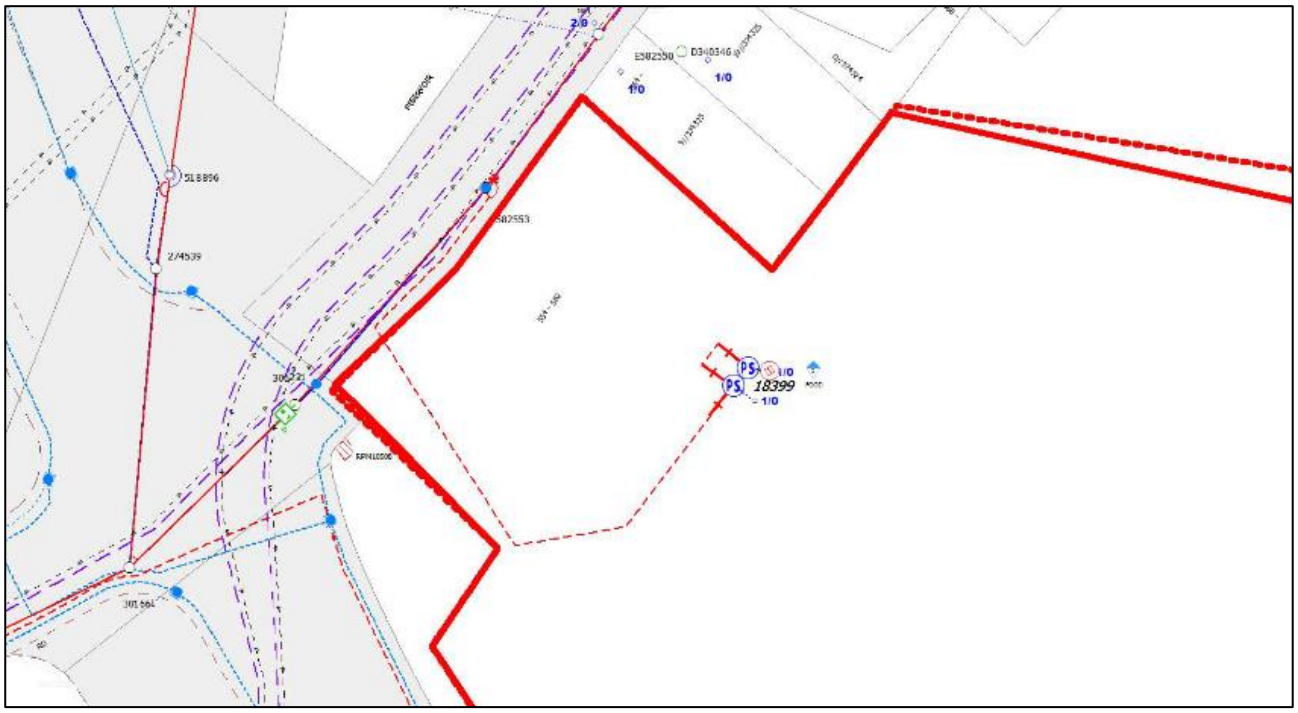

Figure 8-1: Padmount Substation & 11kV High Voltage Underground Cables (Source: Endeavour Energy)

The proposed development has been altered since Endeavour Energy's comments were first received. As a consequence, no works are now proposed that would impact the Padmount substation or underground cable infrastructure (demolition of the existing office and substation and new carparking was previously proposed in this area). The nearest new proposed infrastructure is the relocated condensing units. These are intended to be located further from the Padmount substation than the clearance distances specified by Endeavour Energy (Figure 8-2) with an indicative location shown in **Appendix E – Site Development Plans**.

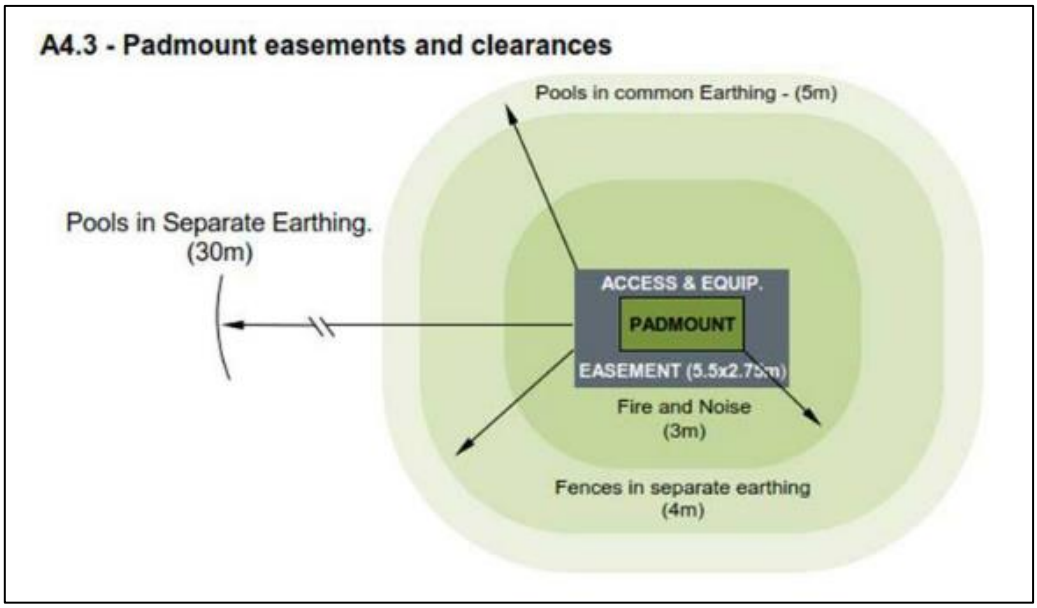

Figure 8-2: Minimum Padmount Clearances (Source: Endeavour Energy)

8.7.3 Network Capacity

The Endeavour Energy comments note that the availability of electricity supply to a site is based on a wide range of factors and should not be assumed. The applicant notes the requirement to submit an application to Endeavour Energy's Network Connections Branch to carry out a final load assessment. This is proposed to be undertaken at the Building Consent stage.

8.7.4 Proximity of Electrical Infrastructure

The Endeavour Energy comments note that electrical infrastructure is not defined/regarded as a sensitive land use under SEPP 33 (now superseded by Resilience and Hazards SEPP). However, Endeavour Energy has requested that Americold address the risks associated with electrical infrastructure in close proximity to the proposed works. In terms of those risks:

- The design has been altered to eliminate works in the immediate vicinity of the 11kV high voltage underground cables and Padmount substation.
- Americold has engaged with Endeavour Energy in relation to works proposed within the area of Endeavour Energy's electricity easement, located towards the rear of the site. A number of steps have been taken to minimise risk in this area, including:
  - Proposed inclusion of two new three-beam (armco) barriers to provide additional protection for two existing power poles located closest to the site access road.
  - Construction of a new layback to enhance vehicle access to the easement area.
  - Proposed earthing of the two new emergency access staircases & existing fence located within the easement area.
  - The implementation of specific controls as outlined in the 'No Objection' letter received from Endeavour Energy on 11 May 2022.

8.7.5 Easement Management / Network Access

Americold has engaged directly with Endeavour Energy in relation to works proposed in proximity to Endeavour Energy's easement. A 'no objection' letter is attached as part of **Appendix D – Transmission Line Easement (Proposed Works)**

8.7.6 Earthing

The Endeavour Energy comments note that the construction of any building or structure (including fencing, signage, flag poles, hoardings etc.) whether temporary or permanent that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with Australian/New Zealand Standard AS/NZS3000:2018 'Electrical installations'

Earthing of the two new emergency access staircases and the existing fence located within the easement area is proposed as part of the development. No other new infrastructure is proposed in close proximity to Endeavour Energy's assets that would require earthing.

8.7.7 Vegetation Management

As outlined in **Appendix M – Landscape Plans** new landscaping proposed in the vicinity of Endeavour Energy's overground assets is proposed to be limited to a mature height of no more than 3.0m.

8.8 Transport for NSW

Table 8.6: TfNSW - Key Issues

Comments Received	Response / Where Addressed
TfNSW has reviewed the submitted information and request the following issues to be addressed as part of the traffic and transport impact assessment of the application: Accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development.	Accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movements are outlined in section 5 of **Appendix G – Traffic Impact Assessment.**
Details of estimated total daily and peak hour trips generated by the proposal, including vehicles, public transport, pedestrian and bicycle trips.	Details of estimated total daily and peak hour trips generated by the proposal are outlined in section 5.2 (vehicles) and 5.3 (public transport, cycling and walking) of **Appendix G – Traffic Impact Assessment.**
The adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development.	Staff currently access the site with a 99% passenger vehicle mode share. 3 staff members (<1%) arrive by cycling. The existing on-site cycling facilities allow for an approximately 5% cycling mode share, which is expected to be sufficient for the 10-20 additional jobs expected to be generated over the first 10 years of operation of the proposed development. Proposed upgrades of Prospect Highway by TfNSW (discussed further in section 2.6 of **Appendix G – Traffic Impact Assessment**) are expected to encourage greater uptake of sustainable travel modes, including public transport. This infrastructure is expected to meet the anticipated future demand of the proposed development.
Details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location- specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site.	A Green Travel Plan has been prepared. Proposed upgrades to the Prospect Highway by TfNSW (including bus stops adjacent to the site) are expected to increase uptake of public transport. 5 bicycle racks with space for 10 bicycles are available at the site, encouraging an increase in existing cycling mode share to 5% of trips. Three male showers, one female shower and lockers are available by way of end-of-trip facilities.

Comments Received	Response / Where Addressed
The proposed walking and cycling access arrangements and connections to public transport services.	Public transport, pedestrian and cycle access to the site is adequate but limited, as outlined in section 2 of **Appendix G – Traffic Impact Assessment**. Proposed upgrades to the Prospect Highway by TfNSW are expected to encourage greater update of sustainable transport modes.
Measures to integrate the development with the existing/ future public transport network.	No specific measures are proposed to integrate the development with the existing/future public transport network, however proposed upgrades to Prospect Highway by TfNSW (including bus stops adjacent to the site) are expected to increase uptake of public transport.
The impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/ associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years).	SIDRA modelling has been undertaken to determine the impact of trips generated by the development on nearby intersections. Further detail is outlined in section 6 of **Appendix G – Traffic Impact Assessment.** Overall, the proposed development is not expected to adversely impact traffic impacts at nearby intersections.
Identification of the volume and type of traffic movements into and out of the site, as well as details on the provision of all queuing and staging of vehicles on the site.	The volume and type of traffic movements into and out of the site are outlined in section 5 of **Appendix G – Traffic Impact Assessment**. Staging and queueing information is addressed in section 3 of **Appendix G – Traffic Impact Assessment.**
Details on the source of materials coming into the site (including any operational constraints).	The site access is located on Reservoir Road, east of the intersection of Prospect Highway. Vehicles/materials enter the site from the west, with the site comprising a large proportion of the total traffic on the eastern approach of the Prospect Highway / Reservoir Road intersection. The only other facility using this road is another refrigerated transport facility.
Details on the provision of driver facilities on site.	Proposed facilities include the lunchroom (including kitchenette), toilets and outdoor seating area.
Details of the proposed site vehicle access and parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (i.e. turn paths, sight distance requirements, aisle widths, etc).	Access and parking addressed in section 3 of **Appendix G – Traffic Impact Assessment.**
The proposed access arrangements, including car and bus pick-up/ drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones.	Details of these features are outlined in section 3 of **Appendix G – Traffic Impact Assessment.**
Proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance.	5 bicycle racks with space for 10 bicycles are available at the site. Three male showers, one female shower and lockers are available by way of end-of-trip facilities.
Proposed number of on-site car parking spaces for staff and visitors and corresponding compliance with existing	A total of 171 carparks are proposed in the post-development scenario. This is expected to provide an

Comments Received	Response / Where Addressed
parking codes and justification for the level of car parking provided on-site.	excess of parking spaces to help cater for increased demand at shift changeover times.
An assessment of the cumulative on-street parking impacts of cars and bus pick-up/ drop-off, staff parking and any other parking demands associated with the development.	The proposed carparking is expected to adequately provide for the proposed development as outlined in section 4 of **Appendix G – Traffic Impact Assessment.**
Emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).	Emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements are outlined in **Appendix G – Traffic Impact Assessment.**
The preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following: • Assessment of cumulative impacts associated with any other construction activities (if any). • An assessment of road safety and key intersections and locations subject to • heavy vehicle construction traffic movements and high pedestrian activity. • Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process. • Details of anticipated peak hour and daily construction vehicle movements to and from the site. • Details of temporary cycling and pedestrian access during construction.	A CTMP is proposed to be prepared by the construction contractor for the proposed development. Details of proposed construction staging are outlined in section 3.4 of **Appendix G – Traffic Impact Assessment.**
Details of all traffic types and volumes likely to be generated by the proposed development during demolition, construction and operation, including description of heavy vehicle types, and haul route origins and destinations. This includes the breakdown of daily inbound and outbound traffic profile per vehicle types during AM and PM peaks.	Details of anticipated traffic volumes, including a breakdown of the daily inbound and outbound traffic profile in the AM and PM peaks is outlined in section 5.2 of **Appendix G – Traffic Impact Assessment**.
Details of access to the site from the road network including intersection location, design and swept path and sight distance including detailed site layout to demonstrate that both road network and the site will be able to accommodate the most productive vehicle type as well as the worst performing vehicle type.	Sight distance has been assessed as satisfactory for both the existing driveway and proposed light-vehicle driveway. A Safe Site Distance (SSD) technical note is attached as **Appendix S – Sightline Assessment Technical Memo**. In the proposed development scenario, heavy vehicle access to the site from Reservoir Road will be through the existing driveway. Light vehicles will access the site from Reservoir Road through a new vehicular crossing to the east. Access and circulation of vehicles are detailed in section 3.3 of the Traffic Impact Assessment. Swept paths for the new circulation paths within the site were satisfactory for both light and heavy vehicles. Swept paths for the new eastern driveway for light vehicles is satisfactory. Swept path diagrams are shown in appendix

Comments Received	Response / Where Addressed
	D of the Traffic Impact Assessment. The traffic impact assessment concluded that the upgrade will not greatly impact surrounding road network.
An assessment of the forecasted impacts on traffic volume generated on road safety and capacity of road network including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model as prescribed by Transport for NSW. The traffic impact assessment must include the cumulative study area traffic impacts associated with the redevelopment and any other known proposed developments in the area.	SIDRA modelling has been undertaken for the proposed development. Findings are outlined in **Appendix G – Traffic Impact Assessment.** The traffic impact assessment concluded that the upgrade will not greatly impact surrounding road network.
Identification of any dangerous goods likely to be transported on arterial and local roads to and from the site and, if necessary, the preparation of an incident management strategy.	The existing facility and proposed facility will use chemicals and substances classified as dangerous goods as per the Australian Dangerous Goods Code (NTC Australia, 2018). This includes cleaning products, products to service machinery and the refrigerant (Anhydrous Ammonia). Cleaning products and products to service machinery are stored & transported in minimal quantities (up to 10L). Additional ammonia required to service the new freezer building extension will be approximately 2.5 tonnes.
Detailed plans of any proposed road upgrades, infrastructure works or new roads required for the development and an assessment of potential impact on load road pavement lifespan.	No road upgrades, infrastructure works or new roads are required for the proposed development. However, a new vehicle crossover onto Reservoir Road for passenger vehicles is proposed east of the existing access.

8.9 Department of Planning, Industry and Environment – Water Division and Water and Natural Resources Access Regulator (NRAR)

Table 8.7: DPIE Water and NRAR - Key Issues

Comments Received	Response / Where Addressed
The SEARS should include: The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.	As outlined in section 7.3, the water supply demands of the development are proposed to be met by the existing Sydney Water mains supply.
A detailed and consolidated site water balance.	The main existing water uses include staff amenities, fire water, washdown for plant/dock areas an truck/vehicle washing. It is expected that the proposed development will result in a water demand increase of less than 1% and will nominally be 48 - 84 kL/day. The main water uses for the proposed development will be similar to those for the existing facility. The existing domestic water supply system will be extended to the following areas / uses: • New satellite plant area (including safety shower and hose tap for washdown);

Comments Received	Response / Where Addressed
	• New security office (for WC fixtures); • Refurbished amenities and outdoor seating areas; • Washdown for refrigeration penthouses associated with the southern warehouse extension; and • New battery storage room
Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.	No impacts on surface/groundwater resources, groundwater dependent ecosystems, adjacent licensed water users or adjacent landholders are anticipated.
Proposed surface and groundwater monitoring activities and methodologies.	No surface / groundwater monitoring activities are proposed.
Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water).	The NSW Aquifer Interference Policy (2012) applies to 'aquifer interference activities'. The *Water Management Act 2000* defines 'aquifer interference activities' as activities which involve: • The penetration of an aquifer • The interference with water in an aquifer • The obstruction of the flow of water in an aquifer • The taking of water from an aquifer in the course of carrying out mining or any other activity prescribed by regulations, and • The disposal of water taken from an aquifer in the course of carrying out mining or any other activity prescribed by the regulations. As no 'aquifer interference activities' are proposed as part of the development, this policy has not been further considered.

9 Ecologically Sustainable Development & Energy Efficiency

An Ecologically Sustainable Development (ESD) & Energy Efficiency Report has been prepared for the proposed development and is included as **Appendix T – ESD & Energy Efficiency Report.** The proposed development will incorporate a number of passive and active energy-saving measures to enhance building operating performance, informed by climate change projections developed for the Sydney Metropolitan area (as outlined in section 4 of the ESD & Energy Efficiency Report). Those measures include:

- A high-performance thermal envelope with roof, floor and external wall insulation.
- Construction of all windows, doors, exhaust fand and pipe penetrations in order to minimise air leakage as required by Section J3 of the 2019 National Construction Code (NCC);
- Selection of an energy-efficient air conditioning system.
- Proposed use of an Energy Recovery Ventilator (ERV) for ventilation of the locker/amenities area below the lunchroom.
- Increased temperature set-points for the battery research and switch room to save energy.
- LED lighting to all areas with advanced controls (daylight and motion sensors have been proposed to different locations).
- Sub-metering to record individually the energy consumption of air conditioning plant, lighting and appliance power.
- Light coloured roofing (cool roof) with high reflectivity and appropriate insulation to reduce solar heat gain into the warehouse.
- Thermal bridging to all structural steel passes through the insulation envelope (wall, roof, ceiling floor).
- All joints to roof panels to be fully sealed and weathertight.
- Windows between ambient and refrigerated spaces to be double glazed.
- Selection of water-efficient fixtures and dishwashers.
- Incorporation of water-sensitive urban design principles.
- Retention of existing bicycle racks and new proposed locker rooms to encourage active transport.
- Development of **Appendix Q – Waste Management Plan** to minimise operational and construction waste going to landfill.

There is no inclusion as part of the proposed development for solar power generation, however Americold will address and implement opportunities to reduce greenhouse gas emissions from the site as art of a ‘whole of business’ approach. Americold is committed to a range of general sustainability goals and operational principles including energy efficient building designs and layouts, water conservation actions, and recycling programs, as well as participation in utility demand-response programs – lowering emissions and helping to reduce carbon footprint.

In addition, the following measures will be considered during detailed design of the development, should Development Approval be granted:

- Glazing selection in accordance with NCC Section J to cut excess solar heat gains.
- Consideration of a solar hot water system or heat pump for domestic hot water.
- Selection of minimum 4 stars energy rating air conditioning system for new offices and lunchroom.
- Selection of minimum 4- star water-efficient dishwashers.
- Selection of minimum 5- star water-efficient urinals.
- Selction of minimum 4-star energy-efficient refrigerators.
- A target for more than 70% of the predicted construction waste arising from development to be re-used (on-site or at another development) or recycled off-site.

Overall, these features are expected to achieve significant reductions in the energy and water required by the development.

10 Risk Assessment

10.1 Overview

An environmental risk assessment has been conducted for the proposed development. The level of risk has been assessed by considering the key environmental risks identified through the environmental assessment undertaken for the project (section 7) in light of:

- The likelihood of an event occurring; and
- The severity of the event's impact.

The outcomes of the risk assessment are summarised in Table 10.5.

10.2 Likelihood Categories

The probability of a risk being realised is based on its likely or expected occurrence as outlined in Table 10.1.

Table 10.1: Categories of likelihood

Level	Category	Description
A	Probable	Is expected to occur.
B	Possible	Has been known to occur in similar scenarios.
C	Improbable	Theoretically possible but unlikely to occur.
D	Highly improbable	Very unlikely to occur.

10.3 Consequence Descriptors

Consequences have been assessed based on the potential magnitude or severity of a risk being realised as well as financial implications as outlined in Table 10.2.

Table 10.2: Consequence descriptors

Level	Consequence	Interpretation
1	Minor	No medical treatment required, low financial loss and minimal environmental impacts.
2	Moderate	Some medical treatment required, moderate financial loss, short to medium term environmental impacts.
3	Major	Irreversible disability or death, significant financial loss, long term environmental impacts.

10.4 Risk Matrix

The likelihood/probability and consequence of a risk occurring have been used to determine risk ratings. The risk rating matrix is outlined in Table 10.3.

Table 10.3: Risk Matrix

Likelihood	Consequence or Impact		
	Minor	Moderate	Major
	1	2	3
A (Probable)	Moderate	High	High
B (Possible)	Low	Moderate	High
C (Improbable)	Low	Low	Moderate

Likelihood	Consequence or Impact		
	Minor	Moderate	Major
	1	2	3
D (Highly Improbable)	Low	Low	Low

10.5 Risk Rating

The level of risk is defined by the level of further assessment and/or management that is required and the timeframe for any further works. Risk ratings are outlined in Table 10.4.

Table 10.4: Risk Rating

Category	Action
Low	Further assessment or management required in the medium or long term (e.g., within 6 months).
Moderate	Further assessment and/or management measures to be implemented within a short to medium timeframe to reduce the risk to an acceptable level.
High	Immediate action required to reduce the risk to an acceptable level.

10.6 Risk Assessment

The outcomes of the risk assessment are summarised in Table 10.5 on the following page.

Table 10.5: Risk Assessment

Risk	Likelihood	Consequence	Level of risk	Discussion / Proposed Risk Mitigation
Construction Noise & Vibration Construction noise & vibration temporarily causes stress and annoyance, interferes with daily activities and disturbs sleep for nearby receivers.	C	2	**Low**	Based on the findings of the preliminary construction noise assessment, no NML exceedances are expected as a result of construction activities. However, a CNVMP is proposed to be prepared to safeguard against potential construction noise and vibration impacts.
Operational Noise & Vibration Operational noise and vibration causes ongoing causes stress and annoyance, interferes with daily activities and disturbs sleep for nearby receivers.	B	2	**Moderate**	Operational noise is expected to comply with the NPI day and evening criteria at all surrounding residential receivers, however daytime exceedances are expected at the Berry Patch Preschool and Long Day Care Centre due to the operation of engine compression braking and truck air braking unless management & control measures are adopted. During the night-time period, exceedances of the NPI criteria are expected at 517 and 533 Reservoir Road due to engine compression braking and truck air braking, and at 566 and 568 Reservoir Road due to noise levels emanating from the existing northern plant room, unless management and control measures are adopted. The management measures outlined in sections 7.2.2 and 1.1 are proposed to be adopted to mitigate the potential impacts of operational noise. Provided these measures are adopted it is expected that the operational noise of the expanded facility would comply with the NPI criteria at all nearby sensitive receivers.
Water Quality / Biodiversity Sediment is discharged from the construction site and causes environmental impacts on nearby waterways / aquatic life including Girraween Creek.	C	2	**Low**	Sediment erosion from construction sites is known to cause environmental impacts on waterways and aquatic life. Given the distance of the proposed works from the nearest waterway (Girraween Creek) and slope of the site, discharge of sediment is possible, though unlikely. The potential consequences include short term waterway impacts. To further mitigate the level of risk an ESCP has been prepared for the proposed development in accordance with the International Erosion Control Association (Australasia) (IECA) *Best Practice Erosion & Sediment Control – for building and construction sites* (2008) and is included as an appendix to **Appendix I – Stormwater Management Plan.** The ESCP is proposed to be implemented for the duration of construction activities.

Risk	Likelihood	Consequence	Level of risk	Discussion / Proposed Risk Mitigation
Land Contamination Localised contamination hotspots or unexpected finds of asbestos / acid sulfate soils are encountered during excavation.	C	2	**Low**	Based on the investigations undertaken as part of **Appendix K – Preliminary Site Investigation** the likelihood of encountering localised/unexpected contamination on site is possible, though unlikely. The potential consequences include possible harm to construction workers and/or short to medium term environmental impacts. To further mitigate the level of risk the CEMP will detail a procedure to address the potential for localised contamination hotspots and will include an unexpected finds protocol for acid sulfate soils and asbestos. Excavated spoil is also proposed to be sampled, tested, and characterised prior to off-site disposal, and all off-site movements will be carried out in accordance with the NSW EPA guidelines on transporting waste and NSW *EPA Waste Classification Guidelines*.
Ammonia Spill / Leakage	B	3	**High**	Ammonia is used on site operations as a refrigerant. As ammonia is stored and used in an enclosed, fully sealed, recirculating refrigeration system, it is not expected to be emitted unless there is an accidental spill. A spill/leakage could have an immediate impact to workers on site, and depending on the prevailing wind conditions, a plume could disperse towards sensitive receptors in the surrounding area. To minimise the likelihood of an ammonia spill/leakage the refrigerant system is proposed to be properly and regularly inspected and maintained to minimise the potential for leakage/spills. Furthermore, Safety Data Sheets are to be maintained on site at all times. Prior to construction, an Emergency Management Plan is proposed to be developed in accordance with *AS/NZS 2022 Anhydrous Ammonia – Storage and Handling*. The plan will include maintenance, emergency response mechanisms and clean up procedures in order to minimise the potential for emissions of ammonia. Additionally, access to Personal Protective Equipment (PPE) is to be made available on site.
Aboriginal Cultural Heritage Accidental discovery of items of Aboriginal origin or of human remains	C	1	**Low**	Based on the findings of **Appendix O – Aboriginal Cultural Heritage Assessment Report**, no impacts on Aboriginal cultural heritage values are anticipated. Furthermore, consultation with Aboriginal people has been undertaken in accordance with DEWCCW 2010. The significance of cultural heritage values for Aboriginal people who have a cultural association with the land is documented in the ACHAR.

Risk	Likelihood	Consequence	Level of risk	Discussion / Proposed Risk Mitigation
				If any items suspected of being Aboriginal in origin are discovered during construction, all work in the immediate vicinity must stop and the Unexpected Finds Protocol (Appendix C of the ACHAR) must be followed. The find will need to be assessed and if found to be an Aboriginal object, an AHIP may be required. In the unlikely event that human remains are uncovered during construction, all work must cease in the immediate vicinity. The appropriate heritage team within Heritage NSW and the local police should be notified. Further assessment should be undertaken to determine if the remains are Aboriginal or non-Aboriginal. If the remains are deemed to be Aboriginal in origin the RAPs should be advised of the find as directed by the appropriate heritage team within Heritage NSW. Heritage NSW will advise Americold on the appropriate actions required.
<u>Colonial Heritage</u> Accidental discovery of heritage finds relating to the 'Former Great Western Road Prospect'	C	1	**Low**	The proposed development has the potential to impact on one heritage item, the 'Former Great Western Road', Prospect (SHR no. 01911) through construction of the new staff/visitor access. However, as outlined in **Appendix P – Statement of Heritage Impact**, it is unlikely that the original 1818 road fabric of the 'Former Great Western Road' will be disturbed given the difference between the road's historic and current width. Therefore, the archaeological potential in this area is low. There will also be no impact on the heritage significance of the original alignment of the road as the proposed works will not result in a change to the alignment. Overall, the proposed development is expected to have a nil/neutral-low impact on the ''Former Great Western Road'. In the unlikely event that heritage finds relating to the 'Former Great Western Road, Prospect' are found, an unexpected finds procedure is proposed to be implemented and has been included as Appendix A of the Statement of Heritage Impact.
<u>Air Quality (excluding ammonia)</u> Standard construction works will be required to give effect to the proposed development. These are expected to include minor earthworks using diesel heavy machinery and exhaust emissions	B	3	**Low**	The main air emission sources are anticipated to be caused from truck movements (and associated engine exhausts), standby generators, and solid waste. During construction, there may be dust emissions associated with minor earthworks only to clear the existing structures for the cold room extension. The Air Quality Review (Appendix R) of the proposed development listed a number of mitigation measures. This included incorporating air quality management measures in the environmental management plan developed for the site; providing information and training to staff and contractors on key air quality

Risk	Likelihood	Consequence	Level of risk	Discussion / Proposed Risk Mitigation
from truck movements and heavy machinery.				issues; maintaining all relevant records; implementing a complaints handling procedure to respond to air quality issues; not leaving vehicles idling where possible; locate standby generators as far as practicable from the nearest houses; keeping waste storage areas appropriately ventilated and ensuring waste receptables are closed.

11 Conclusion

This EIS has been prepared in accordance with the SEARS issued by DPE on 23 December 2021 and provides an assessment of the potential impacts associated with the development at 554-562 Reservoir Road, Prospect.

Overall, the proposal is in general accordance with the objectives and provisions of the EP&A Act, relevant SEPPs, the Cumberland LEP and applicable strategic planning policies. Based on the specialist studies and investigations undertaken as part of this EIS, all environmental impacts are able to be appropriately managed, such that significant impacts on the environment are not anticipated. The proposed development will also:

- Support the ongoing use of the site for employment generating land uses;
- Contribute to the growth of cold storage warehousing in an appropriate established industrial location; and
- Assist in the ongoing development of a strong and diverse local economy.

For these reasons, and in light of the foregoing assessment, it is respectfully requested that the proposed development be supported, subject to appropriate conditions.

A

Appendix A – SEARs

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Appendix B – Quantity Surveyor's Report

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Appendix C – Certificate of Title

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Appendix D – Transmission Line Easement (Proposed Works)

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Appendix E – Site Development Plans

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Appendix M – Landscape Plans

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Appendix N – Biodiversity Development Assessment Report

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Appendix O – Aboriginal Cultural Heritage Assessment Report

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Appendix P – Statement of Heritage Impact

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Appendix Q – Waste Management Plan

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Appendix R – Air Quality Review

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Appendix S – Sightline Assessment Technical Memo

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Appendix T – ESD & Energy Efficiency Report

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Appendix U – Green Travel Plan